

PERFORMANCE ASSESSMENT OF TECHNICAL REPORTS AS A CHANNEL OF INFORMATION FOR DEVELOPMENT: A LESOTHO CASE STUDY

Matseliso M. Moshoeshoe-Chadzingwa

M.A. Info. Studies, University College London
P.G. Dip. Librarianship, Polytechnic of North London
B.A. + C.Cert. Educ., National University of Lesotho

**Submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy in Information Studies (School of Human and Social Studies),
University of Natal, University of Natal, Pietermaritzburg, January 2002.**

DECLARATION

I, Matseliso 'Mamahlape Moshoeshe-Chadzingwa hereby declare that this thesis is my own work unless where stated otherwise. I also declare that the thesis has not been submitted at any other university for a purpose of any degree.

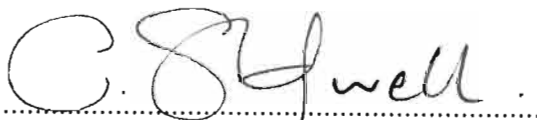
Candidate : Matseliso M. Moshoeshe-Chadzingwa

Signed :



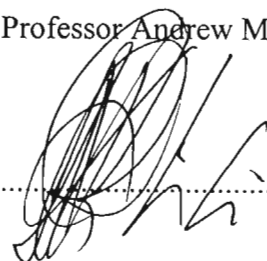
Supervisor : Professor Christine Stilwell

Signed :



Co-Supervisor: Professor Andrew M. Kaniki

Signed :



PERFORMANCE ASSESSMENT OF TECHNICAL REPORTS AS A CHANNEL OF INFORMATION FOR DEVELOPMENT: A LESOTHO CASE STUDY

By

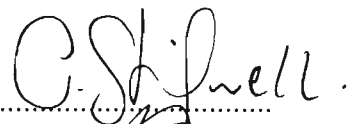
M.M. Moshoeshoe-Chadzingwa

M.A. Info. Studies, University College London
P.G. Dip. Librarianship, Polytechnic of North London
B.A. + C.Cert. Educ., National University of Lesotho

This is to certify that, as the supervisors of this candidate, we have approved/~~have not~~
~~approved~~ that this work be submitted for examination.

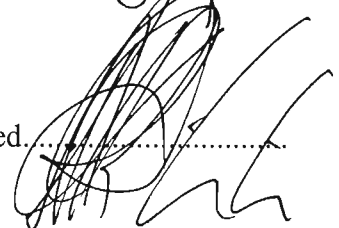
Supervisor : Professor Christine Stilwell.

Signed.....



Co-Supervisor: Professor Andrew M. Kaniki.

Signed.....



DEDICATION

This work is dedicated to

Ausi Kholu

ABSTRACT

The study aims to assess performance of Technical Reports as a channel of information for development in the Lesotho context. It concurrently evaluates how a specialized information unit of the Institute of Southern African Studies (ISAS) has performed in its obligation to devise adequate mechanisms for managing the report literature and meeting the development-related needs of users. In order to achieve that aim, the study contextualized development as a process, state, and condition and highlighted some development indicators for Lesotho. Agriculture and gender were selected as sectors of development. Global conferences, as one of the many development strategies that generate technical reports heavily, were used as a benchmark. In the performance and impact assessment methodologies, case study techniques were applied with ISAS as a site and one unit of analysis. Technical Reports (TRs) on Lesotho were studied. Triangulation approaches were applied in sourcing data. The academics, information workers, government officials, non-governmental organizations (NGOs) and aid agencies based in Lesotho were surveyed. Research questions that guided the study centred on the productivity, distribution of technical reports, their management by intermediaries, use, non-use and the effects thereon.

Seven types of Technical Reports feature in the development process, namely Academic, Project, Conference, Survey, Enquiry, Official and Special Committee Reports. Technical Reports are produced at varying levels depending on needs and approaches to development by producers or commissioning bodies. Academic Reports are authored mostly by the academics. The Government, Aid agencies and NGOs produce widely through external consultants/experts, who utilize centres such as ISAS where commissioning bodies do not have information services. TRs productivity is high and diverse in Lesotho, but capacity to manage the output is seemingly low, and hence under-utilization results; ISAS's out-dated mission, lack of, or limited resources and *de jure* national support in the form of acts and statutes affect the Institute's Technical Reports' services. Production is gender biased, thus making for imbalance in reporting on development. Agriculture as a sector is heavily researched and reported about, but the benefits to the populace are either few or non-existent. Restricted materials are estimated at 30%, but most of the TRs are unaccounted for. Hoarding and poor records or information management leave a vacuum that

leads to a duplication of previous studies and production.

The study confirmed that technical reports are required by all the surveyed groups. Technical Reports are not of a transient nature even though they reach a peak of topicality and use at certain periods. Where the channel conveys factual data timeously, there are developmental benefits. Low or non-use is common where there are no specialized information services especially within the civil service. Such negative factors cause delays and infrequent currency, inadequate reporting and erroneous budgetary allocations, for example. Seemingly there is no clarity on what restricted, secret and limited materials mean. Major recommendations were made. One concerned an integrated approach to managing the channel. This would involve preparing a *Manual for the production of Technical Reports* which would clarify how to prepare them; for instance, the caliber of personnel/experts who should author reports, the conditions to be observed, the timeliness production, reliability of data used, and centres that would be acknowledged to then qualify for commensurate financial and other support. The other proposes that the envisaged National Research Council be given the powers to enforce the guidelines of the manual and related functions. The last recommends assigning to *the documentalists for classified Technical Reports*, the role of managing classified items. Consideration should also be given to important issues raised in the study, being the role of Information, Communication and Technologies (ICTs), sectors of development to be attended to, training and networking in technical report\'. Further studies are also recommended mainly for the causes and effects of the closures of information services that managed technical reports' in southern Africa; longitudinal studies on the impact of non-use of technical reports in major sectors of development like Agriculture; comparative studies on the impact of specialized centres in the developed and developing countries. Further action is urged under the aegis of bodies like the Standing Conference of Eastern, Central and Southern African Librarians (SCECSAL), Standing Conference of National and University Librarians (SCONUL) and the International Federation of Library Associations and Institutions (IFLA).

ACKNOWLEDGEMENTS

It is through the grace of the Almighty that I managed to embark on this study and reach the end.

My immeasurable indebtedness goes to my supervisor, Professor Christine Stilwell, and to my co-supervisor, Professor Andrew Kaniki, who have guided me through this academic exercise. I have learnt tremendously from both. I am thankful to them also for further supporting me emotionally psychologically, and otherwise. I heartily appreciate it all. The staff of the Information Studies Programme, in general, made the department a homely one. Mrs Darlene Holtz deserves a special 'thank you' for meticulously attending to my extra-curricula demands which, if not met, would have hampered progress.

The National University of Lesotho (NUL) as my employer, through its Localization and Training Board granted me study leave. The Board facilitated my field research and related requirements during the entire study period. I record my gratitude. The Lesotho government's National Manpower Development Secretariat provided me with a loan bursary. I am particularly grateful to the W.K. Kellogg Foundation (WKKF) that came to my rescue as I required supplementary funding. On account of the outstanding support of Dr. A.M Setsabi as the Lesotho country contact for the AED, IEMS/LCC partnership, I applied and was awarded the WKKF grant for thesis writing in 2001.

Assistance during my data collection came from a number of persons, at NUL, within the civil service, the NGOs and aid agencies based in Maseru. I am sincerely thankful to each one of them. The study would not be complete without their invaluable experiences, information, candid comments and their enthusiasm that motivated me to enquire more. It is equally befitting that I express my thankfulness to Miss Nthabiseng Ntene, Dr. Henry Mwambi and Mr Sipho Zuma. Their respective expertise in the fields of Mathematics, Statistics and Information Technology assisted me at the stages of data analysis and word processing.

My profound sense of appreciation is due to all my family, for their inspiration, patience, love. Above all, I owe this to Karabo, Thenjiwe, Nonceba and Ebuse. Despite my prolonged absence, the sudden loss of their beloved 'M'e Kholu and thence their suffering at their tender age, they continued to be good. I hope their experience is not in vain. I would not have continued if I did not find yet stronger pillars in the form of 'M'e 'Makholu, Sebina.... all the Jankie and Setsabi families, lithlokotso kaofela, friends, associates and colleagues from Lesotho, Pietermaritzburg and elsewhere. I sincerely say, ever so much, and may you be blessed, and Arthur too...

LIST OF CONTENTS

Abstract	v
Acknowledgments	vii
List of figures	xxii
List of tables	xxiv
List of appendices	xxi
List of abbreviations and acronyms	xxv

Chapter 1

Introduction

1.1	Background to the study	1
1.1.1	The Institute of Southern African Studies (ISAS)	1
1.1.2	Technical reports (TRs)	2
1.1.3	Technical report information and handling	3
1.1.4	Development and development indicators	4
1.1.5	Information and development	6
1.1.6	Origins and application of development information	7
1.1.7	Some major development information systems and technical8 information globally	10
1.1.7.1	Technical reports and development information in Africa and elsewhere	10
1.1.8	Significance of the Standing Conference on Library Materials on Africa (SCOLMA)	14
1.1.9	Globalization and technology	15
1.1.10	Performance assessments	16
1.1.10.1	Levels of assessments	18
1.1.10.2	Three selected performance assessment with relevant indicators	19
1.1.10.3	Levels of information dissemination and the role of intermediaries	21
1.2	Problem statement	25
1.3	Purpose of the study	36
1.4	Objectives of the study	36
1.5	Research questions	36
1.6	Operational definitions of key concepts	37
1.6.1	Channel	37
1.6.2	Cost-benefit	38
1.6.3	Development	38
1.6.4	Effectiveness	39
1.6.5	Information	39
1.6.6	Input	40

1.6.7	Outcome	40
1.6.8	Output	41
1.6.9	Performance assessment	41
1.6.10	Technical reports	41
1.6.11	Use	42
1.7	Justification and significance of the study	42
1.8	General assumptions of the study	44
1.9	Scope and limitations	44
1.10	Summary	46

Chapter 2 Context of the study

2.1	Introduction	49
2.2	Geo-political situation of Lesotho	49
2.3	The development potential of Lesotho	50
2.3.1	The tourism sector	53
2.4	Agriculture and Gender	54
2.4.1	Some development indicators in the agricultural sector	54
2.4.2	Gender disparities in Lesotho	56
2.5	The Lesotho information scene	57
2.5.1	Some information services and indicators in Lesotho	58
2.5.2	Legal framework for the information services	60
2.5.3	Other information channels and systems	60
2.5.4	Information Communication and Technologies (ICTs)	60
2.6	The establishment of ISAS and its choice as a site of the case study	61
2.6.1	ISAS's strategies of managing TRs and by sectors	64
2.7	Summary	69

Chapter 3 Theoretical framework and the review of the related literature

3.1	Introduction	71
3.1.1	Conceptualizing and defining information	72
3.1.2	Types of information	74
3.1.3	Properties of information	75
3.1.4	Value of information	76
3.1.5	Linking information to knowledge	77
3.1.5.1	Conceptualizing information further as opposed to knowledge	78
3.1.6	Information diffusion models	82
3.1.7	The dimensions of development information and its role	84
3.2	Conceptualizing development and development indicators for Lesotho .	86
3.2.1	The origins and notions of development as a process and state	87
3.2.2	Stages of development	90

LIST OF CONTENTS

Abstract	v
Acknowledgments	vii
List of figures	xxii
List of tables	xxiv
List of appendices	xxi
List of abbreviations and acronyms	xxv

Chapter 1

Introduction

1.1	Background to the study	1
1.1.1	The Institute of Southern African Studies (ISAS)	1
1.1.2	Technical reports (TRs)	2
1.1.3	Technical report information and handling	3
1.1.4	Development and development indicators	4
1.1.5	Information and development	6
1.1.6	Origins and application of development information	7
1.1.7	Some major development information systems and technical8 information globally	10
1.1.7.1	Technical reports and development information in Africa and elsewhere	10
1.1.8	Significance of the Standing Conference on Library Materials on Africa (SCOLMA)	14
1.1.9	Globalization and technology	15
1.1.10	Performance assessments	16
1.1.10.1	Levels of assessments	18
1.1.10.2	Three selected performance assessment with relevant indicators	19
1.1.10.3	Levels of information dissemination and the role of intermediaries	21
1.2	Problem statement	25
1.3	Purpose of the study	36
1.4	Objectives of the study	36
1.5	Research questions	36
1.6	Operational definitions of key concepts	37
1.6.1	Channel	37
1.6.2	Cost-benefit	38
1.6.3	Development	38
1.6.4	Effectiveness	39
1.6.5	Information	39
1.6.6	Input	40

1.6.7	Outcome	40
1.6.8	Output	41
1.6.9	Performance assessment	41
1.6.10	Technical reports	41
1.6.11	Use	42
1.7	Justification and significance of the study	42
1.8	General assumptions of the study	44
1.9	Scope and limitations	44
1.10	Summary	46
Chapter 2	Context of the study	
2.1	Introduction	49
2.2	Geo-political situation of Lesotho	49
2.3	The development potential of Lesotho	50
2.3.1	The tourism sector	53
2.4	Agriculture and Gender	54
2.4.1	Some development indicators in the agricultural sector	54
2.4.2	Gender disparities in Lesotho	56
2.5	The Lesotho information scene	57
2.5.1	Some information services and indicators in Lesotho	58
2.5.2	Legal framework for the information services	60
2.5.3	Other information channels and systems	60
2.5.4	Information Communication and Technologies (ICTs)	60
2.6	The establishment of ISAS and its choice as a site of the case study	61
2.6.1	ISAS's strategies of managing TRs and by sectors	64
2.7	Summary	69
Chapter 3	Theoretical framework and the review of the related literature	
3.1	Introduction	71
3.1.1	Conceptualizing and defining information	72
3.1.2	Types of information	74
3.1.3	Properties of information	75
3.1.4	Value of information	76
3.1.5	Linking information to knowledge	77
3.1.5.1	Conceptualizing information further as opposed to knowledge	78
3.1.6	Information diffusion models	82
3.1.7	The dimensions of development information and its role	84
3.2	Conceptualizing development and development indicators for Lesotho .	86
3.2.1	The origins and notions of development as a process and state	87
3.2.2	Stages of development	90

3.2.3	Economics as an aspect of development and conventional measurements of development	94
3.2.3.1	Measurements of development	95
3.2.3.1.1	GDP, GNP and PDL	95
3.2.4	Examples of development strategies by the international community, the outcome and relevance for Lesotho	98
3.2.4.1	Non-Aligned Movement (NAM)	98
3.2.4.2	UN New International Economic Order (NIEO)	99
3.2.4.3	UN New International Information and Communication Order (NWICO)	99
3.2.4.4	UN International Conference on Science and Technology (UNCST) ...	100
3.2.4.5	The South Commission	100
3.2.4.6	UNDP and its focus on Human Development	100
3.2.4.7	The United Nations Conference on Environment and Development (UNCED)	106
3.2.4.8	The Social Summit II	107
3.2.4.9	The World Food Summit	108
3.2.4.10	Global knowledge (GKI) and globalization conference	108
3.2.4.11	HABITAT II	107
3.2.4.12	The United Nations International Women's Conferences	109
3.2.6.	Propositions concerning non-conventional development measurement for Lesotho	111
3.2.6.1	Genuine Progress Index (GPI) as an alternative measure	112
3.2.6.2	Attributes of GPI for measuring development in Lesotho	112
3.2.7	Discussing peculiar factors affecting development in Lesotho	114
3.2.7.1	Discussing knowledge versus ignorance as a factor affecting development in Lesotho	115
3.2.7.2	Understanding aid, and dependence as factors affecting development in Lesotho	115
3.2.8	Discussing agriculture as a sector in the development of Lesotho	118
3.2.8.1	Agricultural information and the agricultural development community .	118
3.2.8.1.1	Farmers as agents in development and users of agricultural information	118
3.2.8.1.2	Government officials as agents of development and information users .	120
3.2.8.1.3	Academics (researchers, teachers, intermediaries, administrators, consultants) as agents and users of agricultural information	121
3.2.9	Conceptualizing gender as an ingredient for development in Lesotho ..	122
3.2.9.1	Understanding the evolution of gender from the notion of women in development	123
3.2.9.2	On putting gender on the development agenda for Lesotho	124
3.2.9.3	Conceptualizing the gender discourse as a human development issue ..	127

3.2.10	Conceptualizing globalization as an aspect of development	128
3.2.11	The origins of globalization	128
3.2.12	Endogenous versus exogenous information within the globalization process	131
3.2.13	The general indicators of the development process and state for Lesotho	132
3.2.13.1	Indicators of development state in general	132
3.2.14	Indicators for the process in the agricultural sector	132
3.2.15	Indicators for the state in the agricultural sector	133
3.2.16	Development indicators for gender	133
3.3	Conceptualizing TRs as channels of information	133
3.3.1	Conceptualizing TRs at the Inception/Production stage	134
3.3.1.1	Classification of information and materials including technical reports	139
3.3.2	Understanding the nature of TRs by physical aspects	138
3.3.2.1	Characteristics of technical reports	139
3.3.2.2	Elements of technical reports	139
3.3.2.3	Formats of technical reports	139
3.3.2.4	Types and broader categories of technical reports	141
3.3.3	Understanding technical reports types by the time aspects	144
3.3.4	Understanding technical reports by function	145
3.3.4.1	Conceptualizing technical reports by user groups	145
3.3.5	Assessing technical reports by attributes pertaining to value	146
3.3.5.1	Discussion of 'timeliness' as an attribute	146
3.3.5.2	Understanding technical reports by format and form	147
3.3.5.3	Conceptualizing TRs attribute pertaining to access	148
3.3.5.3.1	Understanding TRs in terms of availability	149
3.3.5.4	Understanding the appropriateness of information channelled by TRs .	150
3.3.5.5	Discussing quality and value of TRs	151
3.3.5.6	Discussing the nature of TRs versus that of conventional items management	153
3.4	Conceptualizing specialized TR information management as a global phenomenon	155
3.4.1	Specialized information management in ISAS and selected centres in Africa	155
3.4.1.1	The National Institute of Research (NIR) as a specialized technical information service in Botswana	160
3.4.1.2	The Social Science Research Unit (SSRU) in Swaziland	160
3.4.1.3	Specialized documentation centre in Zambia	161
3.4.1.4	The Zimbabwe Institute of Development Studies (ZIDS) in Zimbabwe	161

3.4.1.5	West Africa's Sahelian scientific and technical information and documentation network (RESADOC)	162
3.4.2	Technical reports in Europe, the Far East and North America	162
3.4.2. 1	Special information services in Germany	163
3.4.2.2	Specialized information management in the UK	163
3.4.2.3	Specialized technical information management in Russia	164
3.4.2.4	Specialized development information services in Japan	164
3.4.2.5	Technical and report information services in the USA	164
3.5	Conceptualizing use	165
3.5.1	Analysis of use	167
3.6	Summary	170
Chapter 4	Research design and methodology	
4.1	Introduction	172
4.2	Description of population groups	173
4.2.1	Description and the rationale for the choice of the human population groups	173
4.2.1.1	Members of the National University of Lesotho (NUL) academic community	173
4.2.1.2	Information workers	175
4.2.1.3	The Lesotho government officials	176
4.2.1.4	Non-governmental organisations	176
4.2.1.5	Aid or development agencies based or represented in Lesotho	178
4.2.2	Records and documentary materials	178
4.3	Reasons for the choice of an exploratory case study methodology	179
4.3.1	The purpose, advantages and disadvantages of the case study method ..	181
4.3.2	Reasons for selection of the site	182
4.4	Library-centred impact indicators and measurements	183
4.4.1	Total quality management	185
4.4.2	Benchmarking	186
4.5	Triangulated methods of data collection and the instruments used	186
4.5.1	Questionnaires	186
4.5.2	Interviews	187
4.5.3	Observation	188
4.6	A pretest of instruments	188
4.7	Data collection procedures	189
4.8	Evaluation of methodology	190
4.9	Data analysis	191
4.7	Summary	192

Chapter 5	Findings of the study	
5.1	Introduction	194
5.1.1	Characteristics of population and respondents	195
5.1.1.1	The academic community	195
5.1.1.2	Information workers	196
5.1.1.3	Government officials	196
5.1.1.4	Non-governmental organizations (NGOs)	196
5.1.1.5	The aid agencies	197
5.1.2	Demographic characteristics	197
5.1.2.1	Distribution of respondents by age and gender	197
5.1.2.2	Academic community statuses, age and gender	198
5.1.2.3	Government officials designation at work by gender	199
5.1.2.4	Academic qualifications of the academic community and government officials	201
5.1.2.5	Length of service of government officials	202
5.1.2.6	Physical location of respondents	204
5.1.3	Description of Aid agencies and NGOs in the survey	205
5.1.3.1	Profiles of Aid agencies that were surveyed	205
5.1.3.2	Non-governmental organizations that were surveyed	206
5.1.4	Types of technical reports in the study	208
5.2	Productivity of technical reports in Lesotho	208
5.2.1	Production of technical reports by four producer groups and gender	213
5.2.2	Classification and temporal aspects that affect the distribution of reports	214
5.2.2.1	Timeliness of Annual Report as a type of Official/Internal Report	215
5.2.2.2	Timeliness and Synthesis of technical reports	216
5.2.2.3	Restrictive classifications applied on TRs	217
5.2.3	Purposes for which technical reports are produced	217
5.2.4	Obtaining the sample technical reports, their identification	219
5.2.4.1	The physical description and contents of the sample TRs provided	221
5.2.4.1.1.	TR' retrieval methods used by government officials and the general description of the sample TRs generated by government	222
5.3	Distribution of technical reports	223
5.3.1	The role of a national research council (NRC) in the distribution of TRs	225
5.3.2	Distribution of Conference Reports	225
5.3.2.1	Distribution of TRs of the Women's Conference Reports by participants by gender	227
5.3.2.2	Academic qualifications as a factor for conference attendance and distribution of technical reports	228
5.3.3	Sources of stock for NUL information centres as depicting the	

	general distribution patterns	229
5.3.3.1	Quantities of acquisitions by types of TRs as determining levels of distribution	230
5.3.3.2	Acquisitions of global conference reports in relation to participation . . .	231
5.3.3.3	Processing costs and mechanisms bearing on the distribution of TRs . .	232
5.3.3.4	Availability of Agricultural and Gender materials in the collections . . .	232
5.4	Adequacy of ISAS's mandate regarding TRS	235
5.4.1	Perceptions of information workers on adequacy of ISAS mandate . . .	235
5.4.2	Adequacy of ISAS's mandate from the academic community's viewpoint	236
5.4.3	ISAS mandate in relation to the NUL Transformation process	238
5.5	ISAS's mechanisms of managing Technical Reports	238
5.5.1	ISAS's mechanisms for reaching out to the producers of TRs	239
5.5.2	ISAS as a depository of technical reports	239
5.5.3	Strategies for attracting aid for management of technical reports' management	240
5.5.4	ISAS's own costs of managing TRS as seen by aid agencies	240
5.5.5	ISAS's capacity to attract TRs distributed by government	241
5.5.6	ISAS's current awareness service for TRs, from the intermediaries' viewpoint	241
5.5.7	The Centre's information retrieval mechanisms as seen by the academic community	242
5.6	Use of ISAS and TRs managed by ISAS	242
5.6.1	Usage of ISAS Documentation Centre	244
5.6.2	Purposes for use of ISAS Documentation Centre	246
5.6.3	Disciplines of the recently used TRs	247
5.6.4	Use of ISAS's TRs from the global conferences by the academic community	248
5.6.5	Use of ISAS and productivity of TRs by the academic community	249
5.6.6	Use of ISAS Documentation Centre by government officials	250
5.6.7	Readership rate among government officials	250
5.6.8	Information centres that are used, other than ISAS	251
5.7	Effectiveness or lack thereof in management of TRs by ISAS	251
5.7.1	ISAS' s effectiveness in terms of whom it attracted	252
5.7.2	Information demands placed by ISAS researchers on other information centres	252
5.7.3	Failure to find the needed materials from ISAS	253
5.7.4	Assessment of ISAS's mechanisms from the academic users' perspective	254
5.7.5	Assessment of ISAS's mechanisms by aid agencies, government officials and NGOs	255

5.8	Cost-benefit of TRs pertaining to Lesotho	255
5.8.1	Views of the academic community on cost-benefits	256
5.8.2	Costs benefits of TRs from the aid agencies' perspective	258
5.8.2.1	Cost benefits in terms of conference sponsorship and attendance	258
5.8.2.1.1	Benefits of sponsoring academics, NGOs and the civil servants as seen by aid agencies	259
5.8.3	Analysis of cost-benefits as viewed by government officials	260
5.8.3.1	Government officials' cost-benefits from any conference participation .	261
5.8.3.2	Description of the most useful report as seen by government officials .	263
5.8.4	The NGOs' views on cost-benefits of conferences and reports	264
5.8.5	Views on cost benefits of development projects and related TRs	265
5.8.4.5	Types of benefits experienced by NGOs	266
5.8.5.1	Awareness of duplication or unsuccessful development project.....	266
	by the academic community, government officials and aid agencies . . .	266
5.8.5.2	Description of unsuccessful projects as seen by aid agencies	267
5.8.5.3	Perception of failures of development projects and reports by all the groups	267
5.8.5.4	Summary of cost benefit of technical reports' related activities	
5.9	Summary	271
Chapter 6	Interpretation and discussion of the findings	
6.1	Introduction	276
6.2	The population and demographic details that affect performance of TRs	276
6.3	General productivity of technical reports in Lesotho	277
6.3.1	Interpreting levels of productivity of TRs by type and producers	277
6.3.2	Purpose and levels of production	280
6.3.2.1	The NGOs' involvement in the production of TRs in Lesotho	281
6.3.2.2	Aspects of TRs' productivity relating to Aid agencies	282
6.3.2.3	TRs' production by the academic community	284
6.3.2.4	Production of TRs by the Government	287
6.3.3	Productivity of TRs by gender and academic qualifications' variances .	288
6.3.4	Production of technical reports by ISAS	290
6.3.5	A sectoral production of technical reports	299
6.3.6	Modification as an aspect of the production of TRs	291
6.3.6.1	Ways of modifying technical reports	291
6.3.6.1.1	Synthesis of technical reports in Lesotho	292
6.3.6.2	Classification of TRs into limited, restricted and secret materials	293
6.3.6.3	Application of standard report numbering	293
6.4	Distribution of technical reports in Lesotho	294
6.4.1	The role of a National Research Council (NRC)	294

6.4.2	Distribution of TRs by groups in the survey	294
6.4.2.1	The role of intermediaries in the distribution of TRs in Lesotho	294
6.4.2.2	The NGO's participation in the distribution of TRs	296
6.4.2.3	TRs' distribution at the government level	297
6.4.2.4	Distribution of TRs by the academic community	298
6.4.2.5	The involvement of aid agencies in the distribution of TRs in Lesotho ..	298
6.5	Adequacy of ISAS's mandate regarding TRs' management	299
6.6	Effectiveness of ISAS mechanisms	301
6.6.1	Outreach mechanisms as assessed by government officials	301
6.6.2	ISAS as a depository of technical reports	301
6.6.3	ISAS's own costs and inputs toward TRs' management	302
6.6.4	Interpreting views of the academic community and the intermediaries on ISAS's mechanisms	303
6.7	Effectiveness of ISAS's management of TRs	304
6.7.1	ISAS's focus thematically and in terms of whom it attracts	304
6.7.2	ISAS's failure to meet information needs of ISAS's researchers	305
6.7.3	Accuracy, appropriateness, quality and value derived from technical reports managed by ISAS	305
6.8	Use of ISAS Documentation Centre and TRs managed by ISAS	306
6.8.1	Usage of ISAS Documentation Centre	306
6.8.2	Usage of TRs managed by ISAS	307
6.8.3	Relatedness of usage of ISA and TRs production	308
6.8.4	Use of ISAS and ISAS's managed TRs by various groups	308
6.8.5	Overall use of TRs pertaining to and within Lesotho	309
6.8.6	Discussing use of TRs in terms of the messages they convey	311
6.9	Cost benefit of TRs' pertaining to Lesotho	313
6.9.1	Academic community's cost-benefits of and on TRs usage	313
6.9.2	Aid agencies' cost-benefits of and on TRs	315
6.9.3	The NGOs views on cost benefits of TRs	316
6.9.4	Views from members of Parliament and of the public on cost-benefit of technical reports	316
6.9.5	Government officials' views and analysis on cost-benefits	318
6.9.6	Awareness of duplication and failures of development projects and TRs	320
6.9.7	Factors contributing to the mediocre performance of TRs in Lesotho.....	323
6.9.7.1	Discussing lack of knowledge	324
6.9.7.2	Unfavourable political climate and dominance by aid agencies	324
6.9.7.3	Inaccurate production methods of technical reports	325
6.9.7.4	Information mismanagement	325
6.9.7.5	Non-use, abuse and misuse of technical reports	326
6.10	Summary	

Chapter 7	Summary of findings, conclusions and recommendations	
7.1	Introduction	328
7.1.1	Restatement of the problem and objectives	328
7.1.2	Research design and methodology	329
7.2	Summary of findings of the study and conclusions drawn thereof	329
7.2.1	Characteristics of the population in the survey	329
7.2.2	Production and distribution of technical reports in Lesotho	330
7.2.2.1	Major inadequacies of the production methods	332
7.2.2.1.1	Delayed government reports	332
7.2.2.1.2	Lack of synthesis and standard features	333
7.2.2.1.3	Modification methods	333
7.2.2.1.4	Engendered production	333
7.2.2.1.5	A consistent production of classified reports	334
7.2.2.1.6	Productivity in an unfavourable political climate and foreign influence ..	334
7.2.2.2	Production concerning Agriculture as a central sector in development ..	335
7.2.2.2.1	Resilience of the agricultural sector	335
7.3	Effectiveness of distribution of TRs in Lesotho	335
7.3.1	Formal distribution more effective than the formal.....	336
7.4	The mandate of ISAS	337
7.5	ISAS's mechanisms and effectiveness of managing TRs	338
7.6	Use of technical reports	340
7.6.1	Abuse and misuse of technical reports.....	340
7.7	The cost benefit of use of TRs pertaining to Lesotho	342
7.8	Potential role of ICTs in TRs' management in Lesotho	343
7.9	Recommendations	343
7.9.1	Recommendations regarding areas requiring further studies	349
7.10	In conclusion	350
8.	REFERENCES	351

9. APPENDIXES

Appendix 1	Questionnaire for the Academic community
Appendix 2	Questionnaire for Information workers
Appendix 3	Interview protocol for Government officials
Appendix 4	Interview protocol for the NGOs
Appendix 5	Interview protocol for Aid agencies
Appendix 6	Letter from the University of Natal
Appendix 7	Letter from the National University of Lesotho

Appendix 8 List of libraries and information centres used as optional
or supplementary to ISAS

LIST OF FIGURES

5.1	The physical location of academic community and civil servants	204
5.2	Productivity of TRs by NUL academics	211
5.3	Government officials' form of participation at the Beijing Conference by academic qualifications	228
5.4	Availability of agricultural and gender materials at NUL information centers . .	234
5.5	Level of usage of ISAS Documentation Centre by the academic community by age	245

LIST OF TABLES

2.1	Growth in per capita food production in selected African countries 1988-1993 ..	54
2.2	Percentage of the declining arable land in the selected African countries	55
2.3	Distribution of civil servants by gender and rank (1991)	56
2.4	Participation in governance in % (1993 - 1994)	56
2.5	The perceived library and information scene in Lesotho	59
2.6	Media, information channels and facilities for development 1996/99 per '000 persons	61
3.1	Percentage of population in the labour force within the Industry sector	93
3.2	Poverty datum one in southern Africa	96
3.3	Population in thousands, of people who have access to safer water	114
3.4	Agricultural labour force in thousands in the BLS countries	119
4.1	A sampled population from the academics of NUL	174
5.1	Target population and respondents by survey groups	195
5.2	Distribution of respondents by gender and age group	197
5.3	Academic community statuses, gender and age groups	199
5.4	Designation of gender of government officials	200
5.5	Distribution of information workers and government officials by age, gender and academic qualifications	202
5.6	Distribution of information workers and government officials by gender, and length age groups of service	203
5.7	The names of aid agencies in the survey, and the corresponding designations of respondents	206
5.8	The names and foci of NGOs	207
5.9	Types of TRs in the study	208
5.10	Productivity of types of TRs by producer group by percentage	209
5.11	Production of technical reports by types by gender	214
5.12	Sample TRs collected, by producer group, type, title and description	220
5.13	Amounts of TR received by the NGOs by type	224
5.14	Rankings of sources of acquisitions by information workers	229
5.15	Quantities of TRs in the collections by type and by scores and %age	230

5.16	Participation at Women's conferences and acquisitions of proceedings	231
5.17	Availability of Agriculture and Gender TRs at NUL by types	233
5.18	Frequency of visits to ISAS Documentation centre	244
5.19	Purpose of visits to ISAS Documentation centre by frequencies	246
5.20	Use of ISAS's technical reports from global conferences	248
5.21	Association of use and production of Academic and Project TRs	249
5.22	'Failure' to get materials and 'designation' of the academic community	253
5.23	'Value' and 'Quality' of information in the recently-used report	257
5.24	Relationship between quality and value of a TR used	257
5.25	Cost of technical reports versus other channels as seen by aid agencies	258
5.26	The importance and benefits of conferences attended	262
5.27	The benefits of contributing a report information to a particular conference . . .	264
5.28	Any conference that was regarded important by the NGOs	265
5.29	Academic community and government officials' perceptions of unsuccessful projects	265

LIST OF ABBREVIATIONS AND ACRONYMS USED IN THE STUDY

AAU	-	Association of African Universities
Acad.	-	Academics
ACP	-	African, Carribean and the Pacific
ADB	-	African Development Bank
ADEA	-	Association for the Development of Education in Africa
Agric.	-	Agricultural
Agric. Re	-	Agricultural Research Library
AISI	-	African Information Society Initiative
APNET	-	African Publishers Network
BAPS	-	Business Advisory Promotions Services
BASP	-	Basic Agricultural Support Project
BE	-	Belgium
BLS	-	Botswana, Lesotho and Swaziland
BW	-	Botswana
CABECA	-	Capacity Building for Electronic Communication in Africa
CAIFE	-	Committee for Access on Information and Freedom of Expression
CAS	-	Centre for African Studies
CAS	-	Current Awareness Services
CBL	-	Central Bank of Lesotho
CEDAW	-	Convention on the Elimination of all forms of Discrimination against Women
CORDIS	-	Community Research and Development Information Service
Corp.	-	Corporation
CPDO	-	Central Planning and Development Office
CTA	-	Technical Centre for Agricultural and Rural Development
DEVSIS	-	Development Sciences Information Systems
dfi	-	Direct foreign investment
Dfid	-	Department of International Development
DISD	-	Development Information Services Division

DSE	-	Deutsche Stiftung für internationale Entwicklung
ECA	-	Economic Commission for Africa
Ecumen	-	Ecumenical
EEC	-	European Economic Community
ESAMI	-	Eastern and Southern African Management Institute
ESAURP	-	Eastern and Southern Africa Universities Research Programme
Environ.	-	Environment
EU	-	European Union
FID	-	International Federation of Documentation
FIDA	-	International Federation of Women Lawyers
FAO	-	Food and Agriculture Organization
GAD	-	Gender and Development
GAIN	-	Gender in Africa Information Network
GDP	-	Gross Domestic Product
GIOPS	-	Government Information and Official Publications
GNP	-	Gross National Product
GL	-	Grey literature
<i>gl</i>	-	grey literature
GK	-	Global Knowledge
GOL	-	Government of Lesotho
GPI	-	Genuine Progress Index
GNP	-	Gross National Product
govt.	-	Government
GTZ	-	Deutsche Gesellschaft für Technische Zusammenarbeit
HDI	-	Human Development Index
hr	-	Human Rights
IAS	-	Institute of African Studies
ICT (s)	-	Information and Communication Technology/ies
IDRC	-	International Development Research Cooperation
IE	-	Institute of Education
IDM	-	Institute of Development Management
IDRC	-	International Development Research Cooperation of Canada

IDS	-	Institute of Development Studies
IFAD	-	International Fund for Agricultural Development
IFLA	-	International Federation of Library Associations and Institutions
ILO	-	International Labour Organisation
ILS	-	Institute of Labour Studies
IMF	-	International Monetary Fund
INIS	-	International Nuclear Information System
ISAS	-	Institute of Southern African Studies
ISBN	-	International Standard Book Number
ISER	-	Institute of Social and Economic Research
ISNAR	-	International Services for National Agricultural Research
ISSN	-	International Standard Serial Number
ISRN	-	International Standard Report Number
JSTC	-	Japanese Science and Technology Corporation
JTC	-	Joint Technical Commission
LB	-	Lesotho Bank
LDCs	-	Least Developing Countries
LEINET	-	Lesotho Environmental Information Network
LFCD	-	Lesotho Fund for Community Development
LHDA	-	Lesotho Highlands Development Authority
Lib.	-	Library
LIPA	-	Lesotho Institute of Public Administration
LISA	-	Library and Information Studies Abstracts
LNDC	-	Lesotho National Development Corporation
LPPA	-	Lesotho Planned Parenthood Association
Ls	-	Lesotho
MNCs	-	Multi-National Corporations
MOA	-	Ministry of Agriculture
MS Lesotho	-	Mellemfolkligt Samvrike (Danish Association for International development)
MW	-	Malawi
NAL	-	National Agricultural Library

NASA	-	National Aeronautic and Space Agency
NATIS	-	National Information System
Nation.L.	-	National Library
NCDC	-	National Curriculum Development Centre
NES	-	National Environmental Secretariat
NIEO	-	New International Economic Order
NGOs	-	Non-governmental Organizations
NIR	-	National Institute for Development Research
NL	-	Netherlands
NORAD	-	Nordic Agency for Development
NRC	-	National Research Council
NRF	-	National Research Foundation
NTIS	-	National Technical Information Services
NTTC	-	National Teachers Training College
NUL	-	National University of Lesotho
NWICO	-	New World Information and Communication Order
OECD	-	Organization for Economic Co-operation and Development
OPAC	-	Online Public Access Catalogue
OSTI	-	Office of Scientific and Technical Information
PADIS	-	Pan African Development Information System
PANA	-	Pan African News Agency
PDL	-	Poverty datum line
PFA	-	Beijing Platform of Action
PIARC	-	Association Mondiale de la Route (World Road Association)
PRAIS	-	Programme for Agricultural Information Service
RCC	-	Research and Conference Committee
Res.	-	Resource
RESADOC	-	Sahelian scientific and technical information and documentation network
RSA	-	Republic of South Africa
SACCAR	-	Southern African Center and Cooperation for Agricultural Research
SACU	-	Southern African Customs Union

SAAINET	-	Southern African Agricultural Information Network
SADC	-	Southern African Development Community
SADCC	-	Southern African Development Coordination Conference
SADC-FANR	-	SADC Food, Agriculture and Natural Resources Development
SADCOSAI	-	SADC Organization of Supreme Audit Institutions
SADCRIS	-	Semi-Arid Tropical Crops Information Service
SADRA	-	Southern African Development Research Association
SACMEQ	-	Southern African Consortium for Monitoring Education Quality
SARDC	-	Southern African Research and Documentation Centre
SAREC	-	Swedish Agency for Research and Cooperation
SCECSAL	-	Standing Conference of Eastern, Central and Southern African Librarians
SCOLMA	-	Standing Conference of Library Materials on Africa
SCONUL	-	Standing Committee on National and University Libraries
SDI	-	Selective Dissemination of Information
SIGLE	-	System for Information on Grey Literature in Europe
SMEs	-	Small and Medium Enterprises
SPSS	-	Statistical Product for Support Services
SSRU	-	Social Science Research Unit
STABEX	-	Stabilizing Export Earnings (of the ACP countries)
STI	-	Scientific and Technical Information
TNGP	-	Tanzania Gender Networking Programme
TCDC	-	Technical Cooperation among Developing Countries
TNCs	-	Transnational Corporations
TQM	-	Total Quality Management
TR(s)	-	Technical Report(s)
Transf Re	-	Transformation Resource Centre
TWAS	-	Third World Network of Scientific Organizations
TZ	-	Tanzania
UNDP	-	United Nations Development Programme
UNCED	-	United Nations Conference on Environment and Development
UNCST	-	United Nations Conference on Science and Technology

UNEP	-	United Nations Environmental Programme
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
UNIC	-	United Nations Information Centre
UNICEF	-	United Nations Children's Fund
UNIDO	-	United Nations Industrial Development Organization
USA	-	United States of America
USAID	-	United States Agency for International Development
VNTIC	-	Scientific and Technical Information Centre of Russia
WAD	-	Women and Development
WB	-	World Bank
WHO	-	World Health Organisation
WID	-	Women in Development
WLSA	-	Women and Law in Southern Africa
UK	-	United Kingdom
UNDP	-	United Nations Development Programme
UNESCO	-	United Nations Educational Scientific and Cultural Organisation
ZA	-	South Africa
ZIDS	-	Zimbabwe Institute of Development Studies

CHAPTER 1

INTRODUCTION

1.1 Background to the study

This chapter introduces a study which assesses the performance of technical report literature as a channel of information for development in the Lesotho based Institute of Southern African Studies (ISAS). The evolution of ISAS is firstly traced, as the Institute is also assessed to determine its effectiveness and efficiency in producing, processing and providing this literature to users. The chapter highlights the nature and purpose of technical reports (TRs); it provides a brief on the understanding of information and development, and their relationship. The overall background to the study of performance is described within the Lesotho, regional and global contexts. There follows a section on the criteria, techniques of performance assessments. Levels of performance assessment applied in the case study of Lesotho are stated. That leads to the problem statement, aims and objectives of the study, as well as the suitable research techniques. Justification is given for the study, for the choice of the agriculture and gender sectors, and for ISAS, Lesotho and the profession.

1.1.1 The Institute of Southern African Studies

When it was established in 1979, the Institute of Southern African Studies became the principal research arm of the National University of Lesotho (NUL). The latter had adopted its new name two years earlier following the dissolution of its predecessor, the University of Botswana, Lesotho and Swaziland (UBLS). The two forerunners of UBLS, namely the Pius XII College which had started in 1945, and the University of Basutoland, Bechuanaland and Swaziland, had had a library, as well as archives. Despite the existence of that information facility of long standing at NUL, ISAS was established concurrently with the setting up of its Documentation and Publications Division. Its mandate was to handle development literature specifically for the development-oriented research of the university, and then of the country and the sub-region. More specifically, the duty of the documentation centre was to gather, organize, repackage, and manage this so-called non-conventional, grey, development-related literature as comprising technical reports

among other types. ISAS's obligation was to make this literature accessible primarily to researchers, lecturers, planners, policy and decision makers; and secondarily to students and others. The publication section of ISAS was intended to be complimentary, to announce and market both the acquired items including technical reports, plus ISAS's own generated materials. The present study is an assessment exercise exploring, firstly, how technical reports are performing, or have performed in conveying development information. Secondly, the exercise examines how the ISAS information service has been discharging that stated duty regarding technical reports.

1.1.2 Technical reports

Technical reports (TRs) are defined as an account of an on-going, state-of-the-art, progressing, or final research work that is prepared and brought by experienced parties or experts or scientists, to other parties which need, want, commission or are entitled to the work (Holloway 1976; Sengupta-Benoyendra 1978; Calhoun 1991). Technical reports form one among several types of development- or grey literature. Whereas the latter can be traced from either the early 1970s (Chillag 1973; Gehrke 1975); or the mid-seventies (DEVSI 1975) when they also gained recognition as wide-encompassing terms, recognition of the former started much earlier. During the World War II, TRs had already begun "to play a leading role in the communication of the research results" (Leondar 1968:84). Henderson (1981) argues that technical reports came to the fore in the hectic 1950s as the channel in communicating research results. Concern over the important yet problematic technical reports has for decades been and is still being expressed by a number of information workers worldwide. Hartas (1967:79-80) described technical reports as demonstrating the complex manner in which scientists communicate, and a communication channel for which librarians are usually neither trained to handle, nor experienced to handle (Mark 1970; Bonitz and Schmidt 1978; Wang and Alimena 1981; Pinelli, Khan, Barclay and Kennedy 1993). Yet, "reports have been with us a long time, and in almost exactly the present form" (Leondar 1968). Leondar further argued that though they are useful, they do not receive enough attention from information workers – inclusive of academic librarians. Balachandran (1991) argued that in India, technical reports (governmental or non-governmental) get a poor bibliographic control.

According to Holloway (1976) and Calhoun (1991) categories of technical reports depend on their types of producers who largely emanate from the academic world, industrial fields, government and private circles. Their categories also relate to the purpose for which they are generated such as the contract, progress, monitoring or committee work in any developmental activities (Cermakova 1975; Conradie, Konig, Koti, Pillay and Valkhoff 1999). As they are often not refereed they are issued quickly. Technical reports, therefore, tend to be produced in small quantities, be subjected to restricted distribution or classified secret, and become fugitive. For that reason, obtaining TRs from their sources is so difficult that it requires specialists' skills.

Holloway (1976:63) further elaborates that it was on account of this expressed need for scientific and technical information as contained in TRs that the *Weinberg Report, 1963* was produced in the USA. The report which succinctly described the problems pertaining to Technical reports and technical information gave an impetus to the establishment of specialized information centres in the USA, thereby marking the beginning of technical information handling (OSTI 2001).

1.1.3 Technical report information and handling

On the understanding that technical reports contain indispensable development and technical information, documentation centers which are assigned the sole responsibility of providing development and technical information to development actors, devise specialized strategies to efficiently and effectively handle these reports. This seems to be a common practice. The literature will also show how technical reports contain development information. As well, examples will be given from different countries and regions. That technical reports contain scientific, technical or technological information which is associated with development, implies that technical reports therefore have the potential to contribute to development. The argument is consequently how technical reports and information they contain actually influence or lead to development, and what development is. The specialized handling of technical reports is invariably widespread in institutions whose objective is to bring about development in one way or another. In line with their seeming conviction that information channeled by technical reports is indispensable and profitable if well organized and used, these centers make considerable efforts to handle Technical Reports in a skillful and effective manner. Another argument then is whether the efforts involved are commensurate with the anticipated value and benefit. Since

information is an abstract concept, evidence that use positively affects development is not immediately apparent. This assumption needs to be supported through objective evidence from studies that demonstrate that development occurred or was stimulated through an effective or efficient management and use of technical report service. That development has also occurred needs to be substantiated through some visible signs or indicators. This is a subject that challenges empirical assessment. It entails a discussion of development, its attributes or development indicators that should be measured as an effect of technical information management or as a consequence of information use thereof.

1.1.4 Development and development indicators

In order to determine if in the Lesotho case study, technical reports and ISAS services are accomplishing any “development” - the goal for which they were set up - it is necessary to shed some light on the theory of development worldwide, and what it should mean in the Lesotho context. Since its emergence in the late 1940s, the term “development” has defied definitions in many respects. The doctrines of development have not only conflicted with different theorists and regions, but also been dynamic with times. There are two approaches to development (Cowen and Shenton 1996; Rist 1999) which will be examined for the Lesotho case study. The conventional thinking is that the term, together with its theory and practice, originates from the West. The post-war, post-industrialization and post-colonialism era saw the emergence of influential economic, political and historical theories that viewed the non- or less industrialized nations as traditional, not modern; poor and “undeveloped”. A majority of those ‘undeveloped’ countries were the former colonies, were located in the Southern Hemisphere, and they had a low Gross National Product (GNP) which characterized a standard measure of economic growth then (Morris 1979). Being traditional apparently meant, *inter alia*, having non-mechanized ways of tilling the land, of accessing water, food, clothes and medicines. The conventional thinking further viewed those non-industrialized nations that engaged in bartering for exchange of services as needing to conform to the “developed” pattern; and that the situation called for a *development* or the transformation process. The non-conventional thinking continuously being advanced is that the “development” theories predominantly originate from the North, and their measures render the term itself inadequate to some communities which may view growth from other perspectives. The debate makes a challenge as to who/what actually is being ‘developed’, modernized, exposed to

growth, and growth in what area. It is yet another challenge to the South as to whether “poverty” is defined in terms of material, monetary, or contrarily even by its cultural value (Nyambura 1999; Rist 1999). According to Rist (1999) development is a complex process that entails not only economic consideration, but also cultural, political, social, historical and everything that arises endogenously, from deep down inside each society. Conventional thinking that the South should abandon traditional ways has differed over the decades and dominated the international strategies regarding attaining development. The first United Nations decade in the 1960s focused on economic growth that was meant to accelerate economic productivity in the South. Indicators that development has taken place would be determined by the country’s gross national product (GNP) or net/gross domestic product (GDP) which measures goods, services or activities being rendered in money terms. GNP and GDP do not measure elements like happiness, justice, security, freedom, or leisure that a society provides (Morris 1979). El Sarafy and Lutz (1989) specifically note that neither is GDP useful in gauging long-term sustainable growth as it ignores the depletion and degradation of natural resources. At the closure of that first development decade which attempted to focus on economic growth, and measuring it by gross domestic product, not only had economic growth failed to occur in the countries of the South but in most countries of the North as well. In Canada, for instance, efforts are advanced, as will be expounded upon in the literature review, to employ alternative means of measuring genuine progress as against indiscriminate growth (Colman 2000). At the same time, as the less developed regions continued to lack the essential characteristics for development, another attempt was made to industrialize and transform the South. In the 1970s, the second development decade formed a focus for development of basic human needs, namely food, shelter, and clothing. However, as early as 1973, the decline of the world economy disrupted the strategy of advancing the basic human needs. Structural adjustment programmes which hit the South hardest were introduced. Poverty increased in terms of the unavailability and inaccessibility to the majority of resources to meet basic human needs. Aid from the North declined due to an urgent need to manage the economic crisis being experienced worldwide. What amounted to the third development decade in the 1980s was a withdrawal of attention to basic human needs. The 1990s have seen the end of the Cold War, but ironically, more of political conflicts and natural disasters which negatively affect the environment, agricultural productivity and social stability (healthy life, peace, harmony and happiness as some of development indicators).

Dependency theorists from South America argued that the relationship between the North and the South was the result of colonialism whereby the colonial masters (located in the metropolis, and as the centre of power) continued to exploit the former colonies that served as the weak periphery. In order for the South, therefore, to develop, they should de-link themselves from that servitude, the non-attainable conventional development. The South/South cooperation is one of those earliest strategies advanced as alternatives and the debate is still about how to divorce the less industrialized nations from the Western style of development.

Braidotti, Charkiewicz, Hausler, and Wieringa (1994:27) and Rist (1999) are of the same view that these theories of development, mainly from the North, have not succeeded in bringing about development. They are said to have been unsuccessful in predicting the development process. Most of these critiques are increasingly seeing the present *inadequate* development theories as actually part of the problem. This school of thought advocates concerted efforts towards eradication of poverty - especially in the countries of the South. They make a call for basic needs-oriented development models that embody genuine respect for human life. These conflicting and changing views on development also become a challenge to the current research aiming at establishing if there is any relationship between information and development, and in the case of Lesotho. It is questionable which model is feasible to aim at, whether it is the conventional or non-conventional one, a combination of both, if possible, or neither.

1.1.5 Information and development

The juxtaposition of information and development, information for development, development information or developmental information is commonly used as if, automatically, one (information) causes the other (development). Simplistically described there may be a close association or relationship between the two, according to Boadi (1987), Menou (1993), and Dosa (1997). However, Boadi (1987:1) observes that it is on condition that information is carefully organized and effectively utilized that it will contribute to social and economic development. It is not *ipso facto* development. That is why information is said to have the potential for development. Since it is conditional, it is that conditionality which has continued to pose a challenge to information scientists worldwide (Kann and Veenendaal 1987:61-68; Sturges and Neill 1990; Menou 1993; McConnell, Mchombu, Tague-Sutcliffe and Thorngate, 1995; Dosa

1997:44-47). Boadi's (1987) point begs the question as to how well organized information should be to become developmental, and here the effectiveness of technical reports and the role of ISAS as an intermediary require investigation. Another crucial question is what the indicators are that show that development has taken place because of the impact of information. This is key to the on-going discourse on information and development, and central to the assessment of technical reports in this thesis.

The relationship between information and development is not a concern of information workers alone but also of other sectors involved in various developmental activities like higher education, research, provision of health facilities, agricultural services, basic water supply to the rural people and monitoring environmental performance (World Bank 1998/99). Concurrently with systems and services relating to development activities, several organizations go further to invest in informational support which is presumed to enhance their ongoing developmental work. That is why there are exemplary information schemes which have been initiated by development-oriented organizations. The next section describes some of those information systems that arose from the philosophy of development information.

1.1.6 Origins and application of development information

An indication of some relationship between information and development being construed can be traced back to the Development Sciences Information Systems (DEVSIIS) project of 1975 involving six major international organizations. They were the International Development Research Centre of Canada (IDRC), International Labour Organization (ILO), Organization for Economic Cooperation and Development (OECD), the United Nations (UN) Department of Economic and Social Affairs, United Nations Development Programme (UNDP) and United Nations Educational, Social and Cultural Organization (UNESCO). These organizations saw the need, firstly, to strengthen their own information and documentation services; and secondly, to devise common automated systems by which they could exchange their databases. One of the strategies employed by their study team was to determine which type of literature would be included in the cooperative scheme. The kind that would commonly serve their developmental interests would be labeled 'development literature'. In order to distinguish which literature that was, the team undertook a survey of the already existing global literature. The purpose was dual,

to weigh how much exists, and what quantities may be of relevance to their developmental requirements. After a six months' process of analyzing and categorizing a sample of materials from the Institute of Development Studies in Sussex and from the National Documentation Centre of Morocco, the team concluded that there was actually what could be called *development literature*. It comprised 60% of what was called invisible (non-conventional, or less conventional), and 40% visible items (DEVSI 1975:18). That the sample was drawn from one center in Europe and another in Africa could demonstrate that development information exists in both the industrialized and 'developing' countries. Nevertheless, the team was not clear in defining development information. The term was rather identified in relation to DEVSI's users and their needs. The users, also called 'development community' were categorized as policy-makers, planners, managers, researchers and teachers, financiers, communicators and personnel concerned with information analysis. These corresponded to ISAS's primary users. Development literature was therefore described as "the information which was generated within the 'development community' in the furtherance of its own mission" (DEVSI 1975:34-5). It is noteworthy that these categories of 'development community' were also the 'generators' of the type of literature that they use. There is no clarity on whether DEVSI thought there could, at the same time, be other users of the literature.

At this point, it is noted that the world's conventional or 'visible' category included mostly commercially available materials like books. The major portion of 60% constituted, amongst other channels, technical reports that contain technical information. Hence the perception of technical reports as central in development literature was supported by DEVSI.

1.1.7 Some major global development information systems

The DEVSI concept was not an end in itself but an impetus for the establishment of reputable international systems that aimed at harnessing world development information in their respective areas of specialization, while at the same time being compatible in their methods for resource sharing purposes. Those were the International Agricultural Information System (AGRI), International Nuclear Information System (INIS), and later Information System for Environment - Infoterra by UN Environmental Program, and the Pan African Development Information System (PADIS) by Economic Commission for Africa (ECA). The mentioned sponsoring organizations

accelerated their efforts to manage the literature under discussion. For instance, the UNDP sponsored various information and development related schemes. The United Nations Educational Scientific and Cultural Organization (UNESCO) gave attentive support to libraries, documentation centres, archives, communication and technological ventures in the UNESCO members states. The DEVSIS project had shed further light on the understanding that the non-conventional literature type of information forms the largest portion of the world information store and the most relevant for development (DEVSIS 1975). Ironically, it is the bulk of the literature which is labeled “non-conventional” while the smaller proportion is recognized as the visible. This situation has not changed more than twenty five years later. According to Farace (1997), there is more grey literature being produced in the late 1990s. Quantities of grey literature are estimated to surpass those of conventional and commercial materials by three to four times. Moreover, “Grey literature has come to be seen as a national commodity where foreign markets are willing to purchase it” (Farace 1997:69-70).

The report of the International Conference of Grey Literature (GL3:1997:i) lists types of channels which seem to correspond to ‘technical information’ as the theme of that conference. The listed channels were in the order of “Reports, Proceedings, Dissertations, Bibliographies, Manuals, plus the latest format CD-ROMs, Databases, Bulletin Boards, world wide web (WWW), Email, Internet, Etc.”. Nonetheless, it was not stated if these were in order of importance, quantities or just randomly listed, but seemingly the list is not exhaustive. What is crucial is that all these formats have some basic and common properties as Grey Literature. In the second instance, differentiations among each and various attributes exist. Of concern in the study of technical reports is their particular attributes and their development-oriented features. Individual organizations or systems may indicate how different these attributes are, and how the attributes affect the channel of information. As well, organizations may go further to specify the scope of technical reports from which they make acquisitions for their own systems. Examples particularly comprise centres handling technical reports in the developed world. For purposes of this study, definitions in this chapter and discussions in the literature review will further elucidate the nature of this channel.

1.1.7.1 Technical reports and development information in Africa and elsewhere

As will be shown, in Botswana, Swaziland, Zambia and Zimbabwe, documentation centres more or less similar to ISAS were established with the same purpose of handling development information including technical reports. In West Africa, one example is chosen to demonstrate the accepted trend of dedicating a documentation centre to a research or development-oriented project.

At the intergovernmental level, DEVSIS influenced the establishment of PADIS in 1980. The inauguration of PADIS programme through the auspices of the UN was a response to a general need to assist African governments to systematically acquire, then provide elusive information for development planning and decision-making processes on the continent. Established in 1958 as the UN Economic Commission, the ECA set up PADIS as its arm for development oriented information schemes. PADIS's aim was to support African governments and institutions in developing their automated systems which would later link up with sub-regional networks interconnected to the continental headquarters in Addis Ababa (Adam 1998). The system initially adopted a sectoral approach of handling its literature and serving relevant clientele. For instance, PADIS opened different files such as PadisDev for development literature and Padis-Stats for statistical data. To date, PADIS has gone through three phases of development. The first was, as mentioned, to bring African countries, mainly through governments, into the New World Information and Economic Order. The advent of the Internet ushered in the second phase which embraced the social and organizational, political dimension, including community participation and democratized access [own emphasis] (Adam 1998:56). The third was its absorption into the communication programme of ECA. It is therefore debatable which of the PADIS strategies and policies have been implemented and satisfactorily borne the expected results in the two phases. A brief overview is made below with regard to how the changes relate to ISAS or similar centres that operated through the influence, or as satellites of PADIS at the national levels.

Firstly, PADIS changed its name only a year after it was established from "Documentation" to "Development" Information. This was understandable in view of the fact that the new name conformed to the mentioned philosophy of DEVSIS. Furthermore, although its regional nodes were identified, they never became operational (Chisenga 1997); and very little communication

ever existed with most of its national focal points. Its hard copies of *Devindex Africa* which announced selected documents published by ECA have been discontinued. Interestingly, the task of handling development information had not been assigned to the ECA library which was established much earlier than PADIS. Even when PADIS operated there was hardly ever any cooperation between the two (Amonoo 1994).

The establishment of PADIS where a traditional library already existed at ECA was thus similar to the situation of ISAS being established to deal with TRs. The literature which PADIS announced in the index was “of unconventional or ‘fugitive type often fairly difficult to locate’” (*Devindex Africa* v. 2:v). PADIS’s Standing Committee on Standardization and Harmonization is continuing to work on harmonizing methodologies for processing non-conventional materials in Africa, but its impact is yet to be assessed. Mechanisms by which the National Institute for Development Research (NIR) - Botswana, issued a number of its *Devindex Botswana* were influenced by PADIS (Kwafo-Akoto 1993). The PADIS’s short-lived project on Capacity Building for Electronic Communication in Africa (CABECA) injected some technological know-how into selected centres which were thus introduced to email systems (Adam 1998). ISAS was one of those centres. One of PADIS’s success stories according to Adam (1998), is to enable a number of centres in Africa to contribute to the web content of the Internet.

The 1990s marked great strides in the information age, an era of knowledge and globalization. The period gave birth to the “information society” concept which according to Prytherch (1998: 395) suggests that “all aspects of life are becoming dependent on electronic access to information; [and that] there are social, economic and political considerations, as well as technological concerns”. In this regard, for individuals, communities and nations to reap some benefits from that information-conscious environment, the capacity is required to handle, export and import information that has emerged in global markets. As a response to this imperative to every society, in May 1996, fifty-three African ministers of social and economic development adopted Resolution 795 (XXX) entitled “Building Africa’s Information Highway” which would connect African states to each other and the rest of the world. The group of experts who designed ways and means of implementing this resolution produced a document entitled *African Information Society Initiative* (AISII) - an action framework to build Africa’s information and communication

infrastructure. The chief executive of the ECA affirmed that “The framework will be the basis for ECA’s own programme of work in its focus of Harnessing Information for Development” (Amoako 1996: ix).

In 1997, PADIS was restructured in that it was absorbed into a new Development Information Services Division (DISD). The latter, like PADIS, was set up with the duty of harnessing information for development. In the same year, PADIS/DISD undertook to focus on AISI. Strategies were set up by which AISI was meant to face challenges that hinder continental development in the area of information, communication and technology. Priorities outlined comprised sectors such as Food Security, Education and Research, Gender Development and Health. Of relevance to the Lesotho case study were the objectives of some of the projects proposed by AISI. For instance, there was:

- ▶ *the higher education and research objective* by which beneficiaries were researchers at universities.
- ▶ *the education and training objective* had target beneficiaries comprising teachers, students, pupils local libraries, and women whose literacy levels were regrettably low.
- ▶ *the food security and agricultural production objective* focused on members of society like farmers, food producers and distributors who were meant to benefit by accessing information pertaining to their work.

Through AISI, PADIS’s aim was to advance technology, or urge governments to do so, so that African society could accelerate the storage and transfer of massive and relevant quantities of information through CD-ROMs, emails and the Internet. It is questionable how much has been achieved. It is a concern in the case of Lesotho whether technological advancement will impact positively on the handling of development information contained in channels such as technical reports. The second concern is that even before PADIS became fully established at national and institutional levels where it was meant to be fully entrenched, and where several centres still operate manually, PADIS had forged ahead technologically. This is likely to bear some positive and negative effects on areas still as controversial as development including technical report literature. All the specialized centres that technologically lag behind are unlikely to catch up, thus creating a digital divide (Nisonger 1997; Chisenga 1999). Another reminder of the history of

PADIS at this stage should be in order. PADIS was inaugurated through the financial and technical assistance of IDRC, UNESCO and UNDP in 1979. At that time it was envisaged that the headquarters would be connected by satellite with the regional, institutional, as well as national centres. PADIS was meant to progress along with all these relevant information centres. The aim was to provide and facilitate a speedy flow of organized and accessible development information within and outside the continent for decision-makers and planners (Hafkin 2000). The so-called the national participating centres would actually serve as clearing agencies between other centres handling development information nationally and the central point in Addis Ababa. Many information workers thus hoped that PADIS as a decentralised system for Africa would provide advisory and pivotal assistance to all the centres handling development information (Howell 1984). Even much earlier, Zulu (1994) also regarded PADIS as holding a promising and bright future for information and technological development of Africa as a whole. That was not to be. In 1999 it was stated that “the major weakness of the system had been its inability to assure access to the information to the users who needed it when they did. The failure was attributed to the fact that the initial PADIS “concept was 15-20 years ahead of technological realities on the African continent” (E/ECA/DISD/CODI.1999:1.10).

Therefore, when AISI is reported to have assisted Africa to contribute its content on the world-wide-web, this is noted as another aspect to assess in relation to its contribution to development. To a great extent, an information service like ISAS, which is making attempts to implement some or most of these strategies, is bound to be affected by those ever-changing continental policies on development information. Interest will also be focused on how they impinge on the effectiveness and efficiency of information services, their systems and products like technical reports, let alone on development that should be confirmed by end-users.

Be that as it may, it is evident from the arguments such as those by Newman (1982:42) that even in the North technical reports are indispensable in channeling information for development. There exist examples of large national ventures or regional consortia that support this fact. The Scientific and Technical Information Centre of Russia (VNTIC) is one. The National Technical Information Service (NTIS) of the USA which is the actual agency for managing technical information from the National Aeronautic Space Agency (NASA) is another. There is also the

German based agency for the International Standard Report Number (ISRN). JSTC exists as the consortium of the Japanese Science and Technology Corporation. In Europe too are the System for Information on Grey Literature in Europe (SIGLE); and Community Research and Development Information Service (CORDIS), which is based in Luxembourg as the centralized source of information on the European Union research and development activities, to mention a few. Though they exist outside Africa, their services may affect the continent as SCOLMA does.

1.1.8 Significance of the Standing Conference on Library Materials on Africa (SCOLMA)

SCOLMA is a cooperative scheme that started in the UK in April 1962 to enable members to share the responsibilities of collecting library materials that would facilitate African studies or research in Britain. Due to its generally poor bibliographic control, Africa was found such a difficult region to collect from that it required members' concerted efforts and cooperation as devised in the scheme. What is discernible from the three editions of *SCOLMA directory of libraries and special collections on Africa* (Collin 1967; Hannan 1983; French 1993) is the significance of five important issues relating to this study on performance assessment of technical reports as a channel of information for development, the Lesotho case study. These issues are: Library materials in general, or technical reports from Africa in particular, are **a channel of information for development everywhere** not only in Africa or Lesotho, but in the UK, in Europe or anywhere materials are being collected and utilized.

Interest in "Africana" has been increasing. In 1967, a year after Lesotho gained independence, there was one SCOLMA member listed as collecting from "Basutoland" and that was the National Library of Wales whose scope is typically too general for a satisfactory handling of technical reports, as will be seen. The 1983 directory lists three centres, one being a Centre for Southern African Studies whose geographical scope is incidentally similar to that of ISAS, the site of this study. In 1993, the third edition lists thirteen centres that are not only specific to Lesotho as were the preceding editions, but, unlike the earlier guides, in addition it lists "Southern Africa". Among these collectors of items from Lesotho are some which for the first time come from elsewhere than the UK. They include the Norwegian Organization for International Development (NORAD) in Norway, the Centre for Development Research in Denmark and University of Bremen's Centre for African Studies. Activities that affect development in Lesotho,

even **the productivity** of related information channels, are **going on in a number of countries**, not necessarily in Lesotho or within the continent only. The geographical scope that goes beyond Lesotho can therefore determine the size of the field from which the ISAS documentalist should also collect technical reports of interest to the Institute. The above-mentioned guides, also specified subject fields and information channels, are covered by SCOLMA members. Apparently the subjects closely correspond to those of ISAS too. Consequently, the situation does not only indicate how wide the field is from which to acquire technical reports relevant to ISAS. The situation offers likely opportunities for either partnerships or competitions, or rivalry over the items to be collected.

1.1.9 Globalization and technology

The label “Southern Africa” as a newly entered category in the 1993 SCOLMA directory signifies the integrating regions that blur national identities and their products. The increasing need from Europe for technical reports pertaining to Lesotho or Southern Africa, further underlines the interdependence of nations and regions on information. It also demonstrates a shifting recognition from the rigid financial aspects to a more balanced position of viewing the value of information in the global development as Uhegbu (1997:86) maintains. Again, the issue underscored the fact that for any debate on development and information it is important to note their relationship with the emerging phenomenon of globalization in which information and information technology play a part. Lesotho is categorized among countries below the lowest poverty lines (World Bank 1998/9). It imports more than it exports, (*Sixth Five Year Development Plan 1998/99*; *Central Bank of Lesotho 1999*). However, the country is part of the world order in terms of TRs and has an indispensable contribution to make with regard to information it generates. Information channeled by technical reports pertaining to Lesotho is potentially a unique local resource that is as particular and attractive in the international information market as resources from any other country. On the global market, these technical reports pertaining to Lesotho can compete with other commodities that have transcended national or regional boundaries. Technical reports might therefore be subjected to what Adam (1998) calls a ‘democratized access’ for intermediaries having the capacity and skills to acquire and further transfer, serve or utilize. For this reason, the Lesotho case should be seen as part of what is going on globally in moving towards open markets in all respects. It remains to be determined if it is true that such democratized access of information –

including development information, channeled by technical reports, translates to an advantage or disadvantage to the developing countries such as Lesotho.

Whether in Europe, Russia, Japan or anywhere in Africa, the view exists that technical reports channel information for development (Hartas 1967; Holloway 1967; Lundin 1978, Calhoun 1991; Pinelli, Khan, Barclay and Kennedy 1993). The challenge is to provide evidence that such development occurs where TRs have been applied and performed as expected.

1.1.10 Performance assessments

The perception of performance assessments, as generically comprising impact assessments and performance evaluations is gaining momentum in the information services (Orr 1973:315; Cronin 1982:227; Chen 1990:7; MacDougall 1991:371) as in other different areas of development. With development projects, for example, it is also common for donors to commission impact assessment and evaluations of on-going or just ended programmes. Information services are no exception to this trend, *sine qua non* with responsibilities of any manager, who should know how well his/her business, service, programme, or organization is operating, and whether it is fulfilling its mandate. That mandate and goals are the criteria upon which to base an assessment that generally measures a service or input against the benefits or the outcome (Lancaster 1981; Martyn and Lancaster 1984; Menou 1993; Griffiths and King 1994; Chambers and Boissier 1995; Taqae-Sutcliffe 1995:14). The idea is, therefore, to get feedback on whether a programme, a business, service or system is performing at a low or high level; as expected, as planned, as desired, or not. Assessment studies are done to judge if the expenses are worthwhile, and/or to diagnose if corrective measures should be applied where aims and objectives were not accomplished. As will be elaborated in the literature review, evaluation and assessment research are closely related. According to McMahon, Barton and Piot (1984:51-52) assessment is a more in depth continuation of an evaluation.

Prytherch (1998:159), however, seems to make no distinction between the two similar functions. He notes that performance assessment/appraisal/monitoring/evaluation and related processes as quality assurance have gained much attention in recent years. Likewise, Morgan (1990) argues that assessment may be synonymous with evaluation, and they are each commonly used in the UK

and USA respectively. Regardless of where they are applied, however, both aim at determining how well or not the systems or products have been. That is why Neuman (1994:23) rightly describes evaluation research, which in this case is considered a component of performance assessment, as the type which is widely used in applied research to address the question, did it work? Of course, not only did it work - but rather, 'did it work efficiently and effectively'? 'Effectively' suggests a preconceived effect that a service was intended to attain and it is therefore incumbent upon information managers to assess the effect and outcome of the input they make to their systems. As noted in section 1.1.5, information is believed to have a role to play in development. As a result, funds are injected into information programmes, services, systems and sub-systems in anticipation of certain benefits. Likewise, the capital costs and recurrent budget of ISAS Documentation and Publication Division which the NUL authorities/authorize(d), are meant to promote and enhance information programmes which in turn are expected to contribute to development within the organization and beyond. Technical reports, it is argued, are a critical channel of information for development. Consequently assessment in this study is of both an information system - ISAS, and the object which ISAS handles - technical reports literature.

Performance assessments and evaluation exercises of information channels and services are therefore crucial to development efforts because they measure information and its use in the broad context of human communication and the coordination of human activity (Thorngate 1995:200). Assessment and evaluation exercises seek to establish if there is, and if so, the extent of, correlation between the human utilization of information and the human knowledge increase and creativity. It must be pointed out, however, that, awareness, availability, accessibility and provision of information are also some of the determining factors. They are prerequisites for the use of information (Poole 1985; Rubin 1998). Unless assessment is carried out of each of these distinct yet interconnected aspects, it may be difficult to diagnose the extent to which level of input, or which factor, has a positive or negative influence. A manager or an information worker who continues to fund information activities without assessing their effectiveness could operate the service under the illusion or assumption that there are some achievements to his/her programme while there are no benefits at all. Using the cost benefit concept this study attempts to establish if an information service and information channel achieves or continues to achieve as intended. In particular, the aim is to assess how well or how badly the channeling of

information through technical reports has been in meeting the objectives of, firstly, the authorities that establish, fund produce and, secondly, the managers and librarians who acquire, repackage, store and disseminate information contained in these reports. Technical reports are thus assessed in terms of their potential benefit to users and potential users. The objective of the study is moreover to assess the mission of ISAS as the context within which technical reports are performing. Finally, the assessment will determine the extent to which ISAS is meeting its objectives in relation to the provision of information for development through TRs.

1.1.10.1 Levels of assessment

Lancaster (1978:15) identifies three possible levels at which an evaluation of an information service can be carried out. These are a) *effectiveness*, b) *cost-effectiveness*, c) *cost-benefit* evaluation levels. Martyn and Lancaster (1981:115) add a benefit category to further specify four possible levels of evaluation, namely a) *effectiveness*, b) *benefits* c) *cost-effectiveness* and d) *cost-benefit relationship*. Menou (1993:21) expounds on the four levels by adding the area of impact measurements. Griffiths and King (1994:89) also provide an assessment framework. It uses four perspectives of assessment. These are, firstly, library services where specific measures are inputs (resources) and outputs (products). The second perspective is service use, where specific measures are actual *usage* or non-usage and *outcomes* (consequences) of use or non-use. The parent organization or community being served is the third perspective and here specific measures involve time saved, improved organizational productivity, improved quality of work, achieved parent organizational goals and values derived at the domain level. The last is the nation/society perspective, whereby specific measures are the target population, user/non-user population and their information needs. Griffiths and King (1994:82-83) then argue that these measures alone are not meaningful except when they are related to each other by determining:

- a) **performance** relating inputs to outputs,
- b) **effectiveness** relating outputs to usage,
- c) **cost-effectiveness** relating service input and usage,
- d) **impact** relating service usage and outcomes, and finally,
- e) **domain** measures used to 'normalize' input costs, output quantities, usage, and outcomes.

In almost all the mentioned cases, emphasis is on linking the use to costs, and then determining benefits, value or outcomes. Though the complete exercise as comprising the outcome, consequence and impact is difficult to apply, this is attempted in the Lesotho case study where an association between information and development is being assessed. Menou (1993:20-21) cautions us about the difficulty and fallibility of too mechanistic an approach:

No specific factor, much less information, can be singled out as a main cause of development. A wide range of external influences are involved at each level in the measurement of the impact of information. It may thus be important to find out which benefits are primarily associated with information, if, indeed 'primarily' can be defined.

A study which in some way resembles the current Lesotho case study is found in the Caribbean situation where the Institute of Social and Economic Research (ISER) was evaluated. Chambers and Boissiere (1995:109-11) applied three levels of evaluation, namely, performance, effectiveness, and outcome. The slight difference between the Caribbean and Lesotho situations is that in the former, the impact of information on policy formulation is being evaluated whereas in the Lesotho case study, assessment/evaluation is on technical reports' information and its relationship to development. In both the ISER and ISAS cases, target users of the information services are multi-disciplinary and broad-based.

1.1.10.2 Three selected levels of performance assessment with relevant indicators

In this section the essential determining elements or indicators for each level of performance are identified.

- ▶ **performance** (inputs - outputs). For performance the following indicators are important:
 - proportion of acquired/processed TRs to the TRs generated by producers
 - comprehensiveness of coverage of acquisitions of technical reports which increases choice, reliability, accuracy up-to-date-ness
 - coverage of TRs in agriculture and gender materials for this current study
 - availability or accessibility of TRs to users, due to such factors as funding and distribution of current awareness tools, revision of web pages as alerting tools
 - relevance of TRs' acquisitions

- provision of abstracting, indexing and synthesis services
- **effectiveness** (of the outputs, including technical reports services to the users). With effectiveness, the following indicators are key
 - frequency of use
 - whether this use is increasing or not
 - ease and convenience of use, including institution's ability to provide copies
 - browsability of the system and services
 - timeliness of outputs
 - minimum cost to use of the service
 - appropriateness, relevance and quality of products in meeting needs
 - ability to reach the intended clientele through appropriate mechanisms
- **outcomes**

The indicators for outcomes are the positive or negative consequences experienced by users, or ISAS/NUL, in terms of inputs aimed at development in the gender and agricultural fields.

Outcomes can be seen as benefits or positive consequences; and these may be:

 - provision of services to clientele
 - acquired knowledge that enhances productivity (by users and ISAS)
 - improved quality of work (by users and ISAS)
 - achieving development goals of ISAS/NUL, especially in the gender and agricultural sectors
 - value derived by individual or organization in terms of input made before benefitting.

The product, technical reports as a channel of information, is assessed in terms of how much it has been produced, made available, organized, processed (indexed, abstracted, announced, disseminated) and made ready for utilization; and how that process affects the development of the people and the country Lesotho as the context.

1.1.10.3 Levels of information dissemination and the role of intermediaries

Information can be disseminated through various channels such as books, journals, audio-visual materials and technical reports. Modes of dissemination can also either be manual or electronic. The strengths and weaknesses of these channels, sources and methods of delivery vary and also their value, importance and the relevance of the messages or information they convey. Producers who constitute the starting point generate information for a set purpose, and transmit that information through a particular conduit because of the particular attributes of both the information and the conduit.

A channel may not just be compatible with information and knowledge it contains and conveys, but also with the particular users being targeted. According to propositions made by Poole (1985), the attributes of a channel predetermine use. For instance, certain users are likely to prefer certain channels. The domain or subject of a channel will tend to attract certain clientele and not others. Users' awareness of the information contained in a channel, its availability and accessibility to them, also have an effect on its usability.

Poole's (1985) assertions concur with the dissemination model put forward by Pinelli, Khan, Barclay and Kennedy (1993:322- 324). They suggest that no matter how good the quality of information and knowledge, if mechanisms are not found by intermediaries to link producers of that knowledge with its [proper] users, the information stands a limited chance of being available and utilized. That assertion highlights the importance of the role played by intermediaries like ISAS. The model can, however be criticized for advocating a one-way model of source-to-user process. Ideally therefore, intermediaries should be in a position to employ a two-way dissemination process for transmitting information.

It is argued that one way information flow is rarely responsive in the user context. The procedure is, as a result, attributed to "passive information intermediaries who rely on the initiative of user to request or search for items" (Pinelli, Khan, Barclay and Kennedy 1993:323-325).

Stevens (1997:153) adds helpfully to this point when he refers to the directionability of information flow which can be upward, downward or lateral; implying between professions of

equal stature, or those of senior or junior positions as well. Stueart and Moran (1998:303) likewise indicate that a communication flow can be downward, upward or horizontal as does Stiglitz (2000). The understanding is that at all these levels, information specialists are linking agents from where feedback should be received. Intermediaries should also be conscious of the possible levels of information transfer that can take place within formal and informal methods that respectively constitute primary and secondary levels of distribution.

With reference to technical reports specifically, Pinelli, Khan, Barclay and Kennedy (1993:324) observed that there are formal and informal levels for disseminating technical reports. In the National Aeronautical and Space Agency (NASA) in the USA, for example, at a formal level, an ideal model of transferring technical reports at the primary level of distribution, is found in the sending reports to libraries and technical information centres. This is a formal level that is described as completing the *producer-user* transfer process. It is a procedure that works better for depository libraries, but even in the USA, Newman (1982) finds the procedure seldom effective with technical report and special libraries. At the informal levels, copies are sent to surrogates on the one hand, while the other, a limited number is set aside to be used by the author for the scientist-to-scientist exchange of information at the collegiate level. In those informal levels, it seems that intermediaries may be bypassed. In the case of Lesotho where there is no legal deposit law in the first place, it is questionable if intermediaries even become the initial recipients of depository/complimentary copies from producers as is the case in the USA NASA technical reports.

The study also determines if, on the contrary, technical reports are sent elsewhere, and to what effect. This is why it is also important for the study to assess if intermediaries and their systems exist to handle and manage the channel, they make a difference. Most importantly, it is essential to find out what differences they make and their extent. The intermediaries referred to are information workers as a whole, documentalists and librarians, as well as the formal institutions, that is, the information services and systems of which librarians are constituent parts. Information workers should have well anchored infrastructures for the task, while they should also keep the channel functioning by identifying, selecting and packaging the relevant, useful information and transferring it to active consumers of information, or creating awareness in potential yet passive

users. By so doing information workers presumably facilitate the transfer of messages or information from producers, to intended and unintended users (Newman1982). Information workers, as intermediaries and brokers, also promote the consumption of that information.

In observing the role of information workers, Conkling (1991:155) states that they are being called upon to serve TRs which support information needs not only for students and staff, but also for industrial and business users. It is worth noting that information which technical reports channel, according to Conkling (1991), can support needs that go beyond academic confines, as they extend to other development sectors like industries and to their policy makers and planners. Maltha (1976:3), in observing the role of intermediaries, argues that initially scientists were content to be self-reliant in finding information for themselves, but changed this view when they came to terms with the complexity of information systems which required assistance from, and collaboration with, skilled information workers. The latter saved enquirers time by locating specific items among the myriads of sources, analyzing, packaging, repackaging and providing information as required by various development actors (Mannix 1967:91-92; Kochen 1975; Duckitt 1984:80; Lamberton 1990:xxi; Thorngate1995; Farace 1997:69). It behoves the responsible information manager, therefore, to get feedback as to whether or not in fact the system makes a difference in a particular situation. Users and stakeholders of that particular information system and technical report service can give that feedback. Non-use and under-utilization of information should be the concern of an information manager who, having noted it, then determine the causes. Dervin (1983:176) cautions that unless messages [information] are constructed in terms that have meaning in day-to-day lives of users, or potential users, they will not be used. This is another respect in which TRs pertaining to Lesotho will also be assessed, that is, to determine whether messages conveyed are constructed in a manner which is meaningful to and useable by the intended audience and recipients. The latter categories include researchers, planners and policymakers. To this end Dervin (1983) suggests the use of effective synthesis of research and development literature and interpretation strategies by both information workers and/or by working scientists. That idea tallies with the suggestion made by Gray and Perry (1975:16) that practitioners should pre-digest information. Dervin (1983) argues further that practitioners should partake in the synthesis because it is they who construct (generate) those messages in the first place. This is another aspect to be investigated in the Lesotho case study. In

that suggested arrangement whereby producers and intermediaries are involved in interpretation or simplification of the language of this literature for users, the likelihood is that not only a developmental communication cycle becomes complete, but that the concerned information manager or specialist also gets feedback on whether the process of managing information is worthy or worthless.

It can therefore be diagnosed whether the channel being employed is adequate, accessible, adaptable to information needs, valuable or valueless; and whether the service is or is not cost-beneficial to the targeted user groups, beneficiaries or development actors in general terms. This study in particular, assesses the extent to which technical reports as a channel of information for development achieve this aim in Lesotho. It also assesses how successfully or unsuccessfully ISAS as an information system, service or provider, has performed in disseminating technical information at the listed levels. As stated in section 1.5 the phenomenon of establishing a technical report service by purpose and design has occurred in a number of almost homogenous development-oriented situations, of government, academic or private orientations, in developing and developed countries. This performance assessment therefore supports or does not support the rationale for such development-oriented organizations to run development information systems, or alternatively supports it while suggesting methods to improve delivery.

The study objectively determines if technical reports effectively channel the information required for development actions and decisions. The assessment attempts to affirm or refute that a specialized information collection, its dissemination and use by producers, decision makers and implementers has a bearing on development. Moreover, the study seeks to establish the causes of under-performance by TRs; or under what conditions they can, or they have, effectively and efficiently performed as desired. At the same time, it is an assessment of ISAS as an intermediary. ISAS's information system, its stature, capacity and capability in terms of staffing, buildings, reading room facilities, collection coverage, management style and so on, are examined. The study determines if the quality of all these, directly or inversely, affect, the level of use; and if the level of use links to the quality of outcome and benefit, thus indicating development.

1.2 Problem statement

Technical reports are described as a valuable channel for development information (Gerrard 1966; Chillag 1973; Auger 1975; Slobodyanik 1980; Henderson 1981; Conkling 1991; Pinelli, Barclay and Kennedy 1997; Farace 1997; Chisenga 1999); hence arguably for development. Development is defined below and discussed in the review of literature. Technical reports are a problem area universally (Leondar 1968; Mark 1970; Sengupta 1978; Smith 1981; Amy and Wang 1981; Balachandran 1991; Calhoun 1991; GL'97 1997). The value placed upon them is demonstrated by the great lengths to which authorities go to put in place the information infrastructure required for technical reports. Not only should information systems be in place, but they should continuously apply appropriate strategies to succeed with the channel. Yet despite the high cost of the funds expended on the production and management of this resource, efficiency, effectiveness, benefits or development as a whole cannot be easily guaranteed. Technical reports as a channel are difficult to handle and they suffer neglect from most quarters. They sometimes become obsolete quickly making the expenses difficult to justify (Leondar 1968). Furthermore, little is known about TRs, and this seemingly results in under-utilization that adversely affects the outcome or benefits, thereby creating a vicious circle.

In the first instance, the non-conventional format of TRs does not lend itself to the usual acquisition methods or cataloguing, shelving and borrowing procedures. Unlike the so-called conventional items such as books which publishers formally market widely, technical reports are not aimed at such public audiences: "They have a highly selective readership and they are difficult to access" (Manfred and Schmidt 1978:8-12). In limited cases producers can directly distribute TRs to intermediaries. DEVSIS (1975:31) identified generators as comprising six major groups that notably produce for their exclusive use and not necessarily for others. The groups include governments, the donor community, academics, private companies or the corporate world. However, it is not specified which of these groups are generators, and which are users. Information workers need to be aggressive in obtaining technical reports from these generators or other sources. TRs differ from conventional books in that, with published books, publishers usually bear the cost of marketing them to libraries. Information workers also need to be rigorous in announcing TRs to intended and potential users. In the case of ISAS as shown, it was set up with an infrastructure separate from the library's in terms of capital and recurrent budgets,

staffing and accommodation. ISAS's relationship to the NUL library is similar to that of PADIS that was established distinctly from the ECA library. The rationale behind the dedicated ISAS centre was basically that, on the whole, a separate technical report service is better, and it makes an impact where TRs are specially attended to using robust and appropriate mechanisms. For this reason, that it is the particular requirement pertaining to TRs management, they undoubtedly do add costs in situations where a general information system already exists.

As shown the cost-benefit level of assessment is not necessarily in this study a distinct level, but is essentially subsumed in the two selected, namely, 'effectiveness' and 'benefits'. It is necessary too to assess the service in terms of costs and benefits so that cost can justified or not be justified. The peculiar problems relating to the effectiveness of TRs exist in all the regions of the world including the developed countries. In the developed and technologically advanced countries, substantial and widespread ignorance and misunderstanding about TRs persist (Wang and Alimena 1981; Newman 1982; Conkling 1991; Pinelli, Khan, Barclay and Kennedy 1993). Ignorance or misunderstanding of the channel can be one important cause of lack of recognition or neglect. This is particularly so among the intermediaries or documentalists. Their ignorance about the channel undermines their duty to link TR producers with users. The effectiveness of intermediaries, therefore, can determine the level of use or effectiveness of utilization. These observations apply to ISAS in that it serves not only as information intermediary, but also an information generator and user.

At the production stage, and in terms of costs, foreign and local consultants are continuously commissioned to prepare feasibility study reports before, during and at the end of development programmes (Ambrose 1984). Donors contract experts to produce technical reports on the evaluation of projects that are donor-funded, in order to be reassured of, or to justify the continuation, increasing or halting of the scheme. Commissions are set up to enquire into the crises of financial, political, or managerial nature. Among the outcomes of these often very intensive investigations are technical reports containing direct and immediate solutions to the problems. The problems identified are those linked with the organization's current or future work and "aimed at particular people" (Hartas 1967:80) [own emphasis], for exclusive readership and use. There is concern in the literature about what the content of these TRs is, and whether they

transmit effectively the factual messages and work of experts pertaining to the solutions to be acted upon by the intended recipients of messages (Pinelli, Khan, Barclay, Kennedy 1993; Conradie, Konig, Koti, Pillay and Valkoff 1999:265). Each development project potentially results in several types of TRs. In several countries, technical reports are increasing in quantities and even assuming new formats (Farace 1997) which demand speedy handling (Newman 1982). This suggests that their difficult nature is increasing too. The difficulties become considerable for those who have not been familiar with the channel in the first place. This scenario is apparently prevalent in Africa and the southern African sub-region (Saracevic 1980; Sturges and Neill 1990). Delays in announcing and making available research results can give rise to duplication of research and costs (Martin 1964; Gardner 1981).

Against this background of escalating demands posed by the management of the channel, and possibly energies devoted to handling technical reports service, there is little evidence in Lesotho that their use is satisfactorily optimal, and that messages communicated are beneficial in terms of development. Evidence exists (Ambrose 1984) that TRs are continuously being produced and increasingly by government departments, development agencies, donors, academic institutions, non-governmental organizations, consultant and individuals. Abstracts, bibliographies and catalogues listing agricultural and gender-related TRs pertaining to Lesotho may serve as one indicator of this activity. There is an increase in grey literature and TRs generated in the world, including those being produced in Lesotho in the field of agriculture, rural development, the status of women and the like. But bearing in mind the potential role of TR in development there is a problem if there is no observable development or transformation of the society. Evidence is therefore required to support the hypothesis that information contained in, channeled and transmitted by technical reports actually has an effect on, or any connection to, development.

There must, however, be a purpose behind that production. The accumulating collection in the information centres, especially ISAS, also provides a challenge for investigations. Do information specialists only assume that TRs in general contain such information for development? In the same way, there must be a reason behind whatever acquisition policy is on hand regarding TRs. This body of literature is believed to contain knowledge which is produced in order to be utilized, and for some anticipated benefit.

In the context of a book, rather than a TR, Abbott (1989) argues that it is published so that it is used. She then describes different notions of “use” depending on the opinion of an author, publisher, librarian, even an extension worker. In the case of technical reports, it is apparent that the initial “purpose”, as well as “use” will have to be determined from the producers, intermediaries and the actual users’ point of view. But whether that purpose has been fully established and the extent to which it is realized, and how well, is not known, hence the current study in which technical reports service is assessed on how well it is performing in relation to availability, accessibility, readability, novelty, informativeness, knowledge enriching and ability to empower for development.

The performance of TRs occurs, according to Swisher and McClure (1984), in an open system of a library that “exchanges resources with the environment” in a manner which may be effective or not. Consequently, ignorance about how TRs perform is seen concurrently with the problem of not knowing how ineffectiveness, if it is established, may be tackled. The study attempts to establish the link between information and development. Other bases for conducting assessments and evaluations have been an attempt to show that the expenses and inputs in information services or technical reports justify the benefits at the end. In a changing world where new methods and technologies regarding information handling and exploitation are continually advancing, additional funds and skills are required to handle the information channel with speed and expertise (Farace 1997). The need to assess performance of these channels becomes even more imperative as quantities of the channels increase with time. Information workers should have the skills to interact with technical information producers, generators, or constructors with whom such information is or should be synthesized and interpreted as Dervin (1983) suggests.

Notwithstanding the multifaceted efforts demonstrated during the 1980s, for which ISAS was commended (Sturges and Neill 1990) concerning the manner in which it handled TRs for development information, there is little or no evidence that the service has kept pace with new methods of TR provision. It is also not known if, as anticipated, use of TRs has had any impact on the development of Lesotho. Development is still the goal of ISAS. Upon the Institute’s request, the ECA sponsored ISAS evaluation (Teriba 1989) which was positive about the

performance of ISAS, although the assessment did focus more on the Research than the Documentation Centre.

Menou (1993) argues that the causal links between development and information observed in the literature (Boadi 1987; McConnell 1995) are so intricate that it is not easy to determine whether 'information causes development or conversely, development causes information'. He further clarifies that the difficulty is caused by "the complexity of real-life situations in contemporary societies and of the number of non-information-related internal and external factors with any endeavour" (Menou 1993:20) that is developmental. The process is, therefore, not like a simple equation. Progress may be hindered or it may be accelerated by other factors. These particular conditions that should obtain, and circumstances that come into play for information to translate into development as an outcome need be determined.

As indicated, the sort of problems pertaining to technical reports globally also apply in Southern Africa and in Lesotho. Some difficulties become compounded due to the already poor bibliographic control even for conventional materials as shown above in discussion of SCOLMA. The persisting economic and political climate in Africa seems to relegate libraries to being a low priority, thus requiring librarians to struggle even harder to justify their services (Sturges and Neill 1990). Insufficient funds and shortage of skilled personnel as a pool of additional resources for 'specialized centres' present a gloomy picture for an adequate environment for effective handling of technical reports. Convincing indicators that the handling was consequently for the channeling of development information to wherever it is needed and profitably used are required.

In the case of ISAS, TRs are handled separately from a traditional library. That handling instead, symbiotically supports and is supported by research and publishing. Current awareness and selective dissemination are done through tools like *Lesotho Index*. ISAS's documentation strengthens cooperation locally and internationally. In spite of these strategies for handling the channel (*ISAS Annual Report 1993*), it is worrying that observation suggests that use of this literature is not increasing. It is not clear either that the impact of TRs on developments is positive. The use of TRs seems low and infrequent, mostly limited to a few academics on the NUL campus. Government officials and other potential users who were clearly envisaged in the

NUL Five year development plan 1985 as development actors do not seem to use the TRs in ISAS.

As indicated in the literature review development connotes a better living standard for people of all social strata nationally. It does not centre around the elite – the academics or government officials who produce and use technical information. Aina (1995:1) concurs with Dervin (1983) in this regard, that “every individual, whether literate or non-literate needs information in order to take decisions” in development-related activities. Admittedly, producers and users can generate and utilize technical information for an indirect benefit (Chambers and Boissierre 1995), or for perhaps indirect use by certain groups, as argued by Abbott (1989). Although this benefit may be applicable to the ISAS situation, evidence to support this would be necessary. The study explores technical reports as channel, whose exploitation gives rise to some development outcome. Unless there is clear establishment of the causes of some of the expected failures regarding the expected performance of technical reports no appropriate action can be made to enhance or correct the situation. With respect to direct use, Uhegbu (1997) discovered that there was a direct link between provision of development information and successful development projects in the rural communities in Nigeria. He argued that communities become empowered and their development projects succeed almost proportionately with use of such information. He then quoted Mchombu, however who, in 1992 commented that “the amount of development information that flows into the rural areas is dismally low”. The point may be comparable to the rural areas of Lesotho, hence also to this study. The ISAS documentation centre, in view of its original mission, cannot be excused for only targeting researchers and policy makers, and not the rural population as well. Researchers and policy makers whom ISAS may claim to serve cannot in themselves bring about development. Therefore, who is affected by development information should be of interest to ISAS too, and in a wider sense.

Serpell (1981) argues that specialized information centres attached to research institutes may be more effective in development if they link with other centres of a general or public nature. In order to ensure that the technical reports being handled communicate developmental information in a multi-directional manner, ISAS could, according to Serpell (1981) and Stilwell (2001), further stimulate dissemination of syntheses, summaries and interpretation to intermediaries

serving the general or rural communities. It is this form of communication at all levels that is recommended by Stevens (1997) and is supported by UNESCO's old but still relevant principle of the National Information System (NATIS 1970). The NATIS concept advocated interconnectedness of intermediaries within a country, as opposed to each existing as an island. In the same vein, Budd (1998:4-6) maps out the academic environment in which he situates research institutions and academic libraries. He regards all as still serving within one continuum, though focusing in varying degrees on particular or given aspects. The information climate around TRs in Lesotho needs to be interrogated along these lines.

The *Lesotho Index*, as was the NIR's *Devindex Botswana*, which lists both newly acquired reports and research reports is academic in nature. The index is never written in the local languages, and it is distributed mainly to the academics rather than government officials, technocrats, donors (Kwafo-Akoto 1993) and extension workers. The Lagos Plan of Action for Africa however, recommended, or "concluded that research findings needed to be made available to the farming community without delay" (Sturges 1997:34). The recommendation would also apply to rural women as well as various actors among the civil societies to whom adequate amounts of information should be repackaged in accessible rather than in hospitable formats (Stilwell 2000). For the same purpose, scientific and highly technical information from the agricultural researchers should be repackaged in appropriate languages at an acceptable level and in easy formats to agricultural extension workers. Their role could be to translate innovations from research findings into practicality, and solicit feedback. It should be investigated if such linkages exist in the Lesotho situation. Rosenberg (1998:8) warns, too, that "All too often development projects fall short of their objectives because adequate information is not communicated to the communities involved and the benefits of change are thus not fully understood". Opinions of researchers, donors, politicians, planners and all types of originators, beneficiaries and intermediaries along the channel are crucial so that all reflect meaningfully upon their distinct roles in this communication circle. Such views could go a long way in educating information specialists about the channel for which they are said to be generally ignorant. If this is not done, information workers continue to work in a knowledge vacuum which contributes to their mishandling of the channel in certain circumstances, to the extent of putting the channel in jeopardy as in traditional libraries (Mark 1970).

Statutorily, ISAS is owned by NUL and is Lesotho based. However, the geographical coverage of ISAS activities was meant to be sub-regional. That is why in 1981 the centre also became the secretariat of the Southern African Development Research Association (SADRA), a body that was commended by Kabudi (1999) for cooperation in scientific and technical information. Given the democratizing political dispensation in South Africa since 1994, as well as other related changes, it may be questionable if ISAS can still attract the same numbers and types of Southern African scholars as it did when it was established in the late 1970s. Alternatively, perhaps ISAS's geographical scope of interest should alter and thereby reduce the costs and become more focused on national development matters in Lesotho. This consideration has implications for the handling of technical reports pertaining to Lesotho. Obviously, regional protocols such as the revised Southern African Customs Union, the eleven member SADC which is bigger than the former SADCC, the envisaged free movement of the SADC citizens within the sub-region, all give an even stronger reason for ISAS to have a regional outlook, yet emphasize national interests. In fact, a researcher on HIV/AIDS in any SADC country in the mid 2000s, for instance, will be faced with more complex social dynamics brought about by more interaction of these countries and their nationals, than before. Documentalists will as a result best meet information needs of such a researcher with data collected from the sub-region more than from one country.

In the light of this recognition, the demanding duty of sourcing TRs from the region even from producers in Europe, America and anywhere in this global community, is important. Such a task is overwhelming and requires additional skills. nationally, regionally and sector by sector. To that end, the currently non-existent regional consortia could be considered specifically to handle technical reports and technical information. In relation to the absence of that type of consortia, it is noteworthy that SADC arrangement whereby member countries assume certain responsibilities is in place. With time as new issues of concern emerge in the sub-region, they may be discussed and duly allocated to countries or centres that are found adequate to handle them. SADC's Gender Policy adopted in 1998 is coordinated from Botswana. Culture, within which information and documentation centres, libraries, museums, archives and related fields are attended to, is coordinated from Mozambique, while issues of higher education as comprising research institutes have their base in Swaziland. On the one hand, it seems a problem that the

responsibilities for TRs management may be scattered over the mentioned counties. On the other, the situation suggests that disciplines are interrelated and intermediaries should cooperate in order to share resources.

One major problem nevertheless, is that specialized handling of development information with all its ramifications seems to be marginalized, and is hardly ever provided for in the SADC protocols. The problem is aggravated further by the fact that the SADC library in Botswana, which should be the depository of all SADC generated technical report literature, has no formal linkages with any SADC information centres within the member countries and this operates as a constraint on bibliographic control in the sub-region (1999). McClure (1993) observes that ignorance is rife about TRs. In order for relevant policies to be formulated at sub-regional, national and institutional, specifically ISAS levels, for making TR available in southern Africa, documentalists should firstly examine themselves to ascertain how knowledgeable they are about the reasons and procedures for generating technical reports, and how, what and where in the intermediaries' catchment area. There is a strong argument (Hartas 1967:80) that the production of a technical report is a response to a research or technical problem for which a solution is immediately worked out by experts through that channel. As stated earlier, TRs require vigorous mechanisms by which documentalists accelerate use of the channel. The necessity for such action is especially important in Lesotho with its fledgling development situation.

Another aspect of TRs use to be established concerns the levels of productivity and availability. It has not been established if quantities are commensurate with use, or if the content of produced TR duplicates other existing reports which could be a deterrent to users. Information overload or heavy "volumes" of information can overwhelm potential users as Dervin (1983:155) indicates. The issue of the need and supply is therefore an essential requirement to be considered. In the case of low use, the ISAS collection has been evaluated fully regarding low and high use in regard to the goals of the documentation centre or targeted clientele. The ECA's (1985) sponsored assessment of ISAS was more geared toward the performance of the research division than of the documentation it contains.

The annual report of ISAS does not provide statistics segregated by subject, gender, periods for unmet requests, untraceable TRs, unindexed backlog nor unsynthesized titles and reasons for failures (*ISAS Annual Report 1985; 1995*). Documentalists' passivity in this regard might suggest that their services are not concerned if the messages being channeled correspond or do not correspond to the developmental questions for which the report was produced. Yet it should be the concern of intermediaries to get feedback about the effectiveness of any of their efforts. That is why the study assesses whether all these seeming problems exist within ISAS and in Lesotho, and what the solutions could be. Saracevic (1981:28) argues that in some cases, the information market may be dynamic, while the product may not be, hence bringing about the failure of the service. The point is only noted at this juncture, so that it is also investigated in the study. Indeed, it is not known if it is ISAS centre, the products, as TRs, or their environment that are dynamic, and to what extent; nor how the condition of each affects other variables as viewed by Saracevic (1981).

In the USA and later in Europe the practice of attaching a service with regard to technical reports, technical and development information to a research institute seems to have clear origins from the *Weinberg Report 1963*. "The report asserted that information was an integral part of research and development" (OSTI 2000). It recommended a specialized management of declassified government technical reports for prompt announcing and inexpensive supply.

The need had been felt for communicating scientific information from the research results. Formal dissemination models that operate for NTIS (McClure 1980) and large specialized systems like the National Agricultural Library (NAL) of the USA serve as examples of an advanced practice which developing countries like Lesotho copied without necessarily realizing the need to adapt them. Mchombu (1985), Boon (1992:67) and Karlsson (1994) argue that one of the reasons why information has not satisfactorily contributed to development in the less developed countries is because information systems there are often designed according to the western models. Such models tend to be inadequate for specific needs of users in the less developed countries. If these systems do make any impact in the less developed situation decision makers tend to conclude that information is of importance to development (Sturges and Neill 1990).

In the library field, most of the studies seeking to assess the impact of information on development have thus far mainly focused on the developed world. They have largely been evaluative only, and on the effectiveness of a library service as a whole, or on the use of the entire stock of different types (Blagden 1980; McElroy 1982; McClure 1985; Morgan 1990; Pinelli, Khan, Barclay and Kennedy 1993; Feeney and Grieves 1994). Evaluations, too, have predominantly looked at information channels narrowly as being library based. That is, assessing the materials *in situ*, within the library systems (Cronin 1982). Hence, those evaluations were unlikely to evaluate the channels before they entered libraries. The library situation itself could be seen as introducing factors peculiar to each library (Saracevic 1981). That is why it is necessary to assess TRs at the levels of producers and non-library-oriented users as well. The traditional studies have also tended to overlook the possibility of informal dissemination and distribution models, or users' complex behaviour of seeking information from providers other than formal libraries. Such patterns of information flow have been recorded even in disciplines like agriculture, in rural development and others, for instance, by Kaniki (1989:132); Mchombu (1991); Dervin (1992); Tuominen, Kimmo and Savoilanen (1997); and by Technical Centre for Agricultural and Rural Development - CTA (1998). This study attempts to apply comparable research methods in the Lesotho situation.

Whilst the same traditional studies provide a sound background to the one being carried out, it is not evident that findings of previous assessments can satisfactorily be applicable *in toto* to the southern African situation where a more encompassing assessment exercise is in question.

MacDougall (1991:371) points to some of the shortcomings in the literature.

The Library and Information Statistics Unit at Loughborough University has reviewed the international literature on performance assessment. Three of their papers shed some light on recent literature. In 1988 Goodal reported: "It would be wrong to suggest that no real progress has been made in the field of performance measurement, but one cannot help feeling that the research has been of a circular nature and although plenty has been written on the subjects, there is a surprising lack of originality. The research appears to be collateral rather than cumulative.

This criticism influenced the researcher's attempt in the current study to move away from the kind of duplication and replication referred to above, though making an effort to draw useful lessons

from those previous studies. In the late 1990s, attention has steadily been drawn towards generic terms like “grey” and “development literature” to the detriment of the intrinsically peculiar channels or individual types in those broad topics like technical reports.

In a majority of previous studies, the question has commonly been whether these reports are really worth the expense and the effort. It has been questionable too, if objectives for which they are produced, collected, meticulously organized, then utilized, are achieved. In southern Africa and in Lesotho that question is still pertinent. In addition there are more questions since the problem of TRs as shown above certainly exist throughout the stages of the TRs functions. The problems start from the production level, continue through TRs distribution, within and outside the libraries, to the processing, repackaging, announcing, dissemination, use and non-use for development. The evaluation exercise therefore looks at the features of the channel and its behaviour, plus attitudes or opinions of all the actors in this chain.

1.3 Purpose of the study

The purpose of the study is to explore through producers, donors, intermediaries and users how technical reports perform as a channel of information for development; and whereby an assessment of handling those reports also involves ISAS as a service provider within a development inclined research institute in Lesotho.

1.4 Objectives of the study

In order to achieve the above mentioned purpose, objectives are stated as:

1. To determine the nature of productivity and distribution of technical reports in Lesotho
2. To gauge the effectiveness of TRs’ distribution methods
3. To establish the mandate and mission of ISAS with regard to technical reports
4. To determine the adequacy of ISAS’s mandate
5. To establish the mechanisms used by ISAS to manage technical reports
6. To assess the effectiveness of technical reports management at ISAS
7. To determine use and non-use of technical reports managed by ISAS
8. To establish cost-benefits of use of technical reports pertaining to Lesotho
9. To make recommendations for action and further studies

1.5 Research questions

On the basis of the objectives of the study, ten research questions were posed regarding the performance of technical reports as a channel of information for development in Lesotho. They are:

1. What is the nature of production and of distribution of TRs in Lesotho ?
2. How effective is the distribution?
3. How adequate is the mandate of ISAS ?
4. What mechanisms does ISAS employ to manage TRs on and about Lesotho ?
5. How effective are these mechanisms and the management ?
6. Who are the actual and potential users of ISAS outputs pertaining to TRs, as well as users of TRs ?
7. What use do they make on TRs ?
8. What are the cost-benefits of using TRs managed by ISAS ?
9. What are the cost-benefits, consequences, effects and outcome of use or non-use of TRs pertaining to Lesotho ?
10. What recommendations can be made to enhance the performance of TRs in Lesotho ?

1.6 Operational definitions of key concepts

Newman (1997:136) opines that “operational definition is a term of specific operations, measurements, instruments or procedures” which a researcher may develop as a new measure from scratch, or the application of one already being used by other researchers. As befitting this case study, a combination of both alternatives is followed.

1.6.1 Channel

A channel is the link between the source of a message and the receiver and therefore exists where there is communication. The message is transmitted through a channel which takes many forms. For instance the five senses, especially seeing and hearing, are communication channels: ‘After the receiver receives and decodes the message, the receiver can become a source and provide feedback by encoding and sending a message, again through some channel’ (Stuert and Moran 1998:303). According to Poole (1985), a channel is the medium utilized to convey information,

or a medium through which a message may pass. Channels take several formats like a book, a chapter in a book, a journal, a person, a catalogue and a report through which specific valuable resources like information is transmitted. A channel thus assumes a form that has suitable attributes as perceived by either the sender of the message or the receiver (Conradie, Konig, Koti, Pillay and Valkhoff 1999). In this case study in particular, *a channel* is defined as a valuable link between communicators of development information who, in the first instance, are producers of technical reports; and the intended recipients/users, development agents or actors such as women's rights activists and agronomists. In the second instance, unless there is noise from the first message, the channel is also a bridge from the recipients, who are expected to understand the message, benefit by acting on it positively, or somehow give feedback to producers (Boon 1992). This valuable link, a conduit, a channel, requires to be handled in a special way by intermediaries who are brokers between the senders and receivers of development messages.

1.6.2 Cost-benefits

Lancaster (1978:15 describes cost-benefit study as “one that attempts to relate the costs of providing some service to the benefits of having this service available”. Cost-benefit is concerned with value of the object itself (Martyn and Lancaster 1981). For this study, cost-benefits are defined as the intended and unintended maximum benefits, rewards, value, and satisfaction derived from the use of information channeled by TRs, in relation to the least costs incurred from the production stage, through management and use of the channel.

1.6.3 Development

According to Rist (1999:13), who articulates the contradictions in the process, “Development consists of practices, sometimes appearing to conflict with on another, which require – for the reproduction of society – the general transformation and destruction of the natural environment and of social relations. Its aim is to increase production of commodities (goods and services) geared, by way of exchange... a process that arises endogenously, from deep down each society”. Menou (1994:16) quotes and uses Vitro's (1990) information sector hypothesis to view development as the ability of a society to add value to material and non-material resources, [which is] the key for generating local wealth'. Menou (1994:22), usefully for this study of TR, further opines that development, even economic development, is a knowledge based process'. The

connotation of 'local' or endogenous links with the thinking of Mazrui (1999:123-124) who in a discussion of the dialectics of globalization, argues that for Africa to "develop", it ought not necessarily to have copied the West or tried to "westernize", as by so doing it tended to modernize in either a wrong direction or at an inappropriate pace. In the same context, Rist (1999:248) views development in the light of benefits that would accrue from exclusion from the globalized, international or "copied western" strategies. He does recognize that total exclusion is neither possible nor desirable. As *The Report of the South Commission* (1990) states, development can also be seen as "a process which enables human beings to realize their full potential, build self-confidence, and lead lives of dignity and fulfilment. It is a process that frees people from fear of want and exploitation, and a condition springing from within the society that is progressing. It is a movement away from political, economic, or social oppression". To do this, it draws on an economic base. In Colman's (2000) view, it is a process and condition that marks a quality of life for all. For this study, development is defined as a theory, practice and process by which resources are exploited, yet without destruction, with the aim of producing more resources and output, for the consumption and well-being of individuals, societies and communities. Development also denotes a condition of well-being.

1.6.4 Effectiveness

Lancaster (1978:15) argues that "an evaluation of effectiveness is an evaluation of user satisfaction". Martyn and Lancaster (1981:183) and Poll and te Boekhorst (1996) define 'effectiveness' as "the extent to which a system's goals (or policies or programs) are achieved". Both definitions correspond. The operating definition is therefore how well the service is performing in terms of inputs and outputs; the extent to which the service, system (ISAS and TRs) succeeds in meeting its mandate through TRs and satisfying users who comprise ISAS itself, the organization/community and society it belongs to, and the individuals.

1.6.5 Information

Rubin (1998:43) argues that though the two terms ‘information’ and ‘data’ are often used synonymously, they have distinct characteristics. This is more so in information studies which sees ‘information’ as “at least aggregation, organization or classification of data, and perhaps more importantly, as a meaning that is assigned to data”. In other words, raw data that possesses meaning is information. Intermediaries play a role in that transformation. Havelock (1969) sees information as making known and communicating for development, which follows the levels of carrying a message (meaning) from one source to the other through some medium or a channel. In the Lesotho case study, *Information* is defined as data which has been assembled, recorded and organized in a comprehensible, communicable form of technical reports; containing messages from authorities generating TRs; being transmitted to recipients to whom messages have the potential of being used to a level of understanding and acquiring *knowledge* that removes uncertainties in developmental actions and decisions.

1.6.6 Input

Swicher and McClure (1984:5) describe input as imported resources (such as information, money materials, goals and objectives) from a larger environment. By throughout, the information “system moves those resources through itself and transforms” them into products. The operational definition of *input* will be all of those resources that an information system/centre gets from the larger environment, comprising staffing, finances, time, premises, ideas, and all that is invested into the system to produce consumable information outputs.

1.6.7 Outcome

Swicher and McClure suggest that ‘outcome’ is the impact that the information system’s output has on the environment. According to Griffiths and King (1994:81), ‘outcome’ refers to consequences of service use, including effects of information provided for instance by special libraries on performance of work. The results may comprise productivity, quality, timeliness, and such attributes through which information helps a company, an agency, or any community to achieve its aspirations. This study will operate with a definition of outcome as a consequence, effect, and result of management, exposure to use of information channeled by TRs, whereby the indicators are related to the value and inputs from the service provider.

1.6.8 Output

Output embraces all of what an information centre, service, system, provider has purposely planned, processed and transformed into items like databases, annotated, indexed and shelved TRs, current awareness tools, web-pages, enquiry services, point catalogues and union lists, opening times, staff attendance and reading room facilities. They are transformed by inputs in a way that they are made readily available, or sent back to the environment for use/consumption (Swisher and McClure 1984). *Output* comprises “amount of specific services provided and attributes of the service. Examples are quality, timeliness, availability, accessibility (Griffiths and King 1994:81). Poole (1985:105) refers to information channel output as information fed out of a channel.

1.6.9 Performance assessment

Webster's new dictionary of synonyms (1978:68 +301) makes ‘assessment’ a synonym of ‘evaluate’. This idea is embraced by Morgan (1995:4) in discussing performance assessments and evaluations in academic libraries. MacDougall (1991:372-73) describes the two terms as comprising performance measures and indicators. Barton and Piot (184:51-52) define evaluation as a continuation of performance; in such a manner that the latter can be said to be an in depth method of evaluation. MacDougall (1991:376) again stresses that the suitability of performance assessment methods and techniques may vary according to the type of country and its peculiarities. *Performance assessment* is defined in this study as an evaluative type of endeavour, literally implying determining value from the service, or measuring the level of effectiveness and efficiency of TR service, with regard to the stated plus presumed objectives of a service provider; and as testified by actual, intended and potential users. In its generic sense it includes both i) performance measures [direct quantitative statement about activity], and ii) impact assessment of the service to determine value or levels of either successes or failures of a programme in the catchment community.

1.6.10 Technical Reports

Holloway (1976:25) defines a technical report as a document formally stating the result of, or progress made with research and/or a development investigation. In the Lesotho case study, a *technical report* is a type of development literature which is commissioned by, or emanates

from, a body of some authority for a specific identified developmental programme or problem, and issued on time as the work of experts possessing some technical know-how in a given field or task to be tackled. As such, the result of that work, study, investigation, periodic assessment or scientific process and presentation, clearly is intended to fit the problem identified. This type of report is produced for particular consumption, seldom for the public, hence its availability is restricted. TRs are produced in limited quantities, yet it may later be valuable to a wider user community in development (Hartas 1967; Auger 1975; Slobodyanik 1980; Henderson 1981; Sturges and Neill 1990; Balachandran 1991; Calhoun 1991).

1.6.11 Use

According to Poole (1985:106), information channel use in particular is the employment of a channel for purposes of information input or output. Abbott (1989:76) observes that there are “the intellectual aspects of use”, on the other hand. These include all those involving the mind and the complex mental process of reading, comprehension, acceptance, recollection, synthesis and retention”. Use can therefore be interpreted as an intellectual exercise of exploiting the literature with the purpose of some possibly developmental outcome. The meaning links with that which also defines seeing and hearing as other forms of channel through which messages are transmitted. *Use* in this study denotes either producing, generating and or exploiting information systems and information channeled by TRs, with the aim of being learned, creative, innovative, more knowledgeable, participatory in increasing or distributing knowledge so as to promote and enhance development.

1.7 Justification and significance of the study

The relevance, appropriateness, and value of information to development has been invoked by development agencies and information experts (IDRC 1975; Rosenberg 1987; IDRC 1993; Menou 1993; CTA 1995; McConnell, Taque-Sutcliffe; Vaughan and Sylvain; Meadow and Spiteri; Thorngate 1995; World Bank 1995; Dosa 1997). Yet, very often, as stated in sections 1.1.10 and 1.2, research that attempted to answer the question of its effectiveness in development has concentrated on the library as an organization (Morgan 1995) and has also dwelt on broad subjects or in ‘information’ in general rather than focusing on particular channels. A study of this nature, while also evaluating performance of an information service and system, provides a

sharper focus on one channel of information. It attempts to investigate the purpose of that object within and outside the library environment. The study explores, describes and analyses effects, consequences or results so that the services' performance is established with regard to effectiveness, and justification of its inputs. In addition, the study as evaluation also of ISAS as documentation centre has a unique significance not only to Lesotho but to the Southern African region as a whole. Since the performance of TRs affects all the individuals and body corporates that functionally handle, desire, cause the handling of this literature at the conception, production, collection, processing, storage, consumption stages and impact, the study should bear some significance in the following areas:

- ▶ In generally creating awareness among all these groups about the implications of poor performance (effectiveness, and wastefulness) on the one hand; or an effective performance that bears some benefits on the other hand;
- ▶ By influencing donors and governments in their respective functions, to be more conscious of the end result of generating the channel, to be more user-sensitive and user-oriented whilst handling TRs, for instance, from mechanism of identifying a problem, determining the type of information required to solve that problem, commissioning studies, selecting consultants for technical reporting, to a stage of producing and distributing TRs;
- ▶ In empowering information workers specializing in TRs and similar literature, especially of this region, in such a way that they are motivated in that task, that they learn more about the literature, build confidence that stimulates efficiency and effectiveness;
- ▶ In assuring authorities of the importance of a specialized information service and thus providing them with adequate resources as appropriate for development;
- ▶ By making a contribution to the agricultural and gender sectors of development which are key areas selected for the study, and keys areas of concern in Lesotho especially in empowering farmers and women with the relevant, appropriate information, especially their own knowledge of the local environment;
- ▶ By discovering yet more there is to learn about, and dispel any mysticism surrounding technical reports.

ISAS's policy to cover development/grey literature is so open-ended that it accommodates almost all of the so-called non-conventional and difficult channels. In order for the ISAS documentalists to acquire skills in handling that wide range of materials, and gain satisfactory expertise in all of them, the Institute has to find ways to disentangle the so called difficult nature and peculiarities of each of the categories. This explores the level of success of ISAS in this regard, bearing in mind that intermediaries in Africa seem to have unfairly neglected development and grey literature, of which TRs form a substantial part (Sturges and Neill 1990).

An assessment on the availability of TRs may go a long way towards advising producers too, of the quality, relevance, popularity and duplication, if any, with respect to their products.

1.8 General assumptions of the study

The study is based on the assumptions that

- ▶ technical reports are a channel by which development activists communicate, hence TRs contain technically detailed, adequate, factual and indispensable information on and about development strategies, processes, progress, failures and or achievements
- ▶ it is upon the understanding and applicability of this information conveyed by TRs that positive results will be borne
- ▶ information workers, libraries and their services promote use of development information; but specialized technical information handling stimulates an effective use more than generalized management
- ▶ in Lesotho, technical reports are not well prepared, not well managed, hence largely inaccessible and unutilized by many development activists.

1.9 Scope and delimitations of the study

Performance assessment of ISAS systems and the technical reports service of channeling information for development will employ a single-case study within Lesotho, and within the catchment areas of users of ISAS's services. Whereas ISAS scope is sub-regional, the survey will cover the academic community of Roma in Lesotho, the government officials, the Lesotho non-governmental organizations (NGOs) and aid agencies mainly in Maseru. Hence, no rigid boundaries in terms of physical location are applied.

In terms of ISAS, performance assessment will cover the period from 1979 when the Institute was established. Regarding technical reports, all the relevant reports available since the independence of Lesotho will be used as sources of data. The sample population of technical reports as one of the units of analysis will also be drawn from the responding government officials, aid agencies, NGOs and ISAS. Peripherally, collections and records of technical reports from the other NUL information centres will be referred to. Technical reports pertaining to Lesotho comprise those discussing Lesotho as well as those referring to Lesotho within the broad topic of, for instance, Southern Africa, SADC, African and the developing countries as well.

Being multi-disciplinary by focus, ISAS is mandated to manage technical reports which are presumed to channel information in all sectors of development. The Institute has researched on, documented and disseminated information about, for instance, agriculture, rural development, the environment, human rights, politics and governance, education, history, health, economics, gender, science and technology. This case study will nevertheless be limited to two sectors, namely agriculture and gender. As mentioned in the operational definition of 'development', the concept signals a concern for societies whose conditions of living are poor, and which should be raised so that they lead lives of dignity. These two sectors were selected as they address the root causes of poverty - a humiliating condition which development claims to reduce or eradicate. The two sectors will be discussed fully in the literature review. Suffice it to stress at this juncture that agriculture and gender permeate other disciplines, and are of great importance in the development of Lesotho (Senaoana 1996). This view is taken further by Kabeer (1994) who argues that development strategies should address the marginalised, the poor and powerless in societies, whom she identifies currently and predominantly as women. Agriculture as science and practice satisfies basic human needs in terms mainly of food, and secondarily, clothing and environmental protection. Empowering women and farmers with the information they require in their respective activities should enable these groups to make informed decisions and actions toward improving their conditions of living. The study does not necessarily nor narrowly address women in development. Rather, the scope has an advantage of covering gender which, as said, cuts across all the disciplines like nutrition, science, health, politics.

The set delimitations serve the purpose of brevity, clarity, and an in-depth analysis required in the case study methods. The sectoral approach has been used by several scholars such as Aina (1992, 1993, 1995) with non-conventional material and Agriculture; and Kaniki (1993, 1995) with Agriculture too. Zilzstra (1993) discussed technical information in science and technology, and TRs in Aerospace by Pinelli (1993) and Tabangcura (1998). Howell (1984) indicated that regardless of all disciplines being developmental, they tend to behave differently information-wise such as in the size of the literature itself, the expertise of producers and level of use. This could perhaps also have a bearing on the pace of development in those fields and in the country as a whole.

Items written in Sesotho and English as the official languages in the country qualify for inclusion in the assessment. The literature to be surveyed will be located within Lesotho. Interviewees will include persons, centres and organizations involved in the already mentioned triangular process of firstly producing, then managing or brokering, and thirdly using. In this way, the assessment will be carried out at the managerial, operational, strategic, and external levels.

1.10 Summary

The chapter has introduced the study on performance assessment of technical reports as a channel of information for development, the Lesotho case study. The introductory chapter is composed of three major categories. The first part gives a historical background to the ISAS Documentation Centre. ISAS is described in terms of its mission, mandate and goals for providing to particular clientele, information that supports research and meets development-oriented investigations. The development literature that constitutes technical reports is also discussed in terms of its nature, features bibliographic control and related problems, all of which elucidate the task of ISAS to manage technical reports. Despite the complexity of the relationship between the two variables, namely information and development, and the difficulty about how the former stimulates the latter, the conviction exists that information has a role to play in the development process. The conviction is illustrated by a number of big and small world wide information systems that have been set up with the purpose of supporting development strategies of the parent bodies. The examples of such development-oriented information systems in the world and in Africa are highlighted.

The second part of the chapter discusses the problem statement of the study. It is postulated from the literature that, although TRs are valuable as the channel information for development, intermediaries, largely in Africa inclusive of Lesotho do not give due recognition to TRs which, to a certain extent, are also mismanaged. In spite of the fact that technical reports are costly to produce, and that they are generated in large quantities in Lesotho, use and the benefits are not apparent, hence making the cost of production and management unjustifiable. The problem is compounded in Lesotho where development is sluggish. Nevertheless, the observations, assumptions and convictions about should be confirmed through evidence gathered from research and that provides the basis for the study.

The third part of this chapter therefore attends to the aim of the study, which is twofold: i) to assess how TRs perform in channeling information which is for development; and ii) how a development-oriented research institute (ISAS) in Lesotho has performed in handling that channel. The rationale behind this performance study, is given as well as for evaluation in the information field. An analysis is made of a number of performance techniques and levels and strategy that is adapted. The strategy has three levels of assessment at performance (relating input to output); of effectiveness relating outputs to usage and the level of cost benefit or consequence, the effect, loss or gains that are measured by level of usage or non-usage, *vis a vis* the efforts made, if any, in the production, distribution and management.

In terms of ISAS, the exercise is anchored on the world-wide-conviction that there is a positive relationship between development information, specialized information management, use and development. It is this intricate relationship between information production, management, use and the outcome in the form of development that leads to a challenge as to what conditions will have obtained in the ISAS/Lesotho case, that the development seems so problematic. That being the crux of the study, the point was whether the application of technical reports and the development of information do bear the intended results or not, and what factors intervene positively or negatively, whatever the case. The question is whether ISAS can determine the effectiveness of its services in relation to, firstly, the overall efforts and, secondly to the benefits derived therefrom.

The stage was then set for the total seven objectives of the study and the corresponding research questions that are the backbone of the enquiry. Tentative sources of data for those questions are suggested as official records, interviews and discussions with, as well as observation of, groups of people believed to be involved in the processes of production, distribution, management and use. The subsequent section defines eleven variables according to how they will operate in the study. These are the channel, cost-effectiveness and cost-benefits, development, information, input, outcome, output, performance assessment, technical reports and use. The chapter then indicates how significant the study will be at the managerial level of ISAS, the parent body, and regarding information workers and all others concerned with information and development in Lesotho and similar situations. In particular, the scope is set around the two sectors that are crucial to the basic needs of all. These development sectors are agriculture and gender. The concluding section describes how research involves the academic and non-academic policy planners, decision makers and information workers, all of whom are seen as contributing in one way or other the technical reports performance in Lesotho. In the next chapter, the context of the study is set out.

CHAPTER 2

CONTEXT OF THE STUDY

2.1 Introduction

This chapter portrays the general picture of Lesotho from the historical, cultural, economic, political and sociological point of view. An overview covers the country's level of development. ISAS, its technical reports service, as well as other Lesotho technical information centres are outlined in such a way that the overall scene is firstly described in its natural setting, from which it may be understood as a case being studied. The situation is primarily presented as an existing and observable phenomenon from all its angles. For, without necessarily undermining the importance of understanding a human phenomenon solely as it is lived, Kelly (1999:340) points out that

no matter how thoroughly we understand a context
from within, there are certain things about the context
that are only going to become evident when we look
at it from the outside .

In that respect, this exposition sets the context both from within and outside ISAS and Lesotho. For clarity, units of analysis, namely technical reports, ISAS and its specialised handling and the development in Lesotho are described in relation to mainly the gender and agricultural sectors, as well as the broader geographical perspective. That is why the context is inclusive of other centres handling technical reports in the country and some continent-based bodies like PADIS which relate to development information. All are introduced as constituting the context of this case study.

2.2 Geopolitical situation of Lesotho

Lesotho has a history of political and economic struggles, having been moulded as a nation in resistance to struggles in southern Africa over four centuries. With the aim of sealing sovereignty for the then fragile state of the Basotho, the king sought British protection in 1868. Subsequently, in the interest of peace the current borders between Lesotho and South Africa were formalised in spite of being culturally and historically artificial in many respects. Lesotho's cultural, economic, political and social fabric have as a result become so intertwined with that of the latter

that a number of analysts have described Lesotho as a supra-country or superficial state within another (Southall 1994:565; Mutisya 1999:24). This condition carries with it implications, some of which are explored in the study.

The other Southern African former British protectorates, Botswana and Swaziland, which were granted political independence at about the same time as Lesotho, that is in 1966 and 1968 respectively, are on the whole showing steady economic growth (African Development Bank Annual Report 1998:223). They are in the middle income group of developing countries while Lesotho's fluctuating development puts the country in the low income group (World Development Report 1998/99:250). Prior to the dissolution of the then joint university of Botswana, Lesotho and Swaziland (BLS), Lesotho was not only the location for this university but it also had the highest numbers of trainees and graduates of the former protectorates. With a population of 2.089 million, the highest of these former protectorates (African Development Report 1998:204), coupled with recurring political instabilities that adversely affect economic growth, the development for Lesotho is problematic.

2.3 The development potential of Lesotho

Though development prospects for Lesotho look bleak, assessment depends, firstly, on which theory, factor or agent of development one lays more weight; and secondly on what measurements, even indicators, of development are used. This thesis argues that development depends as well on which sources of information are provided, let alone how comprehensive, factual or subjective they are. One view is that the world's resources are sufficient to feed us all, but they become scarce in certain parts of the world because of the systems that ensure that wealth is concentrated in the hands of a few (Kabeer 1997:71). A school of thought exists, for example, according to Malthus (UNDP 1990:136; Griffiths 1993:136), that uncontrolled population growth is undesirable as it is finally bound to bear heavily on consumable resources.

As well, the population itself may translate into human resources (Mashinini 1997) that are required, especially if trained, to develop a country in various sectors. Trained personnel comprising men and women is necessary, for example, in areas like education, science and

technology (Hafkin 2000), agriculture, health, gender advancement and research as a whole. In the Bantu, inclusive of Basotho culture, large families were traditionally not only a status symbol (Gay 1982:9) but also economically meaningful regarding the distribution of labour. Lifelong formal and informal training of the people is an indispensable investment for development. Paradoxically, as it will be shown below, Lesotho has, comparatively, a high literacy rate for the continent. And unlike most of the African states which prefer to train boys rather than girls, the reverse is true of Lesotho (International Bank for Reconstruction and Development 1975:39, Gay 1982:5) where it is predominantly the boy child who is socially disadvantaged. This was evinced notably for this study, during the presentation of the report prepared by four NUL academics on behalf of the Ministry of Environment, Gender and Youth. The survey indicated that herd boys are exposed to hazardous inclement weather, exposed to snow, flooding rivers, armed thieves and poor nutrition. They are objects of little or no formal education (*Information Flash* 6[23], 2000). As soon as they pass that this stage of youth, they enter manhood and are expected to assume headship of family which forces many of them to take up insecure non-skilled jobs as migrant miners.

The Ministry of Education goal for 2000 was, however, to increase the primary school enrolment rate from 64% for boys and 76% per girls to 80% for both sexes (Unicef 1998). Free primary education which started in 2000 is thus a positive step in the direction of mainstreaming gender in education. According to the *Sixth Five-Year Development Plan 1995/6 - 1998/8*:170 investing in human resources through education has proved to be one of the most profitable factors in economic growth. Human resources alone, however, are unlikely to bring about social and economic development. Neither education nor health can do this. Rather, all the sectors could and should contribute to a well planned and harmonious application. Evidence is as yet lacking that all the sectors have been broached in Lesotho and gender, as indicated above, is one. Agriculture is another, while culture and information have also not yet been tapped to their full potential. Mathealira (1989:69-71) brought that point home with regard to the position of the then new Ministry of Culture and Information:

We understand culture as the general experience, knowledge and skills inherited by any community from its past, and the way these have influenced the present life of society, In this way, the

new ministry has encouraged the people to contribute towards modern development, basing their effort on the cultural background and practices that have formed their lives....
[Culture] embraces the knowledge, skills and attitudes acquired by community to enable them to take their rightful place in society.....
The great founder of this nation encouraged his people towards progress while training traditional values.....
We believe that a return to national culture in the first step towards development.

“A return to” suggests that perhaps at some stage, the practise they are returning to was either wrongly abandoned, or was not sustained for reasons not stated. Reference to “knowledge and skills” also suggests a strategy for imparting practical information to the people. In their daily responsibilities, men and women require information and adequate knowledge that enables them avoid risks but rather lead quality lives. A mention of “toward development” may be interpreted as a submission that, as yet, development has not been achieved. The captioned statement above is of relevance to this study, which seeks to establish if there is any relationship between information use and improvement of life in the Lesotho context.

With regard to economic development in the mining industry, the Letseng-la-terai, Kao and Mothae diamond mining in the 1970s was short lived, low-key and evinced haphazard activity by local diggers and four international corporations - Rio Tinto, Newmont, LONRHO and Anglo-De Beers (International Bank for Reconstruction and Development 1975:47). The digging was abruptly closed while a proposal for the Mining Act was being drafted to facilitate the monitoring and technical control to be put in place. This action implies that it was an uninformed decision to open the mines and plans are once again underway to explore the prospects of re-opening that industry, if it will boost productivity, income, exports and the general benefit (*Sixth Five-Year Development Plan 1995/6 -1998/9*:125-6).

As far back the mid 1960s the country’s politicians and planners, in conjunction with the international development agencies like the World Bank, were already mooted the prospects of the earnings that would accrue to Lesotho from the envisaged scheme to sell water as the country’s abundant natural resource. For a long time, discussions never reached any agreements

(International Bank for Reconstruction and Development 1975:48) but soon after the 1986 coup d'état the military government rushed through an agreement with the South African government for the project to start. The Lesotho Highland Water Development Project, which took about ten years of construction by gigantic foreign companies, involved inhabitants' resettlements, compensations and provision of other infrastructure. The scheme is now complete as the multi-purpose Katse Dam, but is principally designed to supply South Africa, or rather Gauteng, with high quality water in the future. There are reservations in some quarters that the rushed agreement in 1986 neglected to take into account crucial information regarding other aspects of development, thereby supporting tacitly Rist's (1999) observation of development's inherent contradictions. According to Maema, Turner and Putsoane (1993: 259), it is possible that the Lesotho Highlands Water Development Project might "introduce or increase the prevalence of waterborne diseases and other infectious diseases", yet there is "little information on the relative abundance and distribution of vector of infectious agents such as mosquitoes, snails and blackflies" in that regard, for instance. Adequate utilization of information in such national developmental efforts is undoubtedly necessary. It is in the same vein, apparently, that the Lesotho authorities are warned that quarrels over the water resources should not bring about any conflict in the future between the two countries concerned (*Development and Cooperation*, 2000). Good governance and transparency in that respect may hopefully be ensured by such measures as the knowledgeable society and "the people's alertness" that Nyerere (2000) alludes to. The sort of information alluded to in this section would in all likelihood have been provided in existing technical report literature had it been made available and cited.

2.3.1 The tourism sector

The country's high altitude, mountainous terrain endowed with four distinct seasons which include ski-icy winters, are said to be unique features in the subregion and sufficiently attractive to boost tourism. It is eco-tourism that can accelerate national income with a commensurate rate of preserving and strengthening ecology, as enshrined in the Agenda 21 declaration to which Lesotho is a party. The restructuring of the over 23 year-old Lesotho Tourist Board hopefully implies renewed and informed strategies in the development of this sector

2.4 Agriculture and Gender

The two selected disciplines, agriculture and gender, have some commonalities as well as some peculiarities. While both have been undergoing changes that affect most of the development-related strategies, the focus on gender is a rather new field while agriculture has always been part of the Basotho way of life. This is borne out by, for instance, the existence of Sesotho name for agriculture but none for gender. Since independence, the Ministry of Agriculture has received a fair share of the government's annual budget although the Ministry has also been restructured in that at one time it incorporated rural development, and at another time it was combined with marketing. It has also been coupled with cooperatives, but has survived as the Ministry of Agriculture. Development indicators relating to this area are shown below.

2.4.1 Some development indicators in the agricultural sector.

Within the Southern African region, development especially in the agricultural field in Lesotho has not been the best in several areas. Measured in terms of growth in per capita food production, the country is in the first but one bracket of most under-producing in Africa.

TABLE 2.1: Growth in per capita food production in selected African countries 1988-1993

below -10%	-2 to - 10%	-2 to -4	-1 to -2	0 to -1	0 to 1	1 -3
Somalia	Kenya	Angola	Ghana	Namibia	Malawi	Nigeria
Liberia	Lesotho	Botswana	Mozambique		Zambia	Uganda
		Swaziland			Zimbabwe	
		Tanzania				

Source: CTA 1995:88

Reasons for Lesotho's poor performance in food production may be several, including the above mentioned political crisis, which seems to be the case, too, with the two examples (Somalia and Liberia) of the least-producing and war-torn places. Another reason may be the declining area of arable land as demonstrated from the selected statistics below.

TABLE 2.2: Percentage of the declining arable land in the selected southern African countries

Country	<u>1976 -1981</u>	<u>1994 -1996</u>
Angola	0.41	0.28
Lesotho	0.22	0.16
Malawi	0.21	0.17
Mozambique	0.24	0.17
Namibia	0.64	0.51
South Africa	0.46	0.40
Tanzania	0.12	0.11
Zambia	0.89	0.59
Zimbabwe	0.36	0.27

Source: *World Development Report 1998/99* : 204

The decrease, however, seems to be a common phenomenon even in the so-called developed countries. From a total of 133 countries sampled in the report (1998/99), only two countries, namely, Saudi Arabia and Hungary, recorded a constant size of 20% and 47% respectively for the given period between 1976 and 1996. In the listed SADC countries, Tanzania has the least agricultural land and Zambia has the highest levels of depletion within the given ten years (*World Development Report 1998/99:204*).

Nevertheless, none of these indicators point to the role or status of information; its availability, provision and use, or its role in development. By observation, there are other areas and resources whose positive potential and impact on development have not yet been fully realized. Information may be one of them, notwithstanding a generally accepted belief and practice that it plays an indispensable role in the development of any country, any region and the world at large. Gender in Lesotho, on the contrary, as it is worldwide, is a new concept that has evolved from the realization of the role of women in development (WID), and later women and development (WAD). Gender and development (GAD) as a development strategy spanned the period from the first to the third international women's conferences in 1975 to 1985. It is not surprising that between 1979 to 1999, women's and gender issues have been the responsibility of five ministries and departments within the Lesotho government. Therein the Women's Desk served mainly as an

“add-on” activity instead of the current “mainstreaming” philosophy. Below, a few statistics will illuminate the picture while elaborate details will be covered under the conceptual framework and the literature review.

2.4.2 Gender disparities in Lesotho

As it is the case in many countries, in Lesotho there are gross disparities apparently based on gender, for instance, participation in the highest levels of government and in parliament is dominated by males, as indicated below.

Table 2.3 Distribution of civil servants by gender and rank in Lesotho (1991)

<u>Rank</u>	<u>Women</u>	<u>Men</u>	<u>Women/men %</u>	<u>Gender gap</u>
Senior	29	140	17 : 83	66
Upper middle	204	241	46 : 54	8
Lower middle	1264	1103	53 : 47	-6
Lower	2567	1603	61 : 39	-22

Source: Women and Law in Southern Africa (WLSA) 1997:24-25

The table demonstrates that there are fewer women in the most senior ranks of the civil service.

Table 2.4 Participation in governance in % (1993 - 1994)

<u>Level</u>	<u>Women</u>	<u>Men</u>
National Assembly	5	95
Cabinet	8	92
Ambassadorial	27	75
Senate	22	78
Judges	17	83

Source: Women and Law in Southern Africa (WLSA) 1997:24-25

Women, who form a higher proportion of the total population, are under-represented in all the categories. In terms of academic qualifications and literacy, however, women attain more than men. According to the *1996 Population Census*, only 25% of females against 47% of the males

were illiterate. Females had a higher life expectancy as males' death rate exceeded that of females through all age groups except infancy (0 - 4 years).

In the labour force, there are distinct lines of demarcation between the genders and their jobs.

The *1996 Population Census - gender statistics* (1999:46-47) states that:

Men are in the majority of managerial workers, as well as workers in agricultural production and in the armed forces, in both Lesotho and South Africa. Women are in the majority in both sales and service industries. Women are more common in professional and clerical jobs [for example nurses and teachers], in Lesotho.....
The two dominant areas [of employment] are agriculture and domestic and social services that engage men and women respectively.

2.5 The Lesotho information scene

Though it is within the context of Lesotho that this study was conducted, on the other hand reference is made to the larger region within which the country exists. The larger context depicts intense regional integration in all sectors including agriculture, governance, health and gender. The study also focuses on Lesotho as belonging to the African part of a globe which handles the kind of information channel under study. This part of the globe comprises Africa in particular including southern Africa and the SCOLMA members who specialize in handling technical reports.

This performance assessment of technical reports was made within the context of the National University of Lesotho which is clearly an academic environment. The assessment is also being carried out within the context of a less developed or slowly developing country. The assessment thus interrogates the information scenario whereby information, being regarded as a basic resource and a commodity, is assessed to determine if it can or does contribute to development growth or, if it is not contributing as expected, and what causes its failures. This is done with particular reference to the TR channel and to its primary purveyor in Lesotho, ISAS.

2.5.1 Some information services and indicators in Lesotho

It is common cause that information is essential for an individual, organizational and country's development. Lesotho's information terrain exhibits what ranges from a rudimentary to a patently resourceful evidence of information infrastructure. Yardsticks used are the availability of professional staff, sectoral specialization, communication and technological capacity, plus development consciousness. It is estimated that about thirty information centres exist that may be relied upon for the handling of information for development in the country. Their types include small government-run, some highly specialized internationally oriented, as well as medium size privately owned and large academic centres. Some are fully connected electronically, others are only planning to be hooked up. The majority is located in the capital city Maseru where they benefit they are used by the employed urban population and the academia. The listing below indicates, among other factors, the estimated proportion of the grey/technical report literature collection to other material. Invariably, low levels relate to the traditional kind of library. As such Mark (1970) finds them inadequate to handle report literature. Availability of professional staff is one of the crucial factors being considered in describing the context and the information scene. Table 2.4 provides a breakdown of the perceived capacity for development information of the Lesotho providers.

TABLE 2.5 Lesotho information scene depicting centres' capacity for development information

Name	Started	Owner	Sector	Staff	Users	Access	TR	ICTs
NUL	1945	NUL	Academic	20	academic	open	average	full
Foreign	1971	GOL	Foreign affairs	1	staff+ others	closed	closed	high
IDM	1974	BLS	Management	1	trainers+	Open	average	partial
LNDC	1975	Corp	Development	1	staff	Semi-open	high	full
Agric.Re	1976	GOL	Agriculture	2	staff+	open	high	partial
LIPA	1976	GOL	Administration	1	learners+	semi-open	average	none
NTTC	1977	GOL	Education	2	teacher/pupil	open+closed	low	partial
Nation.L	1977	GOL	Multi-disciplinary	7	all	open	average	none
UNDP	1978	UN	Development	1	staff+	semi-open	high	full
Transf Re	1979	Private	Ecumenic.	1	staff+	semi-open	average	partial
Planning	1980	GOL	Planning	1	staff+	semi-open	high	none
IE	1981	NUL	Education	2	acad+	semi-open	average	full
ILO	1982	UN	labour	1	staff+	semi-open	high	full
FIDA	1983	GOL	Agriculture	1	staff	semi-open	low	none
FAO	1988	UN	agriculture	1	staff+	open	high	full
WHO	1988	UN	Health	1	UN+	semi-open	high	full
Labour	1990	GOL	Labour	1	staff+	semi-open	-	none
LHDA	1991	LHDA	Water	1	staff	closed	average	full
UNICEF	1992	UN	Children	1	staff+	semi-open	high	full
WLSA	1992	WILSA	Gender	1	staff	semi-open	high	partial
Energy	1995	GOL	Natural resource	1	staff+ -	average	none	
Justice/	1997	GOL	Justice/Law/hr	1	judges+ staff	closed	average	none
LPPA	1997	LPPA	Health	1	staff+	semi-open	average	none
Gender/	1998	LG	Gender/youth	-	staff	open	low	none
JTC	1998	Ls/Rsa	Water+environ	1	staff	closed	high	full

Key: :

Agric.Re - Agricultural Research

GOL - Government of Lesotho

NUL - National University of Lesotho

hr - Human Rights

ICT - Information, Communication & Technology

UNDP - United Nations Development Programme

IE - Institute of Education

ILO - International Labour Organization

JTC - Joint Technical Committee

LHDA - Lesotho Highland Development Authority

LPPA

Ls

Rsa

TR

Transf Re

UN

UNICEF

WLSA

WHO

- Lesotho Planned Parenthood Association

- Lesotho

- Republic of South Africa

- Technical Report

- Transformation Resource Centre

- United Nations

- United Nations Children's Fund

- Women and Law in Southern Africa

- World Health Organisation

The exponential growth of establishing these sector-focused centres since independence implicitly mean an attempt to meet diverse and increasing information needs. The subject coverage also indicates the main focus of development, for example, such as natural resources, water and labour issues. The situation for public libraries on the contrary remained bleak as plans to establish them by the year 2000 (*Sixth Five-Year Development Plan 1995-1999*) never materialised.

2.5.2 Legal framework for the information services

What is seen as a weakness of all the listed centres, the government centres included, is that most of them lack legal backing and written official policies as terms of reference by which they may be supported structurally and financially. The library professionals have expressed a need that a number of crucial information services be enforced by law. It was particularly noted that Lesotho has no Legal Deposit Law nor National Research Council (Kukubo 1981:305-324). It would appear that Lesotho is consequently not in full control of its research, research results and information products such as technical reports emanating from the country.

2.5.3 Other information channels and systems

Since 1987 the World Bank has listed information facilities among the other development indicators for a country. Lesotho has markedly significant changes in this area: weekly newspapers grew from two in 1988 to seven in 2000. The government has one TV station that covers special events and normally relays news for about three hours per day. There are two other local channels, and more international channels in addition are accessible. Liberalising radio transmission in 1999 gave birth to three privately-owned stations.

2.5.4 Information Communication and Technologies (ICTs)

Few of the government-owned centres have full connectivity to the Internet. Several centres either have email facility or are at the planning stages of installing them. According to Hafkin (2000), however, information, similar to other natural resources, requires the necessary tools and expertise to exploit it. This is more so in the 21st century which has liberalised and globalized information, communication and technology (ICT) that enables speedy and optimum access and use of

information for and by men and women in every sphere. By 1998, the National University of Lesotho was the only public institution with full Internet connectivity (Outside-In Server 2001).

With regard to information access, there exists a number of channels and facilities which, as a whole, make a context within which technical reports have to be assessed. Below, a few are listed pertaining to Lesotho (LS) in comparison with Botswana (BW), South Africa (ZA) and Tanzania (TZ).

Table 2.6 Media, information channels and facilities for development 1996/1999: per 1000 persons

Country	Radio	TVs	Telephone main lines	Mobile phones	PCs	Internet
	<u>1996/98</u>	<u>97/99</u>	<u>97/99</u>	<u>97/99</u>	<u>97/98</u>	<u>98/99</u>
BW	-/155	--	56/65	0/15	-/25.5	
LS	77/98	13/25	10/10	1/5	-/--	0.08
ZA	179/317	125/126	107/115	22/56	-/47.4	33.36
TZ	398	16	3	0/1	-/	0.02

Source: *World Bank World Development Reports, 1996/96, 1998/99.*

Lesotho is generally lagging behind a number of other developing countries in the sub-region.

2.6 The establishment of ISAS, and its choice as a site of the case study

ISAS, as the policy-related, interdisciplinary and development-oriented research arm of the National University of Lesotho (NUL), was established in 1979. Part of its mandate was to have a Documentation and Publication Division. It was then stipulated:

That as reflected in the First Five Year Development Plan, an Institute of Southern African Studies was established as an independent institute, albeit, an integral part of NUL....

That the task of developing research programmes and preparing a proposal for the Institute’s Documentation Centre should be undertaken concurrently in consultation with the University Library....

That in view of the Institute should explore the possibilities of establishing publication unit that

will serve ISAS and University as a whole.." (NUL 1981:27-8)

The idea was based on the premise that NUL already had the main library. The latter's conventional stock, comprising archives and books from all over the world, was purchased and made available for general use by the entire body of students, lecturers and researchers. The assumption was therefore that ISAS would concentrate on less conventional, unpublished, semi-published, grey materials which included technical reports, other reports and official documents of Lesotho and Southern Africa (*ISAS Annual Report 1981*). Through its documentation section, ISAS would acquire and provide the said literature, while through its publications section, it would generate reports, but in addition, announce newly acquired materials as well as ISAS publications. The rationale was based upon a realization and conviction that these hard-to-get materials pertaining to the local situation were a useful information resource for development-related research, hence would require the full attention of a documentation center which could serve ISAS researchers, government officials, high level decision makers and other seekers with that special information required for development. By implication, such information would not necessarily be found in conventional published books; neither in traditional libraries nor archives.

This vision fitted well with an academic center like ISAS of the late 1970s and early 1980s which, by serving within the country surrounded by the politically-troubled South Africa, for example, offered a safe and convenient sanctuary for researchers from all over the globe. Conference papers on liberation struggles, or technical papers about the then Southern African Development Coordination Conference (SADCC) or Frontline countries and from relevant donors were certainly a worthy collection for a documentalist of the region. The arrangement was also appropriate for a country whose newly attained political independence dictated that the country became adequately informed and discovered its potential in all other areas of development which include agriculture, gender, economy, health and education.

Accumulation of ISAS's own policy-related research results as well as donor-commissioned project reports which were announced in the then *Lesothana*, now titled *Lesotho Index*, constituted

a triangular proactive process which constituted activism. It involved a) on-going process of generating the said literature, b) brokerage by information workers and c) invariable utilization of that information for development, or development information by researchers, technocrats and donors. This was ISAS documentation work and a duty and a de facto policy.

Basically, the functions of the centre evolved as not typifying a traditional library as such. There were no registered users and no conventional lending out of materials as they were actually kept in closed access. There was neither a periodical nor an acquisition section, for example. Documentalists were there to chase the specified fugitive materials on demand, or in anticipation that they would be required. ISAS was nevertheless not assigned a narrow, or a highly specialized responsibility for technical reports per se, but rather for handling the overall development related, less conventional literature. However, in order to understand the entire literature and its impact on development, a single particular type of literature, and possibly one of the most difficult yet most valuable, that is, technical reports, is discussed in depth in the following section.

ISAS's recognition of the potential of technical reports as a channel of information for development was not unique. Within the subregion itself, around the continent and beyond, similar establishments are found as will be elaborated on in the next chapter. Their objectives were initially either to conduct development based research or to participate somehow in development. In the process they then find it imperative to facilitate that work through commensurate information support or a development information service. Unlike in Europe, the USA and Japan where some advanced and highly specialized systems pertaining solely to technical information are as many and as specific in name as there are related scientific and technological organizations, in Africa there are very few such centres. Yet where a non-archival type of information centre which is appended to a development oriented body mentions that it acquires documents, locally produced materials or unpublished grey literature, that is often where valuable resources such as technical reports are also found. As well, that is where this literature is given special attention, comparatively speaking. Indeed, Holloway, Ridler and Yates (1976:22) confirm that in a large library such as the university or national library, technical reports and other unpublished material, whose quantities may by comparison appear few, are often side-lined by the library systems whose

methods relegate the material to less than best use. Mark (1970:34) got the same impressions from the passivity with which technical reports were treated by most of Canadian university libraries. Similar observations were made by Sengupta (1991) in relation to the unsatisfactory attention to technical reports in India, and as typified by the India National Library whose national bibliography does not cover the channel at all. The foregoing argument makes it understandable why NUL made the decision to establish a “specialized” documentation centre to attend to this literature. On the whole this had become an inescapable trend in comparable institutions in the region and abroad as will be shown.

2.6.1 ISAS’s strategies of managing TRs and by sectors

Problematic as the technical report literature might be, the Institute has been applying a number of techniques to manage it. In its efforts to set clear boundaries around GL, in order to distinguish it from books, avoid unnecessary duplication with the library, and target development related items, ISAS has put an acquisition policy in place, stating clearly that “The center does not normally collect books...” (*ISAS Annual Report* 1984-85:27). The word “normally”, as will be seen later, however, provides for seemingly an open and flexible policy. Strategies have also been set towards understanding this “non-conventional literature” regarding its nature, types, subject coverage, its sources or originators (Ambrose 1984), tracking down the resource and announcing it to relevant users in various disciplines. ISAS efforts have continued to be represented at fora where this type of literature is being discussed in order to sharpen its understanding of the material. The institute has also paid attention to sectoral handling of the literature. With special reference to this study, the institute’s endeavours in the fields of agriculture and gender are being put into context. But in general, ISAS strategies of managing the materials comprised fostering links of cooperation with bodies that perform the same work (*ISAS Annual Report* 1984-85).

Right from its formative years, ISAS collected various documents inclusive of reports marked “confidential”, “restricted”, “circulation limited” and the like. In order to protect the centre’s credibility in this regard, and to gain confidence of producers, a strategy was devised to keep the items separately under lock and key, and appropriately red-labelled. Enquirers were made to sign and agree not to copy, cite or quote the items nor use their information for purposes other than

academic. It is pertinent to this study to check if this method is still used, if it is/was effective or not. In 1981 ISAS hosted a workshop of research institutes of all the sub-region excluding South Africa. It was that forum that inaugurated the Southern African Development Research Association (SADRA) with ISAS as the secretariat. The workshop afforded an opportunity for a meeting of researchers, who are producers and users of information at the same time and, information workers who act as brokers in the process. At that gathering, too, views were exchanged on a *modus operandi* for cooperation which ensued for some time thereafter. Study tours to the UK and USA, by the head of the then ISAS Documentation and Publications Division were similarly aimed at collectors of “Africana” as prospective partners. Their methods of handling non-conventional items were learned.

By 1983, expectations were still high that PADIS would provide long-term expertise to centres specializing in development and non-conventional literature. ISAS therefore attached its documentalist to PADIS to familiarize her with the then recommended methodologies. To a certain extent, ISAS expectations were satisfied, until the direct interaction generally dwindled between Ethiopia and Lesotho, and seemingly between Ethiopia and most African countries. The Division set a commitment for itself to have weekly collecting trips to Maseru the capital city or elsewhere within the country. These have, however, been very irregular as it depended on the initiative of each documentalist.

Due to their similar heritage culturally, politically and historically, BLS countries have a lot of commonalities that have kept them together. Their scope of interest over technical reports was likely to overlap too. Hence the workshop was hosted by the Institute in 1990 for the documentalists of ISAS, and National Institute of Research (NIR) in the University of Botswana and Social Science Research Unit (SSRU) in the University of Swaziland. Through collaboration with PADIS, they devised similar methodologies of processing the literature under discussion, and how to share resources. The scheme envisaged could resemble the SCOLMA arrangement.

As an outcome of the 1987 CTA/SACCAR/FAO workshop on the agricultural information handling held in Malawi, where the indispensable role of women in agriculture was emphasised

by the Southern African documentalists, a series of country bibliographies on Women in Development (WID) in the respective countries were published in 1989. Notably, this was the WID era worldwide. The Lesotho issue was partly the work of ISAS which was represented at workshop. The institute was again the main contributor of items entered in the Lesotho volume. ISAS's official collaboration in the compilation was in anticipation that its own collection on women and gender would be enhanced and be brought to the awareness of its clientele.

In another effort to strengthen its own capacity of managing the literature, whether manually or automated, in 1992 the Division agreed to be the Lesotho focal point for CABECA. The latter enabled ISAS to be the first at NUL to access email through Rhodes University in South Africa. ISAS's responsibilities as the CABECA focal point included, *inter alia*, to accelerate PADIS's speed of disseminating volumes of non-conventional and technical information between and among clientele and partners within a country. Though the project did not enjoy sufficient funding, as Lishan (1998:58) states, a number of CABECA's achievements have emphasised electronic communication not only within Africa, including Lesotho, but with the continent and the rest of the world. Seemingly, these activities constituted mainly the 'how' - methods of electronic communication more than the 'what', that is, what is actually being communicated, namely, development information which was also the initial concern of PADIS.

A special bibliography titled *The role of women in Lesotho* was also issued in 1980, coinciding with the second International Conference on Women in Copenhagen. It was not only meant to present the Lesotho delegation to the conference with sufficient references for a detailed country report which was mandatory in Denmark, but was also to assist a number of individuals and mushrooming NGOs to be informed on the subject of the role of women in Lesotho. Through the assistance of SAREC, two more issues of similar annotated bibliographies entitled *Women in Lesotho* were published by ISAS in 1988 and 1994.

The *Lesotho Index* number 15 issued by ISAS in 1989 was a special issue dedicated to the newly established Faculty of Agriculture at NUL. In response the dean of the faculty acknowledged in

the foreword that the strategy was commendable for stimulating easy use of the listed materials by the targeted clientele.

Under the auspices of SACCAR, a regional network was proposed in 1994, in the name of the Southern African Agricultural Information Network (SAAINET). ISAS became the coordinator, working towards the establishment of the Lesotho chapter and a focal point for the network. However, the restructuring of SACCAR in 1997 negatively affected the success of SAAINET. ISAS's strategies of managing and sharing agricultural development literature is, nevertheless, still one of the Centre's priorities.

In 1994 ISAS inherited the gender related report literature by and from the USAID information centre which was closing down in Maseru and moving to South Africa. The objective was on the one hand to safeguard against the likely exportation elsewhere. On the other hand, it was to facilitate the literature's availability in Lesotho to which it pertained. This arrangement would be of importance to ascertain as well.

Two documentalists attended the first and second International Conferences on Grey Literature respectively held in 1993 and 1995 in the Netherlands and the USA. The first conference was in fact a reflection on the 1963 report by Alvin Weinberg titled *Science, Government and Information* which stimulated librarians, especially in USA and Europe, to be conscious of their responsibilities in handling scientific and technical information (GL'93:ix-xiii). Moreover, as seen in section 1.1.2, it was the same Weinberg report which had influenced specialized information handling in USA (OSTI2001; Holloway, Ridler and Yates 1976). Whereas technical reports have some of the qualities of Grey Literature, in these conferences the former's peculiarities largely remained overshadowed. It was only in the third conference where the theme was specifically "Technical and Scientific Information" that technical reports were fairly treated. Unfortunately, no one from ISAS participated in this conference, GL3, where it would appear the developing countries were underrepresented. This underrepresentation possibly links in the researcher's view to why the subject of technical, technological or scientific information is rarely ever a focus for most professionals in this subregion. It is as if the region has no technical information to generate,

to collect, store, repackage, disseminate and use as necessary. Yet at the same gathering, Sturges (1997) presented the cases of Malawi and Kenya, arguing how a lack of capacity to handle and transfer technological information might bring about the collapse of valuable development projects in Africa. Within the context of Botswana, Lesotho and Swaziland, in 1987, the CTA sponsored the ISAS to organise a workshop to train the agricultural researchers and information scientists in research and communication methodologies. This was in furtherance of the felt and expressed need for these groups to interact to facilitate effective development communication.

In 1998, ISAS opened a page on the Internet where the Institute is being publicised in terms of its acquisitions and holdings which include TRs and publications of the research results. At the end of the same year, the Institute applied for and was granted provisional acceptance as Lesotho's focal point for International Standard Report Numbers. The idea of this strategy is to enable the Institute to spot newly produced reports from the country, and therefore facilitate both the acquisition and bibliographic control according to Ulrike (1997).

The publishing arm of the Documentation and Publication Division of ISAS, which strives to produce good quality scholarly publications, especially from its in house research findings, has published and marketed several technical reports pertaining to Lesotho and the sub-region; and not only covering the two mentioned sectors, but all other disciplines as relating to the development of Lesotho. If evidence can be given that ISAS publications are of international standard, and that research output is substantial, that would possibly be one indicator that researchers are in a position to conduct research because they have at their disposal sufficient adequate raw data to feed on. This assumption will be followed up in the next chapter.

ISAS efforts of paying attention to grey literature were duly commended about ten years ago by Sturges and Neill (1990:58-59) in their argument that, in most cases, information centres of the African continent were only struggling to make an impact on development. Unfortunately, ten years later, there is a gloomy picture of the development of Lesotho (*World Development Report 1998/99*:189) as a whole.

From the Research Division, ISAS has cooperated with a number of departments of the Lesotho government and with regional and international bodies with which it continued to issue technical reports accumulated in the documentation centre. The examples are those co-published with the Lesotho-based SADC Environment and Land Management Sector (SADC/ELMS) in 1996. By 1989 when ISAS was evaluated by an economist from the Economic Commission for Africa, (Teriba 1989) the report was detailed and positive about the Research Division. According to the experience of the researcher, staff from the Documentation and Publication Division, however, felt that the assessment was somehow superficial relating to their section.

2.7 Summary

As the 21st century dawns, the context - ISAS, Lesotho and the sub-region - has dramatically changed from within and outside. Manual handling of information including technical reports is certainly out-dated as an ineffective practice. ISAS has lost the closest allies in the management of TRs, SSRU and NIR who are no more. The democratised South Africa has opened doors to other partners, weakening SADRA, and also rendering ISAS services of attracting refugee scholars redundant. The changes thus pose a challenge to ISAS to reflect on what in the new era constitutes “research for development” as well as “development information” in the Lesotho context.

The next section of this chapter has dealt with the history of development, which has not been steady nor positive. The first unit of analysis is the Institute of Southern African Studies which exists within the academic environment of NUL as the immediate setting. The operations of ISAS’s documentation centre are described as non-traditional and lacking registered users for instance. The chapter highlights the timing of the assessment which coincides with the ongoing NUL periodic strategic planning and quality assurance management. The wider area surrounding ISAS is Lesotho. The entire scene depicts the types of users ISAS is mandated to serve locally and regionally. They include academics in the first instance, then government and other policy and decision makers in Lesotho. The section maps out other specialised information centres existing in Lesotho, and handling technical reports on and about the country. It is then indicated how, since its establishment, ISAS has devised ways of managing technical reports, or development

literature in general. The institute's sectoral approach of handling the literature is indicated through the agriculture and gender disciplines amongst many. The country's level of development information services, its general social, economic and cultural background are significant in determining the overall development.

CHAPTER 3

THEORETICAL FRAMEWORK AND REVIEW OF THE RELATED LITERATURE

3.1 Introduction

Defined in its broad sense, as Neuman (1997:136) posits, “a theory is full of abstract concepts, assumptions, relationships, definitions”, facts, ideas, propositions, tentative guesses and hypotheses”. Empirical research tests and challenges theories. In other words, research supports, refutes, builds up or defends as appropriate to an enquiry. The current survey is typically based on a number of assumptions and theories. Durrheim (1999:73-86) opines in this respect that levels of measurement start with the stage of conceptualisation at which theories are clarified before the actual operationalisation. The following discussion is in line with that view of defining the concepts prior to putting them into study’s operation.

The first step in carrying out the study was to identify the related theories and their relevance systematically by developing a conceptual framework. This chapter provides, in the first instance, that kind of outline that guides the survey as to which variables are being observed, which elements are relevant, what assumptions are made about them, and how they link up or inter-relate hypothetically, as Kaniki (1999:19) also argues. By anchoring the survey in existing theory, not only the findings are enhanced and made meaningful, but one is enabled to grasp the reference according to one’s own experience (Poole 1985:82), and to draw conclusions or deductions applicable to a given situation (Poole 1985:21). The framework also shows how the identified variables will be manipulated based on the operational definitions in (see section 1.11). This framework is, in addition, a detailed prelude to the next chapter on methodology. In the second instance, the chapter reviews the existing literature relating to the topic under study. It reviews areas that have been advanced in previous studies, what gaps exist, if any, and what methodologies were employed in those works.

The study, therefore, explores particularly in this theoretical framework and literature review

- ▶ concepts on and about information per se, and the relationship between information and knowledge
- ▶ concepts about development relating these to the Lesotho context, with specific relevance to the agricultural and gender sectors
- ▶ technical reports (TRs) as information channel
- ▶ specialized TRs information management as a global phenomenon
- ▶ use of TR, and
- ▶ the relationship between use of TRs and development

3.1.1 Conceptualizing and defining information

Information is what TRs purport to channel (Slobodyanik 1980; Henderson 1981; Sengupta 1981; Smith 1981; Conkling 1991). A deeper understand the meaning of 'information', deserves a look at several definitions. Menou (1983:23) defines information in relation to

knowledge. If information is 'organised data which are (or rather can be) communicated'....., knowledge is information that has been meaningfully aggregated into a reservoir of facts and concepts that can be applied - that is, information that has been absorbed or 'appropriated'.

He nevertheless argues that despite the perceived relationship between information and knowledge, there is a difference between the two concepts, as well as between information and data. In this approach to describing information, Menou (1983) is joined by Badenoch, Reid, Burton, Gibb and Oppenheim (1994:9-12) who argue that it is impossible to establish an agreed definition of information. Drawing on that, they encapsulated a definition of information as follows:

- ▶ data recorded, organised, classified within the context of giving a meaning
- ▶ pattern, design that rearranges data for instrumental purposes
- ▶ modelling, formatting in a way that increases knowledge
- ▶ knowledge communicated concerning some particular fact, subject, event
- ▶ representation of knowledge
- ▶ reduction in uncertainty
- ▶ that which adds to human knowledge

The definitions are so closely interwoven that they may be conveniently amalgamated into one, to define information as ‘recorded, organised data about a fact, subject or event, being purposely communicated from one party to another so that data is absorbed by recipients to enhance knowledge that may be applied without uncertainties’. In spite of the above-captioned amalgamation of the meanings of the concept, in Dosa’s (1997) view, there is no universally acceptable definition. Poole (1985:82) concurs that none of all these common statements that define information is universally valid. There are various reasons for the lack of universality in defining the concept. Hill (1999:11-12) alludes to the diverse interests of different and newly emerging groups or associations that do not just claim relevance to ‘information’ as subject and field as they also make the term “fashionable”; examples being terms like ‘information age’, ‘information technology’, and ‘information society’. Hill (1999) gives the impression that these fashionable terms refer to a new or different phenomenon that does not match the old application of the term ‘information’. Clearly, the terms are topical and so much so that some scholars dismiss them as more rhetoric than a new phenomenon per se - “In a certain sense we have always been, and will continue to be an information society” according to Dick (2000:7) who, like Hill (1999), points out that though as words they are more used now, as concepts they are not new:

Knowledge is not new” - we have known it for millenia....

A new buzzword has entered the development lexicon:
Knowledge society - information age..

And like all the extinct buzzwords that preceded it, knowledge will end
up in that dusty shelf where all past development cliches are stored

A question may be asked as to whom then the term ‘knowledge society’ is new. Or, as well, if the term has been so adopted by all societies. As will be shown, it might also imply erroneous use, abuse, or misuse (Stanciu 1982; Dick 2000). Most of the emerging terms like ‘information society’ and ‘information technology’, for instance, still apply to services like libraries and documentation centres. An example is the adoption of the new project called AISI by PADIS (DISD) as mentioned earlier. It is instead an additional or extended philosophy still within the arena of development information, and the notion that emerged in the 1970s. When AISI was launched in 1996, it called upon African governments to adopt and implement the following recommendations among others

- ▶ to develop and use software and data that addressed the variety of languages used in the African countries
- ▶ to encourage the development of value added information services including electronic publishing and networking facilities
- ▶ to support initiatives which build local content (Chisenga 1999:8).

The term ‘information society’ means the togetherness of people, systems, organisations, artificial intelligence, with the purpose of making all the world’s information usable through high speed electronic communication. It is an accepted ideology that “people make a greater use of information to inform their choices, and to explore...” (Moore:1997:271). To provide information readily, technological facilities are employed. In Africa, for instance, PADIS’s initial idea was to electronically interconnect Africa among its own member states, and with the rest of the world, as evident also in philosophy of DEVSIS in section 1. This interconnectivity has, however, not taken place as quickly or successfully as first planned (Lishan 1998; Hafkin 2000).

Information has always been a nebulous concept, even in research pertaining to information science. The term has for long, and universally been used, abused, misused even by the profession itself (Stanciu 1982:301, Meadow 1995:202). It can be misused owing to the heterogenous nature of the society that [now] needs information (Menou 1993:90). A positive interpretation is that the concept has become dynamic due to the increasing various information needs that extend the application of the term to equally increasing and different businesses. This latter interpretation is being adopted within the conceptual framework used to underpin the current study.

3.1.2 Types of information

Information is conceptualized according to what may be termed categories or types of provision. According to Menou (1983:25-26), these are two, namely,

- ▶ exogenous- that comes from the outside or the external environment , and
- ▶ endogenous - that is local, similar to indigenous.

This is a category which Braidotti, Charkiewicz, Hausler and Wieringa (1994:87), Prasad (1998) and Wang (1999) associate with rural communities, especially with women’s knowledge of their environment. While Radloff and Ochieng (2001) see ICTs as a vehicle for empowering women, Tauli-Corpuz (2000:99) argues about the negative impact of ICTs, and

makes the point that “the value of indigenous knowledge, which is also women’s knowledge, is diminished and marginalised in those vehicles”. Evidence is required whether TRs pertaining to Lesotho do channel or instead marginalise endogenous women’s information, and what the implication for either situation is to development. A related question is how ICTs can be used to enhance and promote TRs as a channel.

A related concept concerns knowledge and types of knowledge that Stiglitz (2000:10), arguing from the background of a chief economist of the World Bank until 1999, describes as general versus local, as well as codified against tacit knowledge. He defines the former as “knowledge that holds across countries, cultures, and times” while local knowledge is confined to a particular place, particular people and time. His views are noted and further supported by reference to Mchombu (1992) and Karlsson (Johansson 1995:47-57) who identify a third category which Karlsson calls

- synergistic, being a blend of the two which is viewed as relevant to a southern African or least developed situation. Karlsson (1992:53) stresses that “by drawing from indigenous and exotic information providers, the process has been interactive, flexible and dynamic with attempts to shift the balance in favour of marginalised indigenous communities” such as farmers.

The three categories of knowledge and knowledge are noted for the study’s focus on TRs that pertain to the local environment, being on and about Lesotho emanating from within and also outside the country.

3.1.3 Properties of information

Beyond the levels of definitions and types, ‘information’ may be conceptualized in terms of functions or role plus its properties. Kolenski (1981) argues that information may be described according to properties which information has, namely, that it may be collected, processed and stored but he does not elaborate further. The question follows “collected, processed and stored” for what? According to several scholars (Badenoch, Reid, Burton, Gibb and Oppenheim 1994; Chambers and Boissiere 1995; Horton 1995; McConnell 1995) and specifically Thorngate (1995:195) emphasis is put on those elements of ‘information’ that

make it a meaningful object and that should serve a purpose: “The net value of information is benefits after use”.

3.1.4 Value of information

Information is further understood in terms of benefits and value derived from its exploitation. From Menou’s (1993: 89-90) discussion on *Measuring the impact of information on development* the following statements are drawn which summarise the importance of information:

- ▶ information is a strategic resource, that is, it cuts across disciplines and in all human endeavours, including development in the agricultural and gender sectors in Lesotho
- ▶ information must be communicated interactively through technical reports along which feedback is also desirable among such groups as producers/generators (primary users), researchers and/or secondary users who may also be referred to as extended users of technical reports
- ▶ information, like all other resources, has both unique and common attributes - one of its attributes is added-value which increases with use, unlike most resources which deplete with use, inversely, information has more effect with more utilization
- ▶ like most other resources, information has a life-cycle with added value at each stage - though information, including that channelled by TRs, is less time-sensitive
- ▶ the full value of information includes both its present and potential value, which is always readily discernible - that explains, therefore, that information channelled by technical reports may be regarded as ‘transient’ to generators or commissioning bodies, yet it may remain potentially valuable to others
- ▶ to exploit its maximum value, information must be managed, beginning at the level of the individual, then proceeding to the group or sectorial level, the organizational, institutional, the country, the region and finally the global level
- ▶ information is in itself power, as well as an instrument of power that can empower the powerless like women in Lesotho or farmers whose empowerment increases food security, growth, economic and social independence, content and peace as some of the essentials in the Lesotho development
- ▶ information channelled by TRs plays a significant role in decision-making

- ▶ information has both benefits and costs, though they are often hidden; information is never a free good, as at any given time where it is available either with donors, commissioning government departments, producing consultants or documentation centres as listed in Chapter 2, someone must pay or have paid for it
- ▶ an effective and efficient information environment requires investment in human skills, adequacy to produce physical, financial, and technological infrastructure; information resources are not available in a stand-alone fashion, but within a context like the Lesotho/NUL/ISAS capability and capacity, which should also fit into the global setting

3.1.5 Linking information to knowledge

In the previous chapter, definitions were given where information was also described as an event. As an event, it may be understood as an object, a noun that may occupy a certain space and be carried. But as involving a process, information also implies a verb, an action of informing, of letting one have knowledge. Section 3.1.2. sketches out the types of information and their link to knowledge. Coetzee (1977:xi) argues that information in general may serve 'to increase one's knowledge or (to have one) diverted 'from a certain position', and be influential to direct recipients to a particular course, state or event. The same kind of influence that information exerts on its receiver is read from Havelock's (1969) philosophy that information can be understood on the one hand as information what, (the message or content), information that is contained; that can be transported, conveyed, and be delivered; or, influencing the recipient on what to comprehend and, or do.

Information is an essential variable in the ongoing study as it inter-relates with TRs that channel it. It links to a process of development which is the outcome of information resource management and exploitation (Boon 1992). On condition that data and facts contained in TRs enhance the receiver's knowledge and are applied meaningfully to receivers' actions and behaviour, that information becomes a resource. The link between knowledge and information is succinctly put by Stanciu (1982:301)

Semantic information is an entity circulating over the communication channels as a result of human activity. This activity is created by man and represents the unity between the physical carrier and the meaning involved in it

Dosa (1997:9-11) refers to Neelameghan who believes that information is needed by everybody, by every organisation and nation. While information is also required at any level of developmental activity (Teferi 1997:169), it is the context which makes a particular piece of information valuable (Boadi 1987; Dosa 1997). With specific reference to scientific and technical information Gerrard (1966:211) too agrees that such information is only of value if needed and when wanted (Kaniki 1989). It is only if information is digested into knowledge and applied to an appropriate practical and positive situation that it becomes valuable and useful.

The assumption is, therefore, that information, especially that channelled by TRs, shall be credible by content in terms of accuracy, style, language, novelty and comprehensiveness. Information will again be factual, relevant, organised, made accessible on time in order to facilitate or stimulate use leading to knowledge. It has consequently become imperative to situate information contained and channelled by TRs in the practical context of Lesotho in general, and of ISAS' information management specifically.

3.1.5.1 Conceptualizing information as opposed to knowledge

Alongside the tabulation of describing information, Badenoch, Reid, Burton, Gibb and Oppenheim (Feeney and Grieves 1994:11) also cite nine definitions of the concept 'knowledge', as well as its relationship to information. Five of those are of relevance:

- ▶ information is the link between knowledge and observed phenomena
- ▶ information supplies and supports knowledge
- ▶ knowledge is manifest in terms of uncertainty about outcomes in the real world; information is a change in this probabilistic state; implies that information is 'useful knowledge'
- ▶ knowledge is organized information in peoples' heads
- ▶ information is an expression of knowledge

It is further stated that knowledge is a mental state which an individual gets to after exposure to an epistemic type of information. The epistemic is conceptualized as information that is people-constructed or people-produced. It implies that one gets influenced by the already-constructed object, which might not necessarily be truth. As Braidotti, Chairkiewicz, Hausler, Wieringa argue "what is most problematic about the discourses of Western societies is that the centres of truth and centres of power are identical" (1994:10).

In the *Dictionary of library and information management*, Stevenson (1997:71) defines information as “knowledge given to someone in a form they can understand”. “Understanding” suggests a subsequent action which will be appropriate, correct as pertaining to the knowing “what” and the knowing how”. It is in this respect that information format is crucial in determining the audience. For instance, written data may be received by the literate to whom the ‘form of communication may be understood’.

Misuse of the terms information and knowledge and the relationship between the two is again underlined by Stanciu (1982:301) as follows

the frequent regrettable misuse of the words knowledge
and information has concealed over the years the importance
of the correlation existing between these concepts.

In order to explain the epistemological functions of knowledge, it is further elaborated that information is an abstract concept that is either meaningless or meaningful. It eliminates uncertainties and is cognitive as it charges the receiver’s psychological stimulus. It depends on individual’s capacity and ability to recognise and transform it into one’s own environment where it “improves human life quality”. In discussing the same notion of ‘use’, therefore, Abbott (1989) focuses on the manner in which the user actually engages all his/her senses in striving toward mental enrichment.

In simpler terms Thorngate (1995:196-7) shows that information which is not absorbed in peoples’ understanding remains out there, perhaps in the TRs and several information systems. But that which permeates peoples’ senses and their comprehension becomes cognitive as ‘knowledge’. It is that knowledge which then reduces uncertainties - at the rate of the quality of information received. The ‘knowing’ state may inculcate wisdom to an individual and the community (Kochen1975:33). Knowledge thus denotes the benefit personally derived from utilization of information, what the user is cognizant and mindful of after being informed, or, put another way “information is only useful if it is used to accomplish a task” (Kaniki 1989:68). The analogy also suits Oskar Morgenstern’s saying that “information in itself is silent” (Kann 1987:61). It becomes active and audible as a knowledgeable user applies it (information) to his/her daily, appropriate, befitting decisions and actions which are assumed

to be effective in the process towards peoples' achievement of progress and their well-being. It is this kind of information which is believed to be conveyed by TRs in the ongoing study.

Emerging from this discussion is an equation that there is firstly data, which is organised in order to make information. Information is then described in terms of three principal functions that also describe what it can be transformed into, namely,

- ▶ knowledge tool
- ▶ a tool to assist in decision-making
- ▶ a communication process (Paquot 1995:107).

Information is therefore not synonymous with knowledge. It is, rather, a knowledge tool or information that has been understood by individuals and is in their minds. Regarding information as a knowledge tool, a general concern is expressed in the literature wherein pertinent questions are asked. The central question is whose knowledge (Harding 1991), who is a 'knower' (Braidotti, Charkiewicz, Hausler and Wieringa 1994:34). Kabeer (1994:79) suggests that the hierarchy of knowledge should be reversed because "the knowledge of the world is constructed not discovered". This is also indicated by Long and Long (1992:) in the manner social networks are able to construct their own knowledge, for adoption of innovation for resistance or for any purpose. In the same vein, according to Prasad (1998:1) "knowledge must be acquired through one's own work and efforts". Putting the question in a context, the study of herders in Lesotho bears reference. Data that was collected from respondents was synthesised into information by experts, paid for by UNICEF on behalf and with the authority of the Ministry of Youth, Gender and Environment. At the stage where information becomes knowledge, who has gained knowledge, and through what kind of work and effort, if Prasad's (1998) argument holds ? Is it that which now belongs to the individuals who will make use/ read the report or have it read or interpreted for them? Are TRs' enhancing the knowledge of all the people who contribute to technical reports generation and for their needs-embracing development ? In this regard, Stiglitz (2000:9) advocates the World Bank's initiative to bring together research institutes as think tanks to promote global knowledge. At the same time, 'global knowledge' is neither solely local information nor external. As seen above with the three types or categories of information and provision, the ideal is perhaps synergistic information. It is that process of synergy which allows an information user or provider to have one's own while cross-fertilising it with others'. At the end of the process, data is transformed

into information. Information that comes from all the various directions is utilized to enrich knowledge that is for progress. Global knowledge will also be dealt with more elaborately in the section on development.

Four practical examples are given here to demonstrate how the two concepts - information and knowledge, are related. The first one is by the World Bank's work on *Knowledge and development* (1998/99). It lists, for example, over 200 cases mainly from the least developed countries in which failure or success stories of knowledge in developmental actions are respectively related to lack of or provision of information or knowledge. The nature of those cases, projects, programmes listed, is often in a form of feasibility studies, mid-term assessments, progress or final appraisal by experts generating technical reporting. The confusion is then whether it is information that goes into the reporting, or the knowledge inculcated among the indigenous development groups cited in the cases. The second example is a compilation by IDRC (McConnell 1995), indicating fourteen case studies whereby use and/or application of information had an impact on different sectors of development in Africa and the Caribbean.

Closer to home are two cases of the UNICEF and USAID studies. In preparation for the UNICEF World Summit Goals for children in 2000, member countries were required to prepare their respective state-of-art/Situation Reports which would be a point of reference for the gathering. UNICEF Lesotho, jointly with the Lesotho government Bureau of Statistics compiled a document titled *Exposing geographic inequity - Lesotho's multiple indicator cluster survey: a district level report: measuring progress towards the World Summit goals for children*. The document indicated that data was gathered from the ten administrative districts of the country. It was analysed and presented as evidence in determining the welfare, pace, prospects and problems of progress with children in Lesotho. One among several findings for the study (Bureau of Statistics and UNICEF 1998:14-15) established that there was a correlation between information, knowledge and application for good health. It was found out specifically that a proportion of mothers who had had information about vitamin A, and knew about it, was related to the proportional number of women that fed their children Vitamin A, and reduced or eliminated diseases associated with Vitamin A deficiency in all ten administrative districts of the country. In the districts where information had not been acquired

and respondents were ignorant about vitamin A, diseases and deaths related to deficiencies were rife among children. Information, then knowledge and application were understood to have had a positive effect on mothers' ability to act, or mothers' empowerment to safeguard the good health of their families. On the one hand the study emphasises the relationship between information, knowledge and good quality of life and on the other, it highlights how the report from producers (UNICEF) feeds into the process of informing and being informed among development activists. The notion that information is an empowering tool and a power on its own is thus shown in practical terms by mothers whose informed decisions contribute to their children's healthy life. Saracevic (1981:74) argues that the diffusion of ideas is brought about by information components and that success is dependent upon the environment.

3.1.6 Information diffusion models

Information may again be understood within the patterns of its diffusion. Two models will be reviewed. The first is Saracevic's (1981) in a discussion on evaluation, restructuring and repackaging of scientific and technical information. It describes a diffusion pattern in terms of communication characteristics depicting five communication factors as basic variables, namely, information source, structure, form, system and communication channel. According to Saracevic (1981:74) these variables play a part at three levels, namely at the informational components, at the diffusion level and at the situational components level.

At the first level exist information sources, structures and systems such as producers of reports. They may be library system or services that repackage such information forms and formats as reports. Information components also include the reports themselves that serve as channels of diffusing information. All constitute informational components. At the second level exists the action attitude of recipients to whom information plus ideas and innovations are diffused. Here processes that take place range from awareness, forming an attitude - taking an interest in information, receiving or rejecting it, delaying, deciding to adopt, to implement or not. At the third and last stage is the situational component which relates to the second, for it enumerates various actors in various situations, to receive, reject or also be the source of information. As the source of information, they also have their own systems, even if informal ones, of repackaging their ideas and diffusing as feedback. Saracevic (1981) describes that environment as comprising individuals, the social characteristic (characters), bodies, organisations and the

like. According to Saracevic and Wood (1981:74) the information diffusion model entails three levels. Firstly, there are information components which have sources, structures, forms and a system. For information to diffuse from that level it requires channels. Secondly, there are diffusion stages of awareness, interest, knowledge, attitude formation, trial decision and adoption confirmation. The third level constitutes situational components having a perceived idea or innovation which depend on individual or environmental characteristics.

The second model is proposed by Long and Long (1992:33) who argue that

individuals and social groups are, within the limits of their information and resources and the uncertainties they face, 'knowledgeable' and capable; that is, they devise ways of solving 'problematic situations' and thus actively engage in constructing their own social worlds.

Whereas this argument is strong in providing exemplary success stories of social networks advocated in information diffusion models, the model does not essentially refute the old-existing ones. It still emphasises the point that there are information systems, even if governmental or informal ones constructed by communities, their own leaders or NGOs. Long and Long (1992) also highlight the importance of communication - even if mainly oral and not through written reports as channels. Several cases they surveyed in which development innovations were rejected or adopted all still pointed to the situational components that Saracevic and Wood (1981) stressed.

An important issue from both models is that information diffusion should equally recognise that all the groups have some 'information' to impart and systems should be created for that. As well the groups should be empowered, or have capabilities to inform. In a diagrammatical form of the first model (Saracevic and Wood 1981) a two way direction of top and down is depicted, implying direction of information. Castells (2000) affirms that information empowers not only individuals but states and organisations. Hafkin (2000), too, provides evidence whereby information, communication and capacity to manage it empowers women. In terms of disadvantages that are associated with ICTs the discussion will follow below.

3.1.7 The dimensions of development information and its role

The hypothesis is that TRs channel information for development. As depicted in the first chapter, the relationship is close between development and information. DEVSIS (1975) was

one of the earliest agents to trace development information. It established that there is a particular type of information which can be labelled as developmental. The discovery that the team had made was based on the non-conventional, invisible literature inclusive of reports. The lesson learnt was that this type of information exists in both the developed and developing countries. Understanding the concept development information can be approached by describing what it is not. Boon's (1992) argument in *Information and development : towards an understanding of the relationship*, underlines quality technical information that is effectively managed and adequately supported by relevant institutions. The extension of the argument that not all information is for development is given by Dosa (1997:10) who highlights two approaches to arrive at a conceptual framework of the relationship between information and development. From the literature she reviewed some authors overestimated the role of information (especially the ICTs which is like a panacea) in development, others underestimated the role. Dosa's (1997) description of information in this respect is useful in indicating that the function, influence, impact or value of information varies according to user groups.

The second approach is then to focus on what development information is and what it entails. Menou (1993:23) describes the link briefly, "true development can only be manifested by wisdom which is the final stage in data transformation". Saracevic (1980:217) argues that we are so accustomed to the link between the two that it is common to hear such statements as:

information is a resource in development; information is power;
there are rich and information poor countries; denial of information
and lack of development; science and technical information (STI) is
a basic requirement for development; and information resources play
a significant role in decision-making.

He concludes that for as long as literature reveals so little verification of the link between information and development, these statements remain assumptions. This study is an effort toward verification.

This framework outlines the elements to be used to determine ISAS's and technical reports effectiveness or ineffectiveness in meeting development information needs of the mentioned groups. Dosa (1997:240) describes the link in a section titled "dimension of development information." She says "in every discipline and profession, four activities are in continuous

interaction: practice, research, education and policy formulation”. With reference to the task of the evaluating ISAS, it can be said that the Institute is itself performing the research function. It is well placed in an educational institution already, and was set up as a development and policy-oriented institute amongst other things. For these reasons, for development information to be disseminated to all the relevant constituencies, the Institute must be seen to be interacting with, and providing a service for practitioners like researchers, teachers, to principal policy makers and implementors like government officials; and to end-users such as agricultural extension workers or rural women as well as educationists and trainers in all their ramifications. Possibly, that is also why for these four functions the relevant information is called ‘development information.’

The role of libraries in Africa in development has been discussed by Sturges and Neill (1990) in *The Quiet struggle - libraries and information for Africa*. A chapter (1990:38-69) is devoted to information and development which, however, is an overview of what are believed to be poor or exemplary services. Sweeping statements such as “ignorance in Africa accounted for a failure of a number of projects”; and “inadequacy or lack of data and information hindered development” (Sturges and Neill 1990:66) are relevant as hypothetical statements for testing in this study. But as Saracevic (1980) states, the analysis does not put in detail how information would feed into development. Though the discussion by Sturges and Neill (1990) is not specific to technical reports as a channel of information, its message is central to a question of the purpose of libraries, or information ‘for what’. The authors infer the predicament of libraries in Africa and their struggle in a search for relevance in development. The book emphasised the role of information services in managing non-conventional literature that encompasses TRs, and that is assumed to be important in development. In that way, the work was influential and challenging for this study.

The bi-annual *Third International Conference on Grey Literature* held in Luxembourg had a theme for 1997 as *Designs and transfer of scientific and technical information*. This gathering did not, however, take time to define what it meant by “technical information”- thus leaving this category still barely understood even by an ardent reader of the proceedings. Participants and presenters from the less developed countries including Africa were clearly in the minority. Under-representation from the least developed countries can be interpreted as dissociating the

topic with these regions, or an indirect yet general submission that technical information is too scarce or non-existent there. This could be true of either the minds of the organisers themselves or of the minds of the developing regions. The previous conferences whose themes were generally on grey literature and its exploitation had comparatively high representation. The glaring absence of those countries from fora that relate to scientific and technical information has been alluded to by Saracevic (1981) with reference to the United Nations Science and Technology Conference in 1979. Yet, to belie that assumption that technical information does not relate to developing regions, as already mentioned in section 2.4 above, it was at the same gathering held in Luxembourg that Sturges (1997) elaborated on, for example, how in Kenya and Malawi developments projects were negatively affected due to some weak information infrastructures, unawareness of effective methods of handling and transferring technical information and technology which already existed. It is through such practical examples based on empirical studies that the theory of this study is grounded regarding information for development.

3.2 Conceptualizing development and development indicators for Lesotho

The following discussion traces the concept of 'development' from its original conceptualization to the current views of the concept. The researcher seeks a position that is suitable to the Lesotho context, and identifies development indicators by which to assess performance of technical reports. An attempt is made in this study to understand the theory in relation to other concepts already debated. The discussion reviews the literature in terms of the relationship between 'use' of TRs and development, and what exactly development is.

Various works on development theory exist (Walter 1972; Nyerere 1974; Braidotti, Charkiewicz, Hausler, and Wieringa 1994; Kabeeer 1994; Jahan 1995; Walters 1995; Cohen and Shenton 1996; Lund 1998; Rist 1999; Castells 2000; Colman 2000; Coetzee, Graff, Hendricks and Wood 2001). In the treatment of development in Lesotho, reference will be made to most of these scholars, especially where their focus is on agriculture or gender in the developing countries. Nyerere's views are reviewed as they provide relevant wisdom that was uniquely African. Despite being written in 1974, they are still challenging in the African context more than twenty years later. Rist's recent theories are interdisciplinary in approach, and recent as emerging in the late 1990s. Though they are radical in some cases, they are

decisive, methodological, universally applicable, and categorical in suggesting solutions to problems of under-development. Women theorists and analysts like Braidotti, Charkiewicz, Hausler and Wieringa, Jahan, Kabeer (1994) and Lund (1998) broaden the perspective by adding a gender aspect. Colman is one of the recent scholars who critique the measurement tools fully.

3.2.1 The origins and notions of development as a process and state

According to Dosa (1997:59) there is “absence of any cohesive, theoretically based, and generally accepted definition of the development process”. Consequently she uses what she terms a “relativistic approach” of defining “development as positive changes permeating the entire fabric of society and quality of human life”[own emphasis]. The description goes on that “such changes, including economic, technological, cultural, social and political dimensions, are only partially measurable either quantitatively or qualitatively”. Nevertheless, an increasing “volume of research is available on alternative measures applicable to basic human needs [own emphasis], the quality of life and the quality of environment”. Rist (1999:10-12) opines likewise that one major constraint with development as a theory is its nebulous definition, and lack of consensus about how it should be understood, be identified where it exists and where it does not. Hence, each of the involved organizations, individuals, systems have thus come to define development as they desire and suit their own purposes and agendas. It is argued that there is no way these groups can attain consensus because pursuance of their inconsistent concepts and goals tends to work at cross-purposes. Rist (1999:13), therefore, redefines development noting its inherent contradictions as consisting “of practices, sometimes appearing to conflict with one another, which require - for the reproduction of society - the general transformation and destruction of natural environment and to social relations”. He, like other theorists whose definitions he rejected, provides rather the properties of ‘development’ instead of an independent semantic description. Nyerere (1974) submits that development is a process by which people realize their full potential, have self-confidence and freedom from any form of domination and discrimination. The three definitions are not the same. By emphasizing different areas, the definitions are a clear reflection of the angle from which an organization, country or theorist approaches the concept and during which period. As an example, a desire for freedom from imperialism is discernable from Nyerere (1974) who was then not only from a recently independent former colony, but also an architect of a theory of

self-reliance and socialism called Ujamaa in Tanzania. Dosa's is a precise definition that emphasizes people's ability to express their desires, aspirations and freedom from any form of domination, to achieve quality of human life with all basic human needs. Rist's (1999) mention of reproduction and environment appears to conform to what is being recognized as an area of development at the time of writing. That is, two years after the Earth Summit that focused on environment. Rist (1999) identifies the contrary tension between effecting growth and preserving the environment. Saracevic (1980:216) argues that "the recognition of what array of elements are important in development keeps changing; it is an evolutionary process." This implies that, at any given period, there are certain segments or sectors of development that may be singled out for more recognition, and at that time such elements may influence the development discourse on what aspect to stress. As Saracevic (1980:216) argued in 1980 "among the latest elements that have entered this process of recognition is information in general." Sturges and Neill (1990:36) made the point that the role of information in the development of Africa has recently been recognized. While a definition for the study is given in section 1.11, what development means in terms of this study is further described here.

The concept 'development' is defined ideally as a process and a condition at which individuals, communities and a states progress by exploiting resources, yet without depleting them; and such that all the people equitably lead participatory, healthy lives of good quality, socially, culturally, morally, mentally, and economically (Nyerere 1974; Morris 1979; Stanciu 1982; World Bank 1990; Giuliano 1997; Rist 1999; Castells 2000; Colman 2000). Development is the process and condition that people, organizations, communities, and countries deliberately engage in to mark progress that ensures a participatory, good quality of life for the people. The dynamic and organic process of development is noted.

As a process, development ideally entails an intentional cultivation of material and nonmaterial resources which brings about change in an environmentally-friendly manner, and enables those intending individuals, organizations, communities or the nation to realize their potential, move away from cultural, political, economic and social oppression/exploitation, and build self-confidence, lead long healthy lives of dignity, fulfillment and nationhood.

As a product, development is the state of fulfillment which has been reached, attained; which however, should be sustained so that it does not revert to the adverse, but rather be dynamic and only change for better with ever adequate cultivation of resources such as information and knowledge.

Besides a problem of semantics, another fundamental problem bearing on the theories is the origins of the term development. Several theorists (Braidotti, Charkiewicz, Hausler, and Wieringa 1994; Kabeer 1994; Rodney 1972; Rist 1999) point out that the Western-oriented origins of development make the understanding of the term difficult, and attempts to apply the concept universally somewhat complex.

According to Rist (1999), on 20 January 1949, President Truman gave his presidential inaugural speech that used the terms 'development and underdevelopment'. The application was viewed as one of the pioneer attempts, seemingly, to remove the disparities between the traditional and the modernized regions; to put things in order, or to bridge the gap between the so called the 'developed' and the 'undeveloped worlds'. But, in Rist's (1999) opinion, the attempt altered the natural course of things in the 'non-developed' regions. The natural practice was that, in every society, people had been striving to improve their conditions of existence under the obtaining conditions or as Nyerere (1974:44) suggests "We have always had the desire to be our own masters". The 'natural' or traditional ways of improving societies were then abandoned by countries of the South as the new 'development' strategies were adopted generally by individuals, organizations, regions and states as if they previously had no aspirations for growth, a better life, prestige, and the like. The intervention and disruption of the 'natural' course, in the name of 'modernization' was aggravated by colonialism with its political domination. Even in the post-colonial era, the problem of barriers to more organic growth is perpetuated by the dependency syndrome whereby the former colonial masters direct their 'foreign aid', donations, loans and assistance to the former colonies which became spheres of influence for particular powerful states or blocks (Leys 1981:87-91; Mafeje 1993:23-37). That dependence, together with the League of Nations' mandate, further divides societies of the world along the lines of the powerful and the powerless, the center versus the periphery states in which the capitalist system then thrived.

A divergent view of Cowen and Shenton (1996:7) about the origins of the term development is attributed to the quotation they make thus:

As for development, so for 'underdevelopment': neither was invented during or after the World War and neither was originally construed as part of a new imperial project for the colonial and post-colonial 'Third World'. It was the global scope of 'aspiration and effort', according to Bernstein, which made development new after 1945. Development was the name, as a slogan, for attempt to confront world poverty [own emphasis].

Whilst the quotation opposes the idea of pinning down the origins to the West, it submits to the consensus that each nation, every individual has the desire and wish to progress, and what makes the difference apparently is attaching to that concept a name, 'development', and accordingly institutionalizing the efforts to progress. As well, the difference is that desirably, each society should develop itself, not be developed by another (Nyerere 1974), or all the nations develop on the basis of interdependence. The 'what' is development and the 'how' to attain it subsequently continued to be dominated by the regions that were said to be 'developed'. This was typified by theorists of what became the influential stages of development; theorists on Economics as part of development studies was taught; theorists who designed what became the universal measurements of development and various strategies that attracted global attention. All this is briefly debated in this framework in order to find the type of development that has obtained; or the kind that can or should prevail to create a conducive climate for TRs effective performance in Lesotho.

3.2.2 Stages of development

The *International encyclopedia of communication* (1989 v.2:10) recorded then that in the 1950s Rostow, a French historian, became influential in Europe by asserting that there were five stages of growth to modernity. They were listed as starting with a) the traditional society which corresponded to a natural state of 'underdevelopment', b) preconditions for take off which were stimulated by such factors as interacting with the industrialized societies; c) the take off, or the drive to maturity, and d) the age of high mass-consumption and e) the stage that was described as the 'self-sustained growth in which it is possible for a country to progress without further external assistance. Such stages of development were heavily criticized for defining the so-called 'traditional' societies negatively. As it can be observed, in general terms the stages focused on the growth of countries and societies in which humans are subsumed.

Though societies differ in terms of particular conditions which may be peculiar to them, Rostow's stages to modernity and growth suggested a standard route for all. Similarly, 'development' was also seen as inevitable even for the traditional societies which would one day reach the final stage of modernity and experience high mass consumption.

It is unclear from the point of Rostow what the indicators of traditionalism would be and how they would be assessed. What was also questionable with stage five was the insinuation that there could be a country that could be fully independent and continue without any external reliance. The understanding, however, is that the 'developed' countries would have also gone through the same stages before achieving their currently industrialized final condition of progress. If so, some of the indicators are deduced from the phases depicting the impact of economic development of the 18th to 20th centuries Britain and France, for instance, and as tabulated by Charlton (1984:20-21). The tabulation is cited in parts as follows:

Level I. Rural Pre-industrial economy

- A. Household/family unit of production and consumption
 - marriage an economic partnership
 - few women economically independent
 - complementary work roles; division of labour by age and sex
 - provision of food main domestic responsibility of women
- B. Reproductive activity consumed two-thirds of wife's married years
 - relatively late marriages
 - high fertility and high infant mortality
 - low standards of health and nutrition
 - little time specifically for child rearing
- C. Dispossession of landowners and agricultural labourers
 - work for wages in agriculture increased
 - work in early manufacturing increased
- A. Growth of urban areas
 - family wage economy prevailed
 - domestic work major occupation for young, single women

Level II Nineteenth-Century Industrialized economy

- A. Decline of household mode of production
 - factory increasingly the centre of productive activity
 - labour force segregated by sex

- continued child labour
- B. Women in work force
 - female work force concentrated in jobs with low levels of skill and productivity
 - movement of women into some new economic areas:
 - : migration of single girls and women to towns and cities
 - : work in garment, textile industries
 - : increase in prostitution
 - : increase in informal labour market increased
- C. Demographic changes
 - infant mortality high
 - gradual decline in birthrates
 - high illegitimate birthrate in urban areas
- A. Rise of urban middle classes
 - difficult for women to reconcile productive and reproductive activities
 - consumption becoming a major economic activity
 - wife continues to be responsible for household management

Saracevic (1980:215) provides a comparable categorization, yet with compact levels of development as 1. Pre-industrial or agricultural, 2. Beginning industrialization and 3. Relatively advanced industrialization. He concludes that “difficulties with this classification arise, however, in many countries where all three levels of development coexist in different regions or sectors”. None of the three stages is backed up by relevant indicators.

From the reviewed literature (Gay 1982; McCarthy 1994; Letuka, Mamashela, Matashane-Marite, Morolong, Motebang 1998:34-7) only some of the above conditions would apply to either the Lesotho ‘traditional’/pre-industrialization period or the present. Others would not. McCarthy (1994:125) subscribes to the idea that “the industrial base in African countries before independence was practically non-existent. Most countries were highly dependent on the export of a few unprocessed raw materials or agricultural commodities” such as Lesotho which exported maize and mohair to South Africa (Cobbe 1981; Leys 1981; Mokitimi and Motsamai 1988). It is difficult even to determine the stage at which to slot in the current stage of Lesotho’s development. First, formal urbanization may be traced only from 1980s, spanning from the establishment of the Department of Land, Surveys and Physical Planning that mapped out new central business districts which were added to the old towns that emerged. Second, the country’s pace of industrializing is comparatively slow if its speed may be measured by size of labour force entering the industry since 1980.

Table 3.1 Percentage of Population in the Labour Force within the Industry sector

	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1996</u>
Botswana	13	19	28	41
Lesotho	4	5	5	6
Swaziland	9	10	12	13

Source: *African Development Bank 1999* (1999:213)

Due to unique geo-political circumstances between Lesotho and South Africa, as described in Chapter 2, industrialization and urban migration within Lesotho, for instance, feature a little, but more within the context of the South African cities which attract male migrant miners and women migrant workers (Bureau of Statistics 1998; Kimane and Ntimo-Makara 1998:101). The emerging industrialization in Lesotho, however, shows signs of oppression of women who go to towns as job seekers and finally provide cheap labour in the industries owned by the multinationals (Wright 1999; Thai 2000). During the Lesotho pre-colonial era which was also rural as in Britain and France, early marriages were prevalent and this continued to the colonial rule, unlike in Europe in stage 1B above (Gay 1982). Using a family unit to describe or assess the pre-colonial Basotho women's condition would not generally fit as it perhaps did in Europe. It is recorded that large extended and polygamous families were prevalent. It is only in the 1980s there is an increase in the small nuclear families that afford women some economic and social independence (Gay 1982:13). Secondly, what might have been a positive transformation in Europe such as a movement from early to late marriages may be a negative aspect in development for some cultures. For instance, early marriages were, or are valued by some societies, as they stand great chances of bearing more children (Gay 1982) and prestigiously large families (Rist 1999:44) than late marriages. The time frame for the study, from 1979 when ISAS was established, will however limit the focus mainly to the post-independence development as stated. What Charlton's levels do is inform this study about the dynamics of development. One essential element that will be adapted in the study is the indicator that there were complementary work roles during the pre-industrial era. Apparently this was a prevalent feature especially in agriculture, as was the case in Lesotho (Cobbe 1981; Gay 1982; Leys 1981). Another is infant mortality for which declining rates are viewed as an indisputable development indicator as seen with the Bureau of Statistics and UNICEF (1998) study on goals of children discussed in section 3.1.5.1 above.

3.2.3 Economics as an aspect of development and conventional measurements of development

According to Rist (1999), in the 1940s, Perroux, in his capacity as a professor of Economics in France, influenced the economic course that was taught there by encouraging foreign markets. He embraced the idea of the multinational corporations (MNCs) as the way of “exploiting the earth’s human and material resources that need to be globally exploited to satisfy the needs of all” (Rist 1999:143). Viewing the oneness of the world and its resources was also advocated by Kabeer (1994:70) whose interpretation was, however different as she cited Ghandi as having said, “there are enough resources in the world to meet the basic needs of all, but not enough to satisfy the greed of a few”. Kabeer (1994) argued in that context that development processes may be viewed negatively as impoverishing the many but enriching a few, especially the few people, corporations or countries that have the power to expand and dominate even by their physical presence. The processes may also be viewed positively for a number of reasons. Dosa (1997:12-19, 349) described the behaviour of MNCs as a controversial issue. On the one hand MNCs bring experiences, innovations and advanced technology on a large scale, she noted. On the other, they compete and do not augur well for local firms, let alone the environmental waste that is often dumped in the host countries whose environment in the whole process is thus impoverished. Rodney (1972) generally exposes how both colonialism and foreign direct investment as systems have underdeveloped Africa. On colonialism, Perroux (Rist 1999) ironically was one of the scholars who condemned the process as bearing negatively on the economic development of the colonies, in that way supporting Walter (1972). A lesson is drawn that, as with other colonies administered by colonial rulers, Lesotho is exhibiting long lasting effects from its colonial past.

Other economic theorists (Seers 1963; Nyerere 1974; Rist 1999; Colman 2000; White 2000) express the view that development, more especially economic theories, were an imported way of thinking which did not fit the regions where they were applied. As economic growth continued to dominate the development doctrines and measurements worldwide, Dudley Seers, as director of the Institute of Development Studies in 1963 argued in his publication *The limitations of the special case* that Economics as a science taught in universities is based upon phenomena obtaining in ‘developed’ countries which he labeled a ‘special case’. He lamented that the case could not fit in the economic conditions of the ‘developing’ countries which he regarded as the general case. It would serve he stressed, if economists from ‘the general cases’

reconstructed appropriate economics and learnt it anew. By highlighting this problem, it is further made clear that most of the principles of the world-wide concepts of development might be unsuitable to societies that copy them from the West or any exogenously conceived origin. Such academic theories, Rist (1999) argued, might as well be rejected together with “the mass of advice coming from the national and international ‘experts’ attached to the planning, agriculture and foreign trade ministries in the countries of the South” (Rist 1999:107; Coetzee, Graff, Hendricks and Wood 2000). Regarding Lesotho and this study, it is not evident whether advice to reconceptualize development was taken either in the South as a whole, or in Africa specifically. One observes in particular that at the University of Natal there is a module on Development Economics which does critique the ‘old’ or original approach. It is not clear what at NUL the Economics and/or Development studies actually entail in this regard.

3.2.3.1 Measurements of development

Measurements that were viewed as yardsticks commensurate with development were devised in order to determine how “developed” a country is. These include such elements as gross domestic product (GDP) gross national product (GNP), poverty datum line (PDL), exports, imports, industrial and technological advancements. White (2000) argued that Simon Kuznets, the principal architect of GNP, warned 40 years ago that “the welfare of a nation can scarcely be inferred from an measurement of national income. “Our growth statistics were never meant to be used as a measure of progress”. Hence it was regretted that the World Bank, for instance, was still applying such measurements, especially with its failure rate being 70% of all human resource projects (inclusive of women’s) that utilize this measuring tool.

3.2.3.1.1 GDP, GNP and PDL

It is argued that the inadequacy of GNP and GDP as measuring development is that they are concerned solely with services and goods that are valued in terms of money. They consequently focus on economic growth at the expense of other services required by people. By not measuring environmental depletion, for instance, they actually ignore the resources from which growth results (Colman 2000). At the University of Natal - Pietermaritzburg, one further recognizes the fact that Environmental Economics, for instance, is taught. The content

actually involves factors that Colman (2000) underlines. The course is fairly recent in Lesotho as it started in 1996 within the Geography Department of the NUL.

Poverty datum line (PDL) is another controversial measurement. According to the World Bank (1998-1999:197), a high proportion of people in southern Africa live below one (US) dollar per day. Compared with four other countries of the sub-region, Lesotho is the second lowest as the Table 3.2 illustrates.

Table 3.2 Poverty datum line in Southern Africa

<u>Country</u>	% of people <u>below</u>	average gap between those below <u>and above</u>
Lesotho	74.1	43.5
Tanzania	45.5	15.3
Zambia	98.2	73.4
South Africa	50.2	22.5
Zimbabwe	68.2	35.5

Realistically, none of these countries use a US dollar as legal tender. Their respective currencies have instead been calculated against that currency which has been internationalized, thus making the conversions more of an estimation than the exact figure. Conclusions that are drawn from the estimated incomes may presumably approximate rough guesses. That notwithstanding, even if a dollar was thus allocated per day, it actually depends on whether or not having it would automatically guarantee one a long, healthy, peaceful life. Even if an income for each household in a country mathematically translates to a dollar per day, it cannot be concluded (Braidotti, Charkiewicz, Hausler, Wieringa 1994:79) that it is equitably shared by members of the household to lead a healthy life. Senaoana (1996:8) argues that Lesotho has no official determinant for PDL. For a study that was carried out to determine levels of poverty, the Lesotho Government sponsored team instead used levels of calories that each household could afford to consume per day. Households that consumed less than 2500 were regarded as poor. Such a measure was a working compromise, but limited since in fact some people have poor diets due to **ignorance**, habits, practices or the obtaining environment, not because they cannot afford better food. The measurement was, therefore, regarded as relative. The figures do not tell if 74.1% (in the case of Lesotho) actually do live well, if they are poor or rich. This is not known, as determined by PDL. In terms of reducing information-poverty

the figures are again silent or meaningless. Yet, development should be “knowledge-based” according to Menou (1983). Knowledge-imparting, reducing uncertainty among people, is marginalized in the above cases. In essence all this demonstrates how difficult it is to comprehend, measure and assess a wide-encompassing concept like ‘development’. In the information sector for instance, Tanzania is more evenly served with library services than South Africa (Kadundu 1998), especially when the democratized provision of such services started only after 1993. Hence the disparity between the two countries in terms of their respective 45.4 and 50.2 pro rata a dollar per day, disregards the importance of information; information that empowers and makes an individual knowledgeable to master his/her everyday quality life. This should not be what Lesotho strives for in the name of development.

In general terms, these measures have a bearing on the performance of countries and states versus how productive and developed and content individual people or the citizens of those countries are. Kabeer (1994:74) submits that “most models informing development policy are couched in abstract and apparently neutral concepts (economy, the gross national product, the market, the formal sector, the informal sector and so on).” That is so, to the extent that the world’s efforts are mainly directed toward economic growth at the expense of redistribution or resources and equity (Kabeer 1994:74-5).

The Central Bank of Lesotho- CBL (1998), the African Development Bank - ADB (1999) and the World Bank (White 2000) still use these yardsticks simultaneously with others that measure development. In 1999, CBL reports that for the 1998 period

real gross national product (GNP) was, in addition to the domestic development, adversely affected by the continued decline in migrant labour income. Real GNP was estimated to have contracted by about 9.4 per cent compared with 0.8 percent growth rate registered the previous year. It is worth noting that this was the first time since 1983, that there was a decline in both gross domestic product GDP and GNP. (CBL 1998:4)

Not only are the models abstract, the language itself avoids a human aspect even where its importance is explicit such as in the ‘decline in migrant income’ instead of perhaps a ‘decline of income from the retrenched mine workers’. The problem still persists presumably because of the gender-insensitive structures obtaining in the hard core sectors of development, as will be demonstrated below with arguments made by Sen (2000). The measurements tally with the ‘hard’ data that Saracevic (1981:124) associates with technical information.

According to Nyerere (1974), Morris (1976) and Menou (1983), development should be people-centred and have indicators that assess individual and collective performance or progress of the citizens, as they are the ones who actually contribute to the wealth of a country. This challenged the study to look at the adequacy of these measures along with other development strategies in general and in the context of Lesotho. Admittedly, the PDL focuses on people and/or their households, though it is beset with limitations as shown.

3.2.4 Examples of development strategies by the international community, the outcome and relevance for Lesotho

That 'development process' is dynamic and often takes the direction of who at a given time is sponsoring or influencing the rhetoric, (Saracevic 1980:216; Kabeer 1994:71), is evinced from past and current areas that attracted global concerns under the banner of development. A number of United Nations agencies and international organizations have conceived several of these development ideologies and strategies that are worth reviewing within the context of development in Lesotho. Some of these strategies are in the form of conferences.

3.2.4.1 Non-Aligned Movement (NAM)

In 1974 the Non-Aligned Movement (NAM) successfully lobbied for adoption by the UN of the New International Economic Order - NIEO (Rist 1999:153-5). In terms of recognizing the uneven distribution of the world resources that were more concentrated in the countries of the North, NAM won. But the idea bore no practical impact since it was badly conceptualized. Its strength was its political neutrality from the Eastern and Western blocs, and its weakness was a narrow focus on 'economism' which is limited to the GNP/GDP. That regions outside the West have continued to depend on foreign theories has proved to be disadvantageous. A number of development strategies that followed were invariably based on the original theories albeit that they were irrelevant. That irrelevance, therefore, relegated most subsequent approaches irrelevant too.

3.2.4.2 UN New International Economic Order (NIEO)

Despite the fact that the aim was actually to bring to equilibrium the order between the economically strong and the economically weak regions of the world, having a strategy which

narrowly focused on economism as critiqued, the approach was in itself a weakness. Within the NIEO philosophy, domination of original subject and concept persisted. Kabeer (1994:71) agreed that while [NIEO] “gave at least rhetorical attention to issues of class and poverty, it was conspicuously silent on [such human-centred areas as] gender inequalities”. Presumably, therefore, most of the development strategies that apply to the conventional economics with GNP/GDP in the policies, design and assessment of the Lesotho development will be subjected to similar flaws. How much TRs pertaining to Lesotho channel information that is advocating or moving away from this kind of element will be also be a focus of the study.

3.2.4.3 UN New International Information and Communication Order (NWICO)

Wells (1987) observes that in the mid-1970s, the Non-Aligned countries and the less developed countries called on UNESCO to bring to balance the unequal regions of the world divided by those who had information and communication infrastructure and could be heard, and those which did not and which could hardly have their voices heard. The philosophy of the New International Information Order (NWICO) was thus born. Its principles emphasized the right that each country, region and individual had, not only to be informed but most importantly, “to inform, that is a right of self-interpretation to others” (Wells 1987:40). That concern of UNESCO tallied with the lesson learnt from the ideal information diffusion model in section 3.1.6 above that demands that all the groups be empowered to inform about what they know or give their feedback about what they hear. Under the leadership of Sean McBride, a report was issued entitled *Many voices, one world* that set guidelines at the local, regional and international levels. At the governmental levels, the report gave an impetus to the establishment of national broadcasting services. Recommendations required the regions of the world to examine whether there was an equally free flow of information, and by what content and form, implying that there could have been some channels that were alien to some recipients. The argument fits well with this thesis on technical reports and channels, and the links to the ideal information model diffusion model in 3.1.6. At the level of Africa, the Pan-African News Agency (PANA) is one regional body that was established in response to the challenges of NWICO. But at institutional levels like universities, one gets no such evident results. At the non-governmental and at the individual or society levels, even twenty years after NWICO, informational infrastructure is still weak in the countries of the South and strong in the North.

3.2.4.4 UN International Conference on Science and Technology (UNCST)

In 1979 the UNCST for Development was held. It drew on the USAID report of a survey that was carried out in preparation for the conference, but none of the Southern African countries participated. Non-participation supported fears expressed about the sub-region's indifference toward this kind of literature. Their poor participation at the GL'97 which will be elaborated on in Chapter 3, was part of a persistent problem that had been observed by Saracevic (1980:21) at UNCST. Evidence of this problem was shown not only with LDCs low attendance figures, but also with paucity of the strictly scientific and technical literature emanating from them. This compelled Saracevic (1980:228) to imagine that

basic research (at times, this means scientific research in general) is not an affordable activity of LDCs, thus the literature on these subjects is not of direct interest to information needs. Other writings are directly negative or even hostile to scientific literature. At times, the literature is viewed as simply 'academic' and inappropriate to needs.

Above all, non-representation and lack of a country report in a form of a technical report was likely to impinge on benefits derived from communicating with counterparts, or prospective partners in the field, a facility that TRs is said to foster.

3.2.4.5 The South Commission

In 1980 the UNDP mandated the South Commission to be led by Julius Nyerere to devise a development strategy that would take on board the aspirations for the South, and in recognition that, thus far, dominant theories had come from the North. The Commission made attempts to document problems of development and past strategies. It devised "a global programme of immediate action" (Rist 1999: 201-2), but not much followed. What remained is that the industrially rich countries from the North continue to maintain their position.

3.2.4.6 UNDP and its focus on Human Development

The year 1990 marked the first time that UNDP issued a Human Development report that is said to have shown a human face. Griffiths (1993:32) writes that the report "broke new ground by attempting to measure the quality of life enjoyed by people throughout the world, rather than merely the economic performers of the individual states". This was the work of a special commission that was mandated to look at ways of adequately measuring progress and avoiding the "tyranny of GNP". The team introduced human-focused indicators comprising income, life

expectancy, level of education, health, water supply. The Human Development Index (HDI) was enthusiastically received and viewed as evidence of an initiative by which a development agent would get closer to the people. By the same token, the Index had a 'managerial character, by which donors could monitor whether aid was well spent'. Rist (1999) argued that through HDI, development aid could therefore bypass undemocratic governments and be channeled directly to the communities. This point will be elaborated on in section 3.2.7.2 below under aid, dependence and development. Consequently, the era gave impetus to the establishment of the non-governmental organizations (NGOs). They in return became popular with, and also empowered by, networking strategies and by recognition through observer status that was attained by many, with the UN agencies. Furthermore, NGOs had the power and freedom to lobby for their voices to be heard in international fora (Motebang 2000; Stiglitz 2000; Wichterich 2000). Rist (1999) writes that "although the HDI weights the income variable in a number of ways, the basis of calculation continues to depend on GNP. Be that as it may, a numbers of analysts embrace its strength more than they lament the weaknesses. Braidotti, Charkiewicz, Hausler and Wieringa (1994:140-1) underline HDI's usefulness in accounting for women's work and gender dis-aggregated statistics. However, they argue that HDI does not include the environmental dimension, nor availability of water, fuel and so forth.

The World Bank's Development annual reports have also incorporated other elements of assessment, the example being *Entering the 21st century world development report 1999/2000*. It has evaluated individual country's performance in development against the following:

- consumption per capita. It is unclear what criteria were used to select 'consumer goods'

that are used to determine consumption. It seems that aspects of this element correspond to objects that go into the Lesotho Bureau of Statistics *consumer price indexes* that by observation are hardly ever used by 'users' of ISAS's Documentation Centre. What is evident is that amongst the commodities listed, for instance, there is no library-managed information as a resourceful commodity. This will be verified. Yet, it could support conclusions by Saracevic (1980) that studies involving hard data are rare in LDCs, and a position negatively affecting production, availability and use of scientific and technical information. The hostile attitude is read from what the director of the African Training and Resource Centre is reported to have told the US gathering that [they], probably from Africa or LDC's, were tired of studies,

and they would rather have some actions (Charlton 1984:38). The statement could be interpreted as meaning conducting studies on LDCs, and use of information coming out of them does not constitute 'action'. That would be doubtful. Another interpretation could be that their impatience with studies is caused by the fact that findings from studies are not translated into any meaningful actions or results. This is also what this study investigates in Lesotho.

- ▶ prevalence of child malnutrition. As it relates to mothers' knowledge and empowerment and reduction of child mortality, it is of relevance as the UNICEF study showed that there is a correlation of provision of information to, and knowledge of mothers with feeding and child health/welfare;
- ▶ life expectancy. A number of definitions of 'development' use this indicator' which the study is not necessarily considering as reliable for assessing development.
- ▶ adult literacy. At the ILO sponsored gathering in Geneva where discussion dwelt on causes of child labour and ways of preventing it, the ILO representative in Lesotho, Makeka (Lesnet 2000), was cited as wondering what could be the significance of the literacy rate for Lesotho development, especially when the country's literacy rate was then found to be one of the highest in Africa. He observed that despite non-availability of compulsory/free education in Lesotho, enrolment in school was not low. By implication, the problem was what the attainment of even primary education could not guarantee that victims would be freed from child labour which ILO was fighting against. From another angle, it is worth noting that in some countries, controversy surrounds free primary education which is viewed as ambitious to poor states (Oxfam International 2000). It may be debatable then if for individuals to develop, they should, in certain cases vie for themselves just as Nyerere (1974) and Prasad (1998, b:1) assert respectively for development and for acquiring knowledge, or for governments to provide for them, or, a combination of both.

The Lesotho situation suggests that the relationship between literacy and development would instead need more interrogation. In terms of TRs, it has been shown (3.5) that their utilization is directly related to literacy. However, the issue must be addressed as producers and documentalists are urged first by Dervin (1983) to participate in the synthesis and repackaging of information channeled by TRs. Channels like radio and slide shows are heavily used for the illiterate in agriculture (CTA 1995) and health (WHO 1980). Secondly, as shown, Serpell (1981) proposes their specialized information systems should work with systems that directly

serve the public. Nevertheless, TRs are nowadays also available by electronic media and would require a broader understanding of the term “literate” to include ‘computer literate’ users.

- ▶ access to sanitation in urban areas. Braidotti, Charkiewicz, Hausler and Wieringa (1994) considered it a major flaw in the HDI that it lacked indicators like this one. It is, however, remarkable that the World Bank considered only the urban areas and not the rural areas as well. That indicator is noted, though it is not used in the survey.
- ▶ poverty. This phenomenon is understood to signal absence of development. Incidence of poverty is discussed extensively in *Pathway out of poverty - an action plan for Lesotho* by the Lesotho Government (1996), which maps areas requiring priority human development. Poverty is also debated about in *Who's in and who's out? - the effects of poverty and inequality on participatory and institutional development* by Lund (1998). The topic is dealt with in *Inclusion, justice and poverty reduction* by the DSE jointly with the World Bank (1999); and finally in *Entering the 21st century world development report 1999/2000* as well as *Attacking poverty 2001*. For this study, Lund (1998) draws a useful relationship between poverty and participatory development. An argument in this study is that for development to be visible, it has to bear outcomes and be the effect of some input. In most cases, however, those who are “in” positions of power, ‘in’ charge of activities of progress, ‘involved’ with processes that are designed to bring about change, tend to exclude keep out the input of ‘the poor’ the powerless, thus limiting the content, character, and impact of output (Lund 1998). At the above mentioned DSE/World Bank (1999) workshop, forty seven participants, including two government ministers who happened to be males from Africa, attended. The majority of the participants were from the World Bank and the DSE. The obvious problem with the gathering was imbalanced participation. From the side of the majority, one participant admitted having had no experience with poverty’ (Kochendorfer-Lucius and Pleskovic 1999:179). Thus they could seemingly talk, theorize, listen and gain knowledge. The likelihood was looming, as expressed by Cowen and Shenton (1996:453), that development has some “serious malcontents”, as they put it, such as “experts” or “professionals” who can engage in “the indignity of speaking on someone’s behalf”. The argument goes on: “The question of development, if its meaning is taken to be what ‘we’ can do for ‘them’ is only a licence for imperial intervention”.

The approach which is followed by approximately 94% of development ‘agents’ who also come from the North and who seek to make an input on how to reduce poverty, is found to be common with the World Bank and the IMF, for instance, it is criticized in the context of Lesotho by Coetzee, Graff, Hendricks and Woods (2001) who interpret the Banks’ “experts” who “dispensed [supposedly] their wisdom” in the country as a failure, especially with the Highlands Water project. They, however, excluded the group that was to be affected by the outcome. The participants nevertheless expressed their moral duty not to “turn their backs on the poor”. The action plan for Lesotho, bearing in mind that it took the form of a technical report, conceptualized poverty as a condition hindering progress, or the state of under-development. The Action Plan (Senaoana 1996) outlined patterns of poverty, revealing that it was prevalent in the rural areas and amongst women (1996:9). In order to reduce and eradicate (as both terms are used) poverty the following are some of the strategies to be adopted :

- * Make land tenure (and women’s rights to land) more secure ...
- * Promote reduction in herd size
- * Reorient agricultural research and extension
- * Spend proportionately more on primary education and less on college and university education (Senaoana 1996:51-2)

Clearly, but unfortunately, no mention of information or knowledge is made.

- ▶ education.
- ▶ health.
- ▶ land use and agricultural production. This element is central to the current study as it makes a special reference to the agricultural sector that will be dealt with below.
- ▶ water use, deforestation and protected areas. In Lesotho, drawing water from the wells has been part of a woman’s responsibilities. As water use is vital in agricultural activities the area is included in this framework. Butler (1997) and Prasad, (1998b) too, recorded their concerns regarding the impact on some Basotho people by developmental schemes that bring about changes on the local environments.
- ▶ energy use,
- ▶ central government finance.

3.2.4.7 The United Nations Conference on Environment and Development (UNCED)

UNCED convened in Rio with the NGO Global forum - or the Earth summit in 1997.

Though it was intended to produce a comprehensive and global responsibility for environmental protection, the final document was issued as a “watered-down” text due to the United States of America ensuring that its national interests were not sacrificed. It is stated that “In effect a large number of species endemic in the South are still open to unregulated use by the biotechnology industry” (Braidotti Charkiewicz, Hausler and Wieringa 1994:127). Possibly this tallies with the advantage to MNCs of dumping harmful industrial wastes in those countries where their operations extend. In South Africa, deaths caused by a prolonged exposure to asbestos from the British company that operated in the Northern Province bears evidence to inform development strategists in Lesotho as well.

At the summit, it was the NGO forum whose coverage of concerns was sufficiently broad to include areas like institutional-building, environment, food production, and cross-sectorial matters like racism, militarization, women and population growth. Finally, emphasis was laid on ‘sustainable’ development. However, contradictory meanings emerged for the term. For conventional thinking it denoted durable development, or ‘for as long as it lasts’. For the dominant forces it meant an irreversible development, that which can or should be sustained eternally (Rist 1999). Lesotho was represented by both government and non-governmental organizations. An outcome was that the government established the National Environmental Secretariat (NES) which since 1999 has been absorbed as a department within the Ministry of Environment, Gender and Youth. Interests taken by NES also converged with those of the Lesotho Highlands Water Development Authority (LHDA) which is responsible for the Katse Dam (*LHDA Impact Assessment Survey Report 1997*).

By observation, a high number of TRs that have been authored by both offices either jointly or separately, and that are being deposited with ISAS, give the impression that a lot of informing, communication and interaction goes on to assist in the development process through conferences, evaluation studies, projects’ final reporting and so on. Another influence has been the establishment of the Lesotho Environmental Information Network LEINET that cooperates with UNEP and other regional or international information systems - (Nthunya 1998). Though the study is not focusing on environment but rather on agriculture and gender,

all three interrelate so much so that each of the mentioned groups will be surveyed to determine who has been affected by the outcome of the processes like forced removals where they existed, or, for instance, benefits/losses from the protected areas. Relevant constituencies in this regard are LEINET, LHDA, NES.

3.2.4.8 The Social Summit II

Geneva hosted the 2000 United Nations Social Summit+5, which followed the 1995 one held in Copenhagen. The aim of the second was also to focus on development from another angle, of committing governments, aid agencies, charity organizations and many authoritative institutions to eradicating poverty and enabling all to have access to productive resources such as land, credit, information and knowledge. It is of relevance to the study in that information and knowledge are mentioned. In addition, 'poverty' was the main issue. Perhaps as a consequence donor agencies, inter-governmental bodies and development theorists (DSE 2000, UNDP 1999, World Bank) reviewed the understanding of 'development' to translate into 'poverty reduction'. The report of the mentioned Villa Borsig Workshop on *Inclusion, justice and poverty reduction* sponsored by both the DSE and the World Bank is an example that attention is on poverty. According to MS (Mellefolkligt Samvirke) Lesotho there were preparatory papers.

The Lesotho Council of NGOs, in partnership with MS contributed to a joint report by nine selected countries of eastern and Southern Africa prior to the Social Summit. A more relevant and one of the many possible, outcome of the Social Summit was the UNDP's \$20 million Poverty Strategy Initiative. Under the project, UNDP commissioned an assessment of poverty in Lesotho, Zambia, Uganda and the Maldives: "In Lesotho, the funds were used for a study on urban poverty, and refocused the attention of government onto issues of urban management" (*NU Info* 2000:3). The report is apparently ready with the UNDP office in Maseru, but despite efforts made, the report was not easily available for the researcher's use.

3.2.4.9 The World Food Summit

In November 1996 a strategy was devised for development by the UN Food and Agricultural Organization (FAO) in Rome. It assembled governments in partnership with institutions representing civil society like non-government organizations as producers, planners and

consumers at the World Food Summit. The aim was to agree on a detailed plan to eradicate hunger as one indicator of poverty and absence of development.

Lesotho was represented, but it is prudent that relevant bodies and officials be questioned on what was their participation and what they view as the effect.

3.2.4.10 Global knowledge (GKI) and globalization conference

The World Bank and the Canadian government organised an international conference that was held Toronto in 1997 with the theme ‘global knowledge.’ The conference mentioned the following as the core sub-themes:

- ▶ understanding the role of knowledge and information in economic and social development; and the profound changes in the development process wrought by new technologies
- ▶ sharing strategies, tools and experiences in harnessing knowledge for development;
- ▶ building new partnerships that empower the poor with information and knowledge, foster international dialogue on development, and strengthen the knowledge and information resource of developing countries

Evident in this case is the point made by Dick (2000:7) and Hill (1999:) that there are some terms that become so topical it is as if they bring a totally new idea. Seemingly, the ‘Global knowledge’ ideology carries the same old principle that was advocated by DEVSIS of the early 1970s as mentioned in Chapter 1. Moreover, the team that conceived the idea still comprised the World Bank and the Canadian government through the IDRC. Semantically, the new notion fits into the concept of ‘globalization’ which will dealt with below. Attention of the 1997 global knowledge conference differed from that of DEVSIS by aiming at ‘empowering the poor’ (individuals and communities), which corresponds to several other fora. On the other hand, the concept ‘global knowledge’ is challenged by the feminist epistemologies whose argument is that for as long as we see information and knowledge being constructed by the dominating forces, it fails to perform as expected and as desirable. This study is balancing the two views (Global knowledge 1997).

3.2.4.11 HABITAT II

The 1997 HABITAT II held in Turkey reviewed progress since the first Habitat conference

on human settlements. Preparation for this gathering was made in a form of impact assessment and progress which were carried out several months in advance. Similar to the International Women's conference in New York in June 2000, participants had to prepare reports that reviewed progress marked since the last forum. With regard to HABITAT II a common evaluative framework was provided to governments and they had to assess national progress, for instance, in terms of :

- ▶ policies, programmes or schemes within a country that could be viewed as exemplary or "best practices" as they were termed, and that enabled people to have decent housing/homes/settlements;
 - ▶ description of such practices - the participants and beneficiaries;
 - ▶ justification for qualifying any practice as one of the "best"
 - ▶ lessons learnt from the practices; and,
 - ▶ if and how the practices could be replicated.
- A formal event was organized for awarding prizes by the Ministry of Local Government to individuals, organizations, associations or institutions that had in one way or other performed well in promoting adequate human settlements, habitable urban areas, cleanliness and a hygienic environment; economic, social, cultural and aesthetic aspects of the practices. That there was cause to award prizes suggests that some progress in this regard had been marked within the context of Lesotho. The compilation of what were called the "best practices" had been through technical reporting. Evaluation of the practices at that level was fitting of Mchombu's (1995) argument that a meaningful assessment should be carried out through the operational/development process as well, and not to wait for the final stage of 'outcome' only. The final reporting to the conference was, therefore, based on interaction with all the groups whose experience in that development process had been practical. It should be noted that the methodology of evaluation by HABITAT II is again applied in *Sharing innovative experiences - examples of successful initiatives in science and technology in the South: Volume 1*, jointly published by Special Unit for Technical Cooperation (TCDC) among Developing Countries, UNDP, Third World Academy of Sciences (TWAS) and Third World Network of Scientific Organizations (TWNSO).

3.2.4.12 The United Nations International Women's Conferences

A series at five year intervals of International Women's Conferences in Buenos Aires (1975), Copenhagen (1980), Nairobi (1985), Beijing (1990) and New York (2000) has represented efforts to focus on the development of women. Theories started with women in development, moved on to women and development, then the concept of gender and development all of which will be assessed below. The latest of these fora was explained in a Gennet discussion 2000 as follows:

Why a special session

A special session that was convened from 5-9 June 2000 under the theme "Women 2000: Gender equality, development + peace for the Twenty-First Century (also called Beijing + 5), will focus on what are called "good practices, positive actions, lessons learnt". (Gennet 2000).

The strategy seems similar to that used for Habitat II.

The methodology of assessing development schemes by and under broad themes like policies, actions by participating individuals, organizations, government ministries, aid agencies and replicability of the schemes seems interactive, economic and easy. It will be compared with others.

► There are other areas that have attracted international attention even though not all of them may be listed or be elaborated here despite their relevance to the study. They include various gatherings on local government, trade, population, Human Rights and water, seemingly having a bearing on development in Lesotho. However, in questioning development planners, government officials and aid agencies, it will be necessary to question which major international gathering they regard as having been important in their work and the consequence to development in Lesotho.

During the first week on September 2000, world leaders attended the Millenium Conference in New York to discuss *inter alia* poverty reduction, ignorance and peace. Lesotho was represented at this gathering which focused on issues of concern to the development of the country.

A common denominator with all these topics and fora are their: repetitiveness - implying that what is central is good quality of human life, irrespective of the sector it is viewed from interrelatedness - for they centre on one target, 'development', domination from the North by origins of theorists, international sponsorship and venues of fora; and point of reference (the

ideal or standard) whereby the LDCs or the South are for comparative purposes. The majority are in the same way male dominated regarding theorists, scholars, sponsors and participants of the fora. It is presumed that all generate TRs before, during and after.

From the foregoing, it is evident that most of the dominant theories of 'development' originate from either the UN, from the bourgeois scholars or from the people of the West which, like other societies, has its own distinct orientation culturally, socially, economically and historically. In the Lesotho case study, the analysis further corroborates Leys's (1981:87) argument that

backwardness or non-development in Lesotho is not a result of a pristine traditionalism of the Basotho people but of the political violence waged against them at the crucial period of their economic development.

According to the dependency theory, is clear that due to its geopolitical position as has been elaborated in the context of the study, Lesotho is doubly-suffering under the syndrome. Firstly, it suffers in comparison with its only neighbour, South Africa, which is more powerful in physical and population size, as well as in economic, political and military terms. Secondly, it is the Western countries, including Lesotho's former colonial ruler Britain, which form the centre of 'development' activities according to conventional thought (Rist 1999; Mafeje 1993).

As a process, development entails an intentional cultivation of material and nonmaterial resources which brings about change in an environmentally-friendly manner, and enables those individuals, organizations, communities or nations as consumers, agents, catalysts or all, to realize their potential, move away from cultural, political, economic and social oppression/exploitation, and build self-confidence, lead participatory, long, healthy lives of dignity, fulfillment and nationhood. In the process, people participate in cultivating, producing consuming and benefiting.

It is also a concern that a 'developed' or developing country may at some stage, also slide back to an underdeveloped or less developed condition. That retrogression has occurred in the former USSR, as an example (DSE 2000:7). Unsteady economic growth for Lesotho implies

that the country's development process is thwarted by some negative factors that impede onward movement.

3.2.6 Propositions concerning non-conventional development measurement for Lesotho

For this study's purposes, the level of development in Lesotho dictates that it be measured by both conventional and non-conventional yardsticks. However, as discussed, conventional ones have proved problematic (Morris 1979; Menou 1983; Rist 1999; White 2000). A brief look is therefore taken at some emerging non-conventional yardsticks.

3.2.6.1 Genuine Progress Index as an alternative measure

In discussing the impact of information on development, Menou (1983:23) observed that the ideal measurements were lacking, albeit the efforts of Morris (1979) who suggested a Physical Quality of Life Index, but did not elaborate its modalities. The Nova Scotia Genuine Progress Index (GPI) which is currently under construction, already provides "20 social, economic and environmental variables into a comprehensive and policy-relevant measure of sustainable development" (Colman 2000). While the index might be appropriate within the context of the study, it would not be wise perhaps to for a 'developing' country of the South to hasten adopt in toto such an index. To avoid the blind adoption of foreign strategies a modified adaptation is suggested for various situations including Lesotho.

3.2.6.2 Attributes of GPI for measuring development in Lesotho

GPI is designed to keep a balance between growth and basic needs (food, shelter, clothes, information, education, job, rest) in a manner that equitably benefits the people of all ages and both genders. Consequently, it attempts to narrow the gap between the poor and the rich. As the latter see the benefits of reducing unnecessary consumption as leading the genuine quality of life, they are consequently willing to adopt the index. High consumption that accelerates growth together with GNP/GDP that are expected to grow indefinitely are viewed as harmful to a healthy life, and as a minus by GPI (Colman 2000).

Nyerere (1999:16) describes 'good governance' for the real development of Africa as that which is free of corrupt governments or corrupt political leaders. He emphasizes the importance of "politically conscious civil society, which is active, organized and alert". He

thus observes that “dictators generally prefer an ignorant and passive or malleable population”. In this respect, information, education and knowledge-imparting services and systems contribute to progress. For its value in development, therefore, the performance of information in stimulating progress may be assessed by GPI. Braidotti, Charkiewicz, Hausler and Wieringa (1994:23) opine that the current conventional thinking of development has entrenched its discourse through three major strategies:

- ▶ of being interdisciplinary and therefore creating “experts” in various sectors. This study will survey those who are regarded as ‘experts’ in gender and agriculture as distinct sectors in development . It will also seek to validate responses from others like end-users; in that way comparing responses from primary and secondary users of any agricultural or gender related information.
- ▶ professionalizing “development” such that the less developed countries may claim no professionalism in the field. We hardly ever hear about development agencies from the South (Charlton 1984:199-211). The study attempts to dispel misguided notions such as any activist in the field can be an agent of progress.
- ▶ institutionalizing “development” into tight national, regional and global systems. Such structures become impenetrable by weak states or systems. The phenomenon apparently results in developing countries having to look up to the so-called professionals to set the development agenda and the pace. The practice maintains the status quo whereby knowledge is continuously being constructed by the powerful, and being fed or consumed by mainly the LDCs, the South. The section on globalization and global knowledge has discussed this issue.

By non-conventional measures that are being advocated by the study, we can determine at any time what the commissioners/producers of TRs, authors, intermediaries and end-users attempt to achieve by using the channel, and what the effects are in terms of a selection that will be made from a list of non-conventional indicators that will given below.

According to the mentioned conventional standards, Lesotho is categorized as one of the least developed countries - LDCs (World Bank 1998/9). Compared to two countries with which Lesotho was once on par, or in some cases ahead of as shown in Chapter 2, the country has now been surpassed by Botswana and Swaziland in several sectors of development. Concerted efforts are therefore required from all fronts to accelerate the pace of the development process

for the people in Lesotho. Maane and van der Lugt (1974:48) in *Lesotho: a development challenge* embraced the conclusion of a feasibility study for the then envisaged highland water scheme. They concluded that “Lesotho would not deprive itself of its own domestic water resource needed if it were to divert water to South Africa in the quantities foreseen”. Since the scheme became operational in 1999, it might be too early in 2000 to question if and when the requirement for domestic provision will be met. However the African Development Bank (1998) reported on a situation which seems ironic, that Lesotho could devote its energies to develop availability of one of the basic needs - water, but not for use by Basotho. The populations that had access to safe water in the BLS countries in 1990 and 1995 stood as follows:

Table 3.3 Population in thousands, of people who had access to safer water

	<u>1990</u>	<u>1995</u>
Botswana	90	70
Lesotho	45	57
Swaziland	...	60

Source: *ADB Annual Report 1998* (1998:222)

It is to be noted that access to safe water, while it had increased by 1995 for the Basotho people, it was less than in Botswana and Swaziland.

3.2.7 Discussing peculiar factors affecting development in Lesotho

It is assumed that it is knowledge that enables members of communities, academics and the civil service, individually or jointly, to take appropriate decisions and actions in their daily lives and work. On the contrary, it is ignorance that denies them certainty on what is accurate and rational, this ignorance derailing decisions and actions. Merrett (1994), commenting on the plight of people who are denied information that leads to knowledge, concluded that governments find it easy to govern people who know less. In that way, the ignorant can hardly challenge what they are not certain about. Ignorance thus leads astray the governed as well as the governing.

3.2.7.1 Discussing knowledge versus ignorance as a factor affecting development in Lesotho

Evidence exists that prior to indirect British rule in the late nineteenth century, Basotho were not only self-sufficient in crops, but their land was also capable of yielding abundantly for exports of foodstuffs to South Africa (*Basutoland Annual Colonial Report 1898/1899*). In the 1980s, the country had instead been “reduced to a state of precarious self-reliance or already dependence on imported food and the remittance of wages by migrant labourers (Leys 1981:89). Ill-prepared women who were also busy with household chores had been left in the country to manage the agricultural sector as the majority of young men were employed in the mining sector in South Africa. If the nation had moved away from self-reliance to dependence as Leys (1981) argues, that **process** and **state** they were in, according to Nyerere and Rist, could not be defined as “development”. Had Basotho been aware that benefiting from the British political protection led to a loss of cultural, social and economic independence, presumably they would have opted for alternative arrangements. Ignorance or lack of information and knowledge is the point for discussion here. Mafeje (1993:28) argues that it took most of the ‘underdeveloped’ countries a long time to realize this trap of political domination that historically explains the dependency theory and its implications in development. All the groups of producers, authors, intermediaries and end-users will be surveyed in relation to knowledge they acquire/acquired from information channeled by TRs.

3.2.7.2 Understanding aid, dependence as factors affecting development in Lesotho

Mafeje (1993:28) posits again as shown above that knowledge and independence for development are complementary. Aid, dependence and development are crucial to the study in that, not only aid agencies are prolific producers of TRs, they are also catalysts (Saracevic 1980) in development through projects that they fund and should follow-up. They are also the users or consumers of information emanating therefrom. The correlation should thus be found if the more agencies in a country meant more development, or its faster its pace. Charlton (1984:199) sarcastically argues that foreign aid is a reflection of the interest of a donating agency or country.

As countries become popular targets for assistance, the number of groups giving aid may reach almost humorous proportions - as in the case of tiny Lesotho in the late 1970s, when close to two dozen different donor groups from North America and Western Europe, the Middle East, South Asia,

and East Asia sponsored projects there

It therefore becomes a challenge to establish if at the time when there were more aid agencies in Lesotho development was accelerated, more technical reports generated and what the effects were. Between the time that Charlton referred to which was the 1970s, and the year 2000, aid agencies reduced in Lesotho. But Kabeer (1994:7) argues that aid does not necessarily go where it is needed most, but where an aid agency has interests.

In a conversation held between the researcher and Prasad (2000) the latter indicated that aid to Lesotho reduced drastically since 1993 when most of aid agencies moved to South Africa. This was indicated (Chapter 1) with USAID closing down and bequeathing its collection on Women to ISAS. It may be concluded that aid agencies in Lesotho depend on the political climate of South Africa. If the latter is unfavourable, Lesotho becomes like a backyard from where to guard the nearby interests, and then to become a stepping stone when moving to the neighbouring country. This does not necessarily apply to all the countries but to the particular situation of Lesotho.

Prasad (2000) further argues, differently from Kabeer (1994), that some countries remain constantly popular with donors regardless of their own or surrounding political climate. She observed that Tanzania, for example, has remained popular with donor agencies even when its political orientation altered. It is within the interest of the study therefore to verify if the agencies' own interests to provide foreign aid coincide with the recipients' interests to progress. That some agencies bypass undemocratic governments and fund NGOs may be a way of 'including' the grassroots communities and the poor. It may be a way of empowering the powerless, and bringing them into the centre of decision-making activities and direct benefits as Lund (1998) submits. On the contrary, Osner (2000:178) warns that such dependence is unhealthy and a structural obstacle to anti-poverty programs. The 'developing' countries including Lesotho are warned against that kind of dependency (Cowen and Shenton 1996; Braidotti, Charkiewicz, Hausler and Wieringa 1994:107; Rist 1998). Aid comes various forms (Charlton 1984:199), though the effect may not differ. It can be loans (including soft ones), grants, purchase credits, goods and services. In the library field Hancock (1996:24) seems oblivious of popular opinion against aid and dependence. She argues that aid in the form of donated books was helpful to schools. Smith (1981:7), recognizing the problematic

acquisition of TRs and their role in development, stressed the importance of interdependence of agencies that produce. The point applies to both producers in the North and South, and it would enhance availability of synergistic information in any situation. A decline of aid to Lesotho may be seen as more of a positive than a negative factor since it will reduce dependence and sometimes one-sided information that comes with donation through feasibility study, progress and final reports.

One specific aspect of an undesirable dependence of Lesotho is on imported vegetables and medicines. In this regard, Prasad (1998 b) laments and cautions about the endangered indigenous knowledge of many Basotho women. Their knowledge of the local flora and fauna made them self-reliant on nutritional and medicinal plants. A changing environment and/or forced relocation affect their survival strategies negatively. Basotho are not likely to be immediately “aware” of this unfortunate loss of self-reliance.

After describing the world’s large development projects, for instance, dams which have had negative impacts on indigenous people, Wang (1999) carries Prasad’s (1998 b) argument further by suggesting that information workers should participate in the efforts that empower peoples or communities in devising alternatives to destructive paradigms of development. This is the ideal model of development for Lesotho where, for instance, Butler (1997), Coetzee, Graff, Hendricks and Woods (2000) list not only the positive, but the negative impact of the Lesotho Highlands Water Development (Katse) Dam on the environment. The vulnerable position of Lesotho surrounded by another country, dictates that Lesotho’s intended processes towards development should be sustained, strategically balancing the national, cultural survival with regional interests. That is why it is fitting to survey NGOs and donors on what they deem to be benefits from selected projects they participate(d) in.

Within the Lesotho context of the study, detailed statistics have also been provided to demonstrate that the Lesotho development process, by both conventional and non-conventional indicators has at times oscillated from scoring high (McCarthy 1994:44; World Bank 1998/99) to scoring low (Central Bank 2000:4). In certain cases the causes are comprehensively documented, for instance, in the field of agriculture, whilst natural disasters such as drought

contribute to low productivity (World Bank 1998/99:36), in general, ignorance, unawareness and various circumstances are the main contributory factors.

Many scholars argue that a major cause of the absence of development is lack of information, or knowledge about where the process is headed. Without information, it is not known if what is unknown is to the advantage or disadvantage of the agent of the 'development' process (Menou 1983; Sturges and Neill 1990). 'Development is knowledge-based' (Nyerere 1974; Boon 1992; Menou 1993), and knowledge is acquired from factual data and information. Knowledge is "processed through insight into understanding" (Hill 1999:24), or that which exists in our minds (Thorngate 1995).

Menou (1993:23) further suggests non-conventional indicators for development such as confidence and happiness. These seemingly shall be prevalent among the knowledgeable, the empowered, and those who become economic, social and cultural achievers at personal or community levels, or in a given sector. For aid agencies, too, may not continue to afford to fund projects for which benefits are not ensured (Gay 1982; Stone 1983; Jahan 1995).

3.2.8 Discussing Agriculture as a sector in the development of Lesotho

The conceptualization of development in relation to agriculture requires evidence from the literature that there is a distinct user group that provides as well as utilizes agricultural related information and to what effect. Agricultural related information and knowledge is an imperative as it is a distinct development sector in Africa, Lesotho included. The sector has potential for improving welfare in Africa as it is providing basic needs and livelihoods to majority. It is the "chief source of income, providing direct employment opportunities", in countries like Lesotho "where the sector is relatively large as engaging over 80% of the population" (ADB 1998:31), which mainly encompasses women (Population Census 1999:47) who rely on this sector for their livelihood (World Bank 1998:99). Despite its importance, the labour force in the agricultural field is declining. It is possibly being lost to the industrial sector and to urbanizing that, amongst other things utilizes agricultural land. Land for agriculture is also being depleted at the rate shown in Chapter 1, thus leaving few attending to the shrinking resource. Comparative relevant statistics are tabulated in Table 3.4.

Table 3.4 Agricultural labour force in thousands in the BLS countries

	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1996</u>
Botswana	70	61	52	42
Lesotho	86	84	82	81
Swaziland	74	71	67	64

Source: *African Development Report 1999*

Compared with the rate of industrialization, Lesotho is fairing better than the other two BLS countries. That is, Botswana and Swaziland are losing their agricultural labour force in industrialization at a rate faster than Lesotho.

3.2.8.1 Agricultural information and the agricultural development community

Agricultural development is, however, a diverse field comprising practitioners such as farmers who also are in categories of subsistence, mixed and commercial, and who are served by extension workers (Aina, Kaniki and Ojiambo 1995). There are governments, planners and donors. There are academic training personnel and researchers as well as information specialists. The focus of the study is on how technical reports channeled information contributes to progress for these individuals and groups.

3.2.8.1.1 Farmers as agents in development and users of agricultural information

Starting with the fundamental aim of engaging in agriculture to produce food to feed the nation, the farmers are responsible for one of the fundamental basic needs and are thus indispensable in development. The performance regarding agricultural productivity and needs of those who are on the forefront, the farmers, are of relevance. However, a conflict of interests arises between production and development as Rist (1999) showed. Subsistence farming may be sufficient for each household if each has access to land. But not all have access to land. Therefore, there are commercial farmers who can increase yields for the consumption of others; and here the problem of high productivity which is not in harmony with nature is evident (Braidotti, Charkiewicz, Hausler, and Wieringa 1994:110-1). Wiggins (2000) in the discussion *Interpreting changes from the 1970s to the 1990s in African agriculture through village studies* writes that African farming is typically small-scale and in the hands of peasant farmers (2000:631) whose information needs are not directly connected to research institutes except by extension services or public libraries. Wiggins (2000:632)

affirms that albeit its importance for rural livelihoods and national development, “African agriculture has failed to fulfil expectations. The growth of agricultural output has failed to match plans, hopes and population growth”. The picture is bleak also from the ISAS side where many agricultural research systems have performed unimpressively (Institute of Development Studies 2000). Reasons for this poor performance are explored in the next section.

Setai (1984:2) indicated in the case of Lesotho that poverty in the rural areas was caused by communities being geographically marginalized, excluded or remote from various facilities. Such constraints comprised lack of, or inadequate access to, land, water and markets. His survey of the rural foothills of the Leribe district, for instance, revealed that farmers

needed advices in agriculture primarily and would particularly like to talk to soil specialists. That was why they were pleased that Co-op Lesotho had opened up a depot nearby at Liqhobong.

One view is that agriculture is failing due to lack of knowledge on the part of several groups on how to go about their business, lack of, or inadequate, dissemination of information, or inappropriate channels of dissemination. This position is supported firstly by Aina (1995:5) who argues that though in Africa, information continues to be generated for development, the problem lying with repackaging and dissemination to ensure that agricultural information is in usable form. Advice which farmers need from ‘experts’ or researchers need not come in TRs format as such, but perhaps be a conversational synthesis of findings that they may utilize with ease (Stilwell 2001). Possibly, even at the extension level, an enquiry or help desk type of information facility would serve. Secondly, ADB (1998:172) affirms that knowledge can help reverse trends in poverty and exclusion, and build stronger societies by facilitating dialogue within and between communities. Farmers in rural remote villages of South Africa use cellular telephones to keep abreast with information pertaining to agricultural markets. Another example is school-to-school initiatives on computer and the Internet that are popular with “local communities and are being used” to network, share, replicate best practices and increase skills” (ADB 1998:172). For comparative purposes it is worthwhile to imagine diverse ways of information provision. Information needs like cellular telephones that rural farmers would have possibly not been an obvious channel to library-oriented- information providers. ISAS was not established to serve farmers directly. Nor were TRs services per se.

According to Havelock 's (1979) and Saracevic's (1981:74) innovation diffusion models innovations from research should trickle down to the 'end users'. So should be findings or recommendations from other development related projects from the scholarly research findings to agricultural research stations through repackaged, synthesized, summarized and translated information that filters down to the NGOs, unions, chambers or associations of farmers, planners, extension workers and practitioners at the grass-roots. A concern is, nevertheless, that most of the research in Lesotho has been project-oriented, depending on external funding (ISNAR 1989) whose sustainability and flexibility may not always be guaranteed, at least in the case of Lesotho.

3.2.8.1.2 Government officials as agents of development and information users

As debated in the first chapter, the report literature is produced in large quantities by academics, industries and government departments (Holloway 1967; Calhoun 1991). It is observed that even in Africa, government publications outnumber those of any publisher in a country (Nweke 1994). The contribution of this category of producer/user of agricultural information has been debated under 'use'. Evidence exists, for instance, in the production of the *Lesotho agricultural situation report 1989/90 - 1996/97* of the development position of officials. Unlike the previous issues of the report which were titled *Lesotho agricultural situation analysis report*, the current issue has left out 'analysis'. There are only two first pages attributed to "Highlights" which start with just a sentence, "The total agricultural contribution to Gross Domestic Product in 1997 was M689.3 ". Although, as seen, the GDP is not necessarily a good source of information about the performance of the people, agricultural economists in Lesotho still strongly adhere to these conventional measures. Information in the report is not supported by executive summaries, details about the methodologies employed to collect data, and target users of the information. This is despite the fact that the report is a product of two specialist offices, being the Economic and Marketing Department, and the Bureau of Statistics. Their rigid focus on abstracts or bare figures typifies the concern of Kabeer (1994:76). She viewed development as a normative concept that is almost synonymous with improvement, and that would hardly ever fit such rigid measurement tools like GNPs that rely on neutral market forces. The shortcomings of the *Lesotho agricultural situation report 1989/90 -1996/97* may also imply that the officials are not always empowered to use this technical information, and using it within the process or at the position of development. The

report thus provides un-contextualized and unexplained statistics throughout its next 57 pages. The performance of various crops is tabulated statistically under the sub-topics of name of a commodity, area planted and harvested, crop production and crop yield, followed by the performance of livestock type, size, changes and reproduction rates. In the case of crop failure, for instance, reasons are not given. That the report is no longer issued annually but now covers a period from 1989 to 1997 is a practical example of the long time it takes to issue government publications in Africa. Coupled with the seemingly relaxed attitude of the producers towards technical information. However, the study focus will in such a case assess input in terms of personnel, costs and time. It will survey who are other actual users, the potential ones and to what outcome is the report.

3.2.8.1.3 Academics (researchers, teachers, intermediaries, administrators, consultants) as agents and users of agricultural information

This is a group that Saracevic (1980:214) refers to as constituting the 'proper users' of TRs. In preparation for the UNCST discussed in 3.2.4.4, Saracevic(1980) conducted a survey on behalf of the organizers of the conference to determine who uses scientific and technical information. His conclusions were therefore based on findings that the group extensively exploits as well as generates scientific and technical information. But his survey did not encompass any of the Southern African countries. Hence only inferences can be made that since more use of TRs will be made by this group, a sharper focus of the assessment should be on them. Methodologies pertaining to agriculture are not readily available for this study. The discussion on *Agricultural information in Africa* (Aina, Kaniki and Ojiambo 1995) comprises fourteen works that, in a general sense, relate to the conceptual framework of this study. Namponya (1995:41), for example, argues that research is an important sector in agriculture and that information arising therefrom has a role in development. Alemna (1995:91) supports the view that research libraries (such as ISAS documentation centre) are established to cater for specialized needs. Ojiambo's (1995:111) model of provision from research does not directly connect research with libraries nor farmers but to extension services. The literature is thus scant specifically about TRs in agriculture and in Lesotho.

The selective dissemination of information (SDI) service called Programme for Agricultural Information Service (PRAIS) and sponsored by the Centre for Technical Cooperation and

information in the University of Orange Free State (UOFS) in South Africa reports that for 1990, out of only three requests that were received from Lesotho, none came from the university (van Tonder 2000). It may be questioned if this view disputes Saracevic's (1980) contention that the academics are among the "proper" and main users of scientific and technical information. This is questionable in the case of Lesotho. Could this imply that the institutional base at NUL, ISAS or the Faculty of Agriculture for instance, is sufficiently developed to meet the technical information needs of its established agricultural clientele in Lesotho? That is unlikely, and an avenue for exploration in the study. A report that is still in the form of a restricted draft (Majoro and Hoohlo 2000) evaluates the cost effectiveness of NUL and gives rather a negative picture of the university's cost-effectiveness as a whole. Another study *Pathway out of poverty* (Senaoana 1996) contained the recommendation that costs be reduced for the University in favour of the primary/secondary schools. That implied that the institution was not cost-effective, nor assisted in eradicating/reducing poverty in Lesotho. This is a reminder as well that whilst the poverty study emphasized developing the people, government infrastructure upon which most national systems depend should be developed too. Annual reports of the ISAS, however, comment positively on most areas of its operations. The case study of ISAS will enquire into its effectiveness with particular reference to its handling of technical reports.

3.2.9 Conceptualizing gender as an ingredient for development in Lesotho

In determining performance of technical information channeling in development, gender as another topical sector of development has been selected. It is not only its topicality that was a criterion for a choice. It is one of the areas that appears to undergo some metamorphosis, thus illustrating how development approaches seemingly keep on changing. Technical reports in Lesotho are also assessed from this angle.

With reference to this second sector on which the study focused, that of gender, Mapetla (2000) wrote about the academic women's achievements for the reporting period as having been impressive in terms of research, publications and other areas. Academic libraries are established to assist staff and students to attaining institutionally their goals in research, teaching and community services as mentioned in Chapter One. Such achievements can be indicators of the service's effectiveness as stated in 3.5.2 (Cotta-Schonberg and Line 1994:56).

Research may bring about innovations that affect the lives and task of farmers or policy-makers. Teaching may produce students who put into practice theory, for example, Economics that are relevant to Lesotho and its development. These are positive conditions for development that the study will work at, with specific attention to the achievements of lecturers, researchers, administrators and intermediaries.

The methodology that was used for HABITAT II, which is the same as the procedure that was mentioned at the UN Special Session for Women 2000, and by the School-to-School Initiative in Uganda above, will be adapted for this study. Its emphasis will be on which of the schemes that staff participated in could be viewed as success stories, good practices as development projects exhibiting peculiar innovative features, and lessons that can be learnt from them. Resources that were input including personnel and information their beneficiaries and their replicability will also be identified.

3.2.9.1 Understanding the evolution of gender from the notion of women in development

Theory around the gender concept evolved as a sequel to theories of women in development (WID) that arose in the early 1970s as part of the realization that women were discriminated against worldwide and that they suffered inequality and oppression socio-economically, culturally, politically and physiologically (Kabeer 1994; Braidotti, Charkiewicz, Hausler and Wieringa 1994; Jahan 1995). Theory around gender addresses the need for a basic social system for organizing the society based on the division between men and women (Larsson, Mapetla and Schlyter 1998:2) through gender attributes that differ with cultures and may change with time (Commission on Gender Equality 1999:3). The practice of discriminating against women was therefore viewed as a constraint to development in the way the constructed divisions marginalized women from both full participation in the development processes and the positions of power.

The WID concept (Kabeer 1994; Braidotti, Charkiewicz, Hausler and Wieringa 1994; Jahan 1995) was not only adopted worldwide by governments, aid agencies, local and international women's organizations. It also devised an integrationist approach to solving women's dilemmas. In the USA, for example, the government's policy to integrate women into the

national economies was formulated through the Foreign Assistance Act (Section 113). To that effect, an office was established for women's needs and to aid and have an impact on the development of the aid-receiving countries (Charlton 1984:202). An example of the response to the Act was the study on *Women in Lesotho* in which Gay (1982:1) submits that the study was in response to the same Act that also served as the directive to the USAID office in Lesotho.

3.2.9.2 On putting gender on the development agenda for Lesotho

The Lesotho government instituted the Directorate of Women and Youth Affairs in 1981, soon after the Women's Conference in Copenhagen (Gay 1982). The Directorate represented an effort to 'integrate' women's interest in all the disciplines, by removing legal and cultural barriers that made women invisible in development activities and public offices. Such aspirations were enshrined in the UN's Convention against all Forms of Discrimination against Women (CEDAW). The efforts that ensued did not have a satisfactory impact. It was soon realized that the approach of integrating the so-called women's needs and women's issues into the already existing structures was slow as token numbers of women were appointed to less influential or newly constituted ministries. There so-called 'soft-ministries' (Sen 2000) like social services, rural development, health, youth, the disabled were seen to be also allocated to women. Section 5.1.2.3 will show that in Lesotho these gaps are closing.

This 'add on' approach failed to change the structures and systems which were the source of the problem. The structures have been constructed from a male perspective which favoured, practised and sustained men (Kabeer 1994; Braidotti, Charkiewicz, Hausler and Wieringa 1994; Jahan 1995; DSE 2000; Sen 2000). Kiondo (1999:94-5) observed that in Tanzania, the 'add-on' approach was not adopted by Tanzania Gender Networking Programme (TNGP) for the same reason that they were doomed to fail. The problem was thus seen as that of gender, to be solved by 'gender mainstreaming'. As a concept, gender mainstreaming was described by Jahan (1995:13) as reflecting aspirations of women to be at the centre-stage, as part of the mainstream where everything that matters is planned, decided, implemented and bears impact. In the integrated process women only join men in the already existing male-compatible system (Jahan 1995), hence token women tend to 'drown down the stream.' Some countries and institutions were quick to find alternative approaches of quotas as a way of affirming that more

women would alter the course of things. In a way, bringing in more women was helpful apparently for visibility and psychologically giving them confidence to challenge the appropriate areas.

The problem, however, is more complicated, and requires more than having men in influential positions substituted by women. Larsson, Mapetla and Schlyter (1998) pointed out that what is also needed to solve the problem is a change of the system as the book *Changing gender relations in southern Africa - issues of urban life* explains. Notably in Lesotho, since the majority of men have been working in the South African mines, women were left at home, facing the challenges of changes. For that reason, most women were found to be more responsive to development than their male counterparts (Women and Law in Southern Africa 1997:29).

Kanu (2000:1-9) gives practical '*human stories of the rural poor in India and Nepal*' and gender mainstreaming efforts within the IFAD's sponsored projects in Nepal. Eight factors were identified as important in bringing about the success of the development projects. These were listed as

- ▶ full participation of 'women as agents of change - agents with a voice that is more caring, more humane and less aggressive'.
- ▶ Breaking the women's silence, implying that they too should impart and construct information and knowledge as already intimated.
- ▶ Ensuring ownership of resources.
- ▶ Assuming leadership roles.
- ▶ Networking into groups for solidarity and
- ▶ Self-sufficiency.
- ▶ Gender-sensitization) and
- ▶ Confidence-building that makes them bold to take initiatives, face challenges and be content. These are the processes that, according to Kanu (2000), are practically moving women toward development.

The Directorate of Women's Affairs in Lesotho was dissolved in 1993 and its responsibilities were re-allocated to other appropriate ministries. The former directorate resurfaced with a new

name in 1999 as the above mentioned Ministry Environment, Gender and Youth is headed by minister who is the female in a cabinet of 18 officials. She took over from a deceased female cabinet minister who in turn was the only woman minister during her term. Incorporating gender information and awareness is seen as progress. Problems pertaining to mainstreaming women were initially attended to in isolation from those of girls, as if the latter start experiencing discrimination only when they grow up. Under the umbrella of gender, problems of disadvantaged boys as herders in Lesotho are also addressed. Uneducated, socially-deprived boys are likely to become social problems for their women, and will not serve as role models for families and society. This new strategy of incorporating, for instance, a 'girl child' in gender issues has also seen the Organization of African Unity drafting the CEDAW-like convention that condemns all forms of Harmful Practices Affecting the Fundamental Rights of Women and Girls (GAIN 2000). Within the limits of this study, this issue was only noted but not assessed. The study assessed the impact of TRs information on issues of gender in Lesotho.

Several strategies have been suggested globally, regionally and at national level to assess the performance of aid agencies in women's projects. Jahan (1995) outlines a framework that comprises Measures of Progress as:

- A. Mainstreaming : Resources and discourse
- B. Gender Equality: Law and norms and human development
- C. Empowerment : Women's movements, public action and decision-making

These measures are discussed in the next section. Since these topics interrelate, at least one from the three sections will be used in the framework as an area of assessment in terms of TRs and ISAS performance.

3.2.9.3 Conceptualizing the gender discourse as a human development issue

Participation in the debate on gender as seen from international conferences is part of engaging in the development process. Not only agencies were surveyed to determine how they performed, and to what effect. As seen with Wichterich's (2000) discussion, aid agencies get involved by sponsoring meetings, by communicating and channeling information to the interacting constituencies by reports. TRs pertaining to Lesotho and ISAS will be assessed in terms of their effectiveness/ineffectiveness in these areas.

A related strategy, Larsson, Mapetla and Schlyter (1998) propose ways of succeeding with gender equality and empowerment in the context Southern Africa. 'Gender contracts' is firstly suggested. Second is an approach of engaging in the discourse by 'negotiations' among men and women. They write, "negotiations are continuously ongoing, at all levels in society such as in parliaments, at work places, in the homes and bedrooms" (1998:2). If this approach is found to be one way of facilitating gender development, means and ways of linking it to technical report information for development could be found so that the two approaches complement each other.

Despite the fact that women dominate in the mentioned government ministries that attend to social services of the developing countries as in Lesotho, these women are unable to eradicate socio-economic poverty which is clearly feminized world-wide (Braidotti, Charkiewicz, Hausler and Wieringa 1994; Kabeer 1994; Lund 1998). One root cause is that at the end of the process, it is not women who control and dispense national resources through Central Banks, Treasury, Ministries of Finance as these sectors are male dominated, impenetrable core ministries. For dependent countries like Lesotho, donors and political allies are influenced through Ministries of Foreign Affairs and Defense which according to Sen (2000) also remain a purview of men. Nyerere's (1999:15) observation that was later confirmed by van de Sand of IFAD (1998), that 'donors bypass corrupt governments and deal with NGOs' does not arise where governments make certain that their diplomacy paints them as politically clean and democratic. This area is important in the assessment of Lesotho development. It is important, not only because the country is comparatively far less developed than its counterparts, but also due to the Lesotho's recurring political crises, which negatively affect the economy (CBL 2000), while peace and stability are the ingredients for development (Colman 2000). It is also important in determining if information channeled by TRs can inform adequately and widely about corrupt or clean governments. What is also required is not only a greater presence of women at the centre-stage where they can challenge the actual structures. It is forging 'social contracts' that would convince those who are currently unable to bring about progress that they surrender to other strategies like gender mainstreaming.

3.2.10 Conceptualizing globalization as an aspect of development

Globalization has added another dimension to the process of development. To some observers, the process has worsened the situation of the non-industrialized countries among which Lesotho is included.

3.2.11 The origins of globalization

Globalization, according to Gordimer (1998:32), originates from the Japanese process noun 'glocalization'. Gordimer (1998:16) observes that 'globalization' in its present sense was coined from the Japanese 'dochaku' which means "living on one's own land" - adapting to its local conditions, but exploiting the world market. Impressed by the booming Japanese business from the late 1980s to the early 1990s, Western investors observed that the Japanese companies were based and exploiting the 'local' conditions but making profits from the 'global' markets. Thereby a theory of 'globalization' was born that embraced the practices of open markets and transnational corporations (TNCs).

Mowlana (1998:22-39) argues that whilst such an international trade is perceived to benefit all the countries, and with the hope that the benefits should "trickle down" to individuals, regrettably, governments are losing power, influence and authority over the TNCs, which ironically do not have any duty to fight against poverty, nor to empower the people with development information and knowledge. The literature in this case shows that in Lesotho, in the spirit of globalization and competitiveness, national companies are being privatized to give way to the direct foreign investments (dfi), which have seen thousands losing their jobs *Commission of Global Governance* (1995). Mowlana (1998) concludes that globalization makes development of a human being redundant in that it is

a process whereby state-centric agencies and terms of reference are dissolved in favour of a structure of relation between different actor operating in a context which is truly global rather than merely international.

As the definition suggests, each state willingly 'compromises' its sovereignty, in favour of some benefits. As it was intimated with Mazrui's (1998) argument in Chapter 1, for example, that globalization is like a new face of imperialism. The countries of the South, especially African compared to Asian ones, have lost more than gained from the process. The continent

has lost most of its rich culture and yet has not reaped the gains of industrialization. Performance assessment of technical reports as a channel of information for development is based on the assumption that TRs are performing a service within the context of a 'globalized' information system, which is also an integral part of the 'globalized' development process. Like development, globalization is interdisciplinary. From the definition again, it is assumed that the actors may act not just at the geographically and temporally limited local space which they occupy, but rather on the widest plane that is 'freely' available at that 'truly global' sphere. 'Freely' available is put in quotes because, in order to act at that level, apparently one needs appropriate tools. If one has not the facilities, one is hampered, and not free after all. In the *Electronic African bookworm - web navigator*, Zell (2000) lists over 1500 of what he terms "best sites on Africa". These are the type of tools that are enabling the actors to search, find information, communicate and enter debates within Africa and 'globally'. The email that was quoted above as an example and contained therein is 'gain@lists.sn.apc.org' by which the Gender and Africa Information Network of women communicate. If this is only a portion of the websites in Africa, chosen by Zell as "the best", it is unimaginable how abundant they are outside Africa and how much debate is on-going electronically. Would this imply that the 'other channels of communication' are declining? It is questionable. TRs can also function in the electronic formats. There is an increasing attention on information, communication and technology that is likely to affect TRs performance (Flamme 2002).

The problem is how communication is kept alive among those who are not connected to the web-sites that characterize the globalization and development process. Speaking at the workshop on indigenous knowledge and science and technology in Lesotho, Prasad (1998b:1) warned that "a new divide is emerging between those with knowledge and those without". She continues that for development in the future, investments in physical infrastructure will still be important, but even more important will be investment in knowledge." The unconnected will have lost the opportunity to communicate and acquire knowledge. Braidotti, Charkiewicz, Hausler and Weiringa (1994) and Kabeer (1994) argue, the poor are likely to remain trapped in a vicious circle of poverty. This should be a concern for Lesotho, for women who are the victims of poverty, and all other groups that are excluded from the centre-stage of development. A challenge for information specialists is seemingly well thought out in this regard in that they 'act' by contributing to the construction of knowledge that is 'globalized'

on the Internet (Chisenga 1999). The understanding is that they contribute information that is endogenously produced. Here TRs should be important as a channel.

Unlike colonialism and imperialism which were cohesive, globalization is introduced to the developing countries in such a way that they are made to accept it. The industrially and politically powerful states convince them that there is a common good derived from the practice. Attendance at a majority of international conferences described above provides fora at which consensus should be reached for global strategies and their application. Consequently, for humanitarian reasons, globalization allows external forces to intervene in the events of civil unrest. For global cooperation, epidemics like diseases are eradicated while AIDS, for instance, is fought by joint forces (Kabeer 1994:70). In the world trade as well, contrary to Mazrui's (1998) observation that globalization carried with it some loss for the South, a Commission on Global Governance emphasizes benefits that accrue instead. They include, for instance, open markets that boosted the striking economic and industrialization performance of the Asian 'tigers'. In politics, a Commission underlines the lessening divide between the North and the South, the end of the Cold War between the East and West. According to the Commission, developing countries are thus made to believe that there are benefits that are reaped from their participating in the globalization and development process. That these countries should disentangle themselves is not as easy as Rist (1999) implies in simply proposing that the developing countries should withdraw. In reality, the powerless developing countries are dragged along, and their option should instead be to find ways of surviving under the circumstances. As Mkandawire and Solundo (1999:83) analyze the situation, from the point of view of the Structural Adjustment Programs and the experience of Africa, aid agencies determine the course and the recipient countries simply follow.

The donors are the principals, who are seeking adjustment and sound economic policy, and the African governments are the agents, who are only interested in the money.

Such interests of African governments force them to participate, and sometimes to negotiate for some favourable conditions, even though much of their authority is eroded. The Commission (1995:11) further writes

Technological advances have made national frontiers more porous. States retain sovereignty, but governments have suffered an erosion in their authority. They are less able, for example, to control the transborder movements of money and information.

3.2.12 Endogenous versus exogenous information within the globalization process

Regarding information, it is to the advantage of Lesotho to down-load exogenous information from cyberspace and, synegetically to add this to its endogenous information which should also be found on the Internet. If it is desirable for governments to control some information across the borders, it is questionable what type of information governments would want to control. Comparing governments with large companies in Britain, William (1993:254) concluded that governments are not major sources of information. Saracevic (1980) did not include governments in his category of 'proper users' of scientific and technical information. If this approach is found to be one way of facilitating gender development, ways and means of linking it to technical report information for development could be found so that the two approaches complement each other. One is not aware of any legal tools in Lesotho that govern a flow of information that could affect TRs. For the current study Lesotho government officials were probed about this issue. In particular, clarification was sought on the management of restricted/confidential or limited access to TR by government officials.

In the interests of both globalization and development, partnerships and common interests and experiences apparently remove the labels of exogenous and endogenous. An example of a research project on *People, rangelands and changing global conditions* (the Lesotho team is looking at the northern-eastern side of the country), which though remote and with a difficult terrain, offers development opportunities because it is close to the Katse dam. The study analyzes the relationship between the rangeland, global changes and how these affect the livelihood of the resident communities. What is crucial is that the Lesotho study is part of the partnership with the University of Botswana, National Botanical Institute of South Africa, Centre of Arid Zone Studies at the University of Wales, the Norwegian Institute of Ecology in Spain with sponsorship mainly from the European Union (EU). It is reported that the overall findings will be presented at a workshop to be held in Maseru in December 2000 (*NUL Newsletter* 7/1:5). In this classical case, seemingly the cluster of 'national' projects will be absorbed into one report and become global knowledge. Experiences are mutually shared for, presumably, all the participants. The study focused on the type of TRs that emanate from this study, and on their relationship to development.

Efforts were made to identify development indicators generally, for agriculture and gender. These were listed according to three categories. Some indicators fall within all the three categories. The example is ‘the environmental protection’ which permeates all the sectors.

3.2.13 The general indicators of the development process and state for Lesotho

In order to arrive at general indicators of the development process, the study referred to a number of sources such as McConnell (1995) *Making a difference - measuring the impact of information on development*. Case studies compiled in this work listed several development indicators that related to developing countries like Lesotho. Other indicators were determined on the basis of the unique circumstances obtaining in Lesotho, and in the mentioned sectors.

3.2.13.1 Indicators of development state in general

- ▶ formulation of agricultural, gender and information policies
- ▶ relevance and implementability of policies
- ▶ provision/availability of information services
- ▶ studies, teaching and learning on gender mainstreaming
- ▶ research on agricultural innovations beneficial to Lesotho farmers
- ▶ seminar on information among researchers, extension workers and intermediaries
- ▶ affordability and access to food per day
- ▶ sustaining information services and all-round dissemination models
- ▶ capacity of information channels (mainly TRs), to contain factual, adequate, relevant, timely information in all the sectors
- ▶ reduction of productivity of TRs that do not channel information for “progress”
- ▶ breed of new researchers/‘experts’ in agriculture that advocate synergistic information and knowledge for the country
- ▶ ability by governments, authorities to value and support information systems

3.2.14 Indicators for the process in the agricultural sector

- ▶ campaigns on environmental protection
- ▶ ability by the agricultural sector to feed the nation
- ▶ studies, campaigns and policy formulation for remuneration for raising children
- ▶ issuing research reports on prospects for, and policy formulation towards, fair distribution of jobs (not necessarily job creation)

3.2.15 Indicators for the state in the agricultural sector

- ▶ ability to reclaim dongas
- ▶ evidence of environmental protection
- ▶ increased labour force from both genders in the agricultural sector
- ▶ growth in national per capita food production
- ▶ satisfaction among agricultural community

3.2.16 Development indicators for gender

- ▶ increased female profiles in leadership roles
- ▶ gender balanced presence in the re-structured soft and hard sectors
- ▶ decline of both migrant miners and common and hazardous diseases
- seminar on information among researchers, extension workers and intermediaries
- ability by intermediaries to manage information pertaining to the development processes

3.3 Conceptualizing TRs as a channel of information

Evidence is advanced by several scholars that technical reports (TRs) channel information that is for development. According to Poole (1985:103) TRs are a source, transmitter, or a channel - “a medium utilised to convey” “certain specific information to a specific reader,” and Auger (1975:6) says TRs do so for some purpose. It is further hypothesised that TRs are a product of human activity whereby they are employed as an object, a container and carrier conveying information which is for the development process and state (Auger 1975; Holloway 1976; Henderson 1981; Klempner 1981; Smith 1981; Balachandran 1991; Calhoun 1991; Pinelli, Khan, Barclay and Kennedy 1993). On the basis of the briefing on development and its operational definition in Chapter 1, it suffices here to state how the process and state of development interrelate with reports. This is albeit the fact that development will later in this chapter be conceptualized in depth and as it relates to Lesotho. In their pursuits for development and quality of life, various parties get involved in the process as agents, catalysts, targets, objects or both. As individuals, groups, societies, organisations, they find it mandatory to interact and get informed about the development failures if any (Gay 1982:1). They are informed about progress marked, how to avoid failures and to advance, in which areas, why and how. The requirement dictates that these groups communicate for purposes of getting knowledgeable about modalities, and/or about priorities for achieving the desirable state. TRs are regarded as one of the channels conveying communication messages that link these groups (Hartas 1967:79), and as the source containing the required information. The role played by this channel is being traced throughout different stages of performance, namely, at the

inception, at production and at the final channelling. A framework is laid for assessing the level of effectiveness/ineffectiveness and outcome of performance and with respect to the TRs nature and their noteworthy features.

3.3.1 Conceptualizing TRs at the inception/production stage

An attempt is therefore made to comprehend the nature of TRs and what determines their nature. Starting from the inception stage, reasons for ‘technically reporting’ arise mainly from the producers’ need to inform or be informed fully about a problem/situation; to communicate with the relevant parties about it so as to devise strategies towards a solution. For an identified problem, facts and data are necessary that verify and analyze the situation in the first place, and direct new, further, or appropriate action in the second. It is in that process that TRs are prepared, brought by the experienced person(s) to the other who needs, wants, or is entitled to it. This understanding follows from the analyses given below by Auger (1975), Holloway (1976), and Smith (1981) on the origins, the nature and the cause behind the production of TRs. As an elaborate summary of the above, Conradie, Konig, Koti, Pillay and Valkhoff (1999) provide seven reasons for the production of reports, namely, to give information, to guide decisions, to monitor, control and evaluate operations like development projects, help implement policy and procedures, comply with rules and regulations, record facts or work performed, analyze problems and suggest solutions.

Technical Reports constitute a composite term starting with an adjective “Technical” which means ‘of, or in a particular art, science or profession’. According to Ching Chen Cheh, in Balachandran (1991), as an adjective it can qualify a number of objects, namely a technical paper, document, information, publication or technical staff. The term “technical” as in technical reports implies pertaining to, requiring or relating to special knowledge which is associated more with natural or pure sciences and technology (Halm 1978:7; Sengupta 1978:1) than any other ‘special knowledge’. But in refuting that preconceived notion that ‘technical’ relates to ‘pure sciences’ only, Davies and Gwilliam (1976:135) confirm that technical reports, technical and scientific information can exist in any subject. They state that “we note, but differ from the opinion of some critics that educational reports can never be truly scientific.” Then they enumerate cases in which technical reports feature in the world in the field of education, for example, in the specialised database called Educational Resource and

Information Centre (ERIC). A general question may still stand as to which disciplines have what quantities of technical reports, even if “scientific” and technical information permeates all subjects. ISAS which is multi-disciplinary will presumably store a number of technical reports from all its areas of jurisdiction as mentioned in Chapter 2.

The compound term then ends with a ‘Report’, originating from the Italian word *reportare*, meaning to bring back or to account for (Auger 1975:7; Holloway 1976:25). The meaning of report in technical report tallies with a notion derivative of a verb ‘to report’, hence what is being reported, stated, told, recorded, or narrated. It denotes an account of something, implying after an action or event. About the concept ‘to bring back’ Auger (1975:7) further stipulates as follows:

It implies that a person or a corporate body goes out and gets something it is commissioned to get and carry back to the person or corporate body which has given the commission.

In a report the objective is generally more definite and has a more imperative shaping effect than in any other form of exposition.

It is prepared for a designated reader or readers who have called for specific information or advice.

A useful practical example is found in the document, the *Situational and needs analysis survey of herdboys in Lesotho* that was prepared and presented by the NUL academics (see section 2.3). In order to cater for the needs of youth, the newly constituted Ministry of Environment, Gender and Youth, in conjunction with UNICEF Lesotho, identified the position of herders as one of the likely problems/situations to be addressed. The two authorities might have been compelled by the general observations and statements (Willem and van der Lugt 1974:38; Senaoana 1996:12) that herdboys have particular problems impinging on their quality of life. In an attempt to investigate the claims, to be informed about the situation factually and holistically, the Ministry authorised, or commissioned the study while UNICEF sponsored that research that would enable the authorities to solve the impending problems as enumerated and described systematically issue by issue. Basically, a development-related problem required government, as a development agent, not just to be informed fully, but also to be specifically and accordingly advised as Auger (1975:7) stipulates. Subsequently, it is recorded that a team of experts/consultants was commissioned and contracted from NUL. The team spent about six months surveying the herders whose “experiences” were recorded, analysed and organised.

Then the team presented a report (own emphasis), that is, 'reported back' at a workshop in July 2000. In that report, the detailed findings indicated, for instance, that herdboys receive little or no formal education, and suffer from poor nutrition, "they worked for little or no payment, they encounter health problems due to abject family poverty, harsh conditions of exposure to snow, inclement weather, flooding rivers, lightning and, armed thieves, " (*NUL Information Flash 2000*), to quote only some of their hardships. The facts, data and recommendations emanating from the survey were conveyed to the Ministry as the owner, authority and producer, through a preferred format, system, technique, channel that was i) suitable for information being conveyed, ii) preferred by the commissioning authorities, and that iii) clearly fit the assumption, descriptions and proposals forwarded by Auger (1975), Holloway (1976), Smith (1981) and others. The channelling of the facts was done specifically through a technical report.

The scenario also highlights the nature of technical reports as "purposeful publications concerned with problems and solutions...." (Hartas 1967:80). Presumably, the recorded responses from the herdboys, as well as the reporting, reveal factual data about the situation that could facilitate a solution. The consultants/authors have apparently assembled data on time and with expertise, in a presumably preferred channel for the party to which this information is being communicated. The focus of the ongoing performance assessment study is then to find evidence of whether or not such services of channelling, and the very data that was channelled, actually contributed to improving the life of the herdboys. If the exercise contributed to change toward a better quality of life for herdboys, then it resulted in development. The idea is then to assess in what way it improved their situation and to what level of effectiveness/ineffectiveness.

Lundin (1978:11) makes it clear that in a situation like this one, despite the work being the intellectual product of the NUL team of experts or consultants, they do not own it since it technically belongs to the Ministry as the authority and producer. UNICEF is a sponsor but at the same time a producer. In such a case, experts are nothing more than authors. In some cases, the actual writers of the report might not even be known or acknowledged (Lundin 1978:11). In cases where experts are not reflected in the reports, it will not be possible to survey them. But where two or three parties will be shown to have participated in the production process,

such a group that may inform the Lesotho case study how the channel performs at that stage. It is at this stage that inputs start and may be measured from the point of view of commissioners/sponsors and or experts/authors/consultants. As Dosa (1997:158-73) argues, consultants have a role to play as information intermediaries and they have the potential to influence the course of things. Evidently, the accuracy of data and subsequent advisory information reported to the commissioning parties depend largely on the level of expertise, reliability of experts, authors or consultants. They should, therefore, be surveyed distinctly regarding their performance and views on the production of TRs. In a similar enquiry titled *A Survey of reader preference concerning the format of NASA Langley-authored technical reports* by Pinelli, Barclay and Kennedy (1997:52), the actual authors became the target group of this assessment as they were regarded as report producers too.

The purpose and the processes through the inception stage are essential in guiding this framework for *performance assessment of technical reports in Lesotho*, in that producers are an important group to advise how the channel in the given context meets the/their goal, and what goal it was.

In detail, the entire process which gives rise to a technical report is also similar to Calhoun's (1991:163) view that "a technical report is an account of work done on a research project which a scientist compiles to convey information to his/(her) [own insert] employer or sponsor or to other scientists". That characterises a particular audience that also marks the exclusive nature of the material, which Auger (1975) stresses, is for a "designated audience". It explains the reason why after the commissioned and consultancy work has been "brought back" in a form of a technical report, it is almost a *fait' accompli* for several producers. One reason may be that producers no longer bother with a wider distribution of the work. The report will have given them an answer to a question or demands they made. After the presentation, that some technical reports finally enter libraries like a bonus - it is for a secondary function (Hartas 1967:80). The initial function which pertains to the authority who commissioned the work will have been accomplished. One reason as will be shown in the types of TRs depends on whether or not the presented version is final or still a draft. Another reason which will be elaborated on in the special features of TRs may be to ensure confidentiality which covers classified reports

3.3.1.1 Classification of information and materials including technical reports

Literature is scarce on the issue of secret, restricted and limited materials. In the USA, with the NASA reports, for example, *The encyclopedia of history of information science* (1971:174-184) indicates that it is in the interest of all governments to classify materials. This view is also observed by Merrett (1994:43) and the CTA (1998:42). However, in the USA there are clear guidelines as to which reports are top secret, secret, confidential and restricted to the public, and thus “for official’ or exclusive use. “Restricted” is understood to cover circulation which for some time, while being modified or revised of correctness and like conditions, is confined to a certain audience, yet after some time it should be widely circulated. Within the United Nations (UN) system too, there are materials designated ‘limited’ as Humaida (1994:132) indicates, which may, for instance, not be available in all the languages of the UN. Information workers should take an interest in the time frame work of any limited and restricted report.

Regarding lack of a consensus on a definition of technical reports, Holloway (1976) argues that, though it was believed [then] there was no international definition, the British Standard described research or development report as:

A document which formally states the results of, or progress made with, a research and/or development investigation, which where appropriate, draws conclusions and makes recommendations, and which is initially submitted to the person or body for whom the work was done (Holloway 1976:25).

This quotation which describes a “research/development report” resembles that which defined a “technical report” earlier on, thus confirming the broad spectrum within which TRs are conceptualized and as they are also enumerated below.

3.3.2 Understanding the nature of technical reports by physical aspects

Most of the reviewed literature paints a confused picture regarding the understanding of types, characteristics, features, elements, formats, and categories as concepts by which to further comprehend technical reports.

3.3.2.1 Characteristics of technical reports

Under the heading of ‘characteristics’ Pinelli, Barclay and Kennedy (1997:49) state that according to Fry (1953), “technical reports are heterogeneous as appearing in different shapes, sizes, layouts...” One would instead understand ‘shape’, for instance, not to denote a characteristic but rather a format. Characteristics of TRs’ are then enumerated as content, limited distribution, and readership or audience. The description goes on to say characteristics “may exhibit”. “May” implies that under certain conditions TRs may perhaps not exhibit those characteristics. Conditionalities are not specified that would possibly distinguish ‘which’ types exhibit ‘what’ characteristics ‘when’ and to what effect in the use or developmental aspects. Wang and Alimena (1981:28-29) describe the nature of the channel by mentioning, firstly, the producers - government, academic, research and industrial institutions, then the purpose, formats, quantities and distribution problems. In the section of ‘Producers of technical reports’, Calhoun (1991:163) starts with a mention that reports differ a lot in size, scope, significance or content, quality of writing and effectiveness of presentation; then categories of three major sources are listed as private companies, contract, and the like. It is unclear whether the categories of producers automatically form the types or categories or features of TRs. In the discussion of types, Calhoun (1991) refers to a “list of 36 types of technical reports” such as video/floppy/magnetic formats and design/trip/incident reports (as if incident reports may not be on floppy, magnetic or video formats).

3.3.2.2 Elements of technical reports

The same discussion distinguishes “elements” of technical reports as seven, namely, personal author, title, date of report, issuing agency or corporation, report series number, clearing house accession number and grant/contract number. Smith (1981:5) spells out the same elements under the discussion of unique features. Smith (1981) and Calhoun (1991) therefore uphold a common position regarding elements or parts technical reports are made up of. This notion is noted for the Lesotho case study.

3.3.2.3 Formats of technical reports

Holloway (1976) then has a different section for the treatment of ‘formats’, being the physical form ranging from a single sheet of paper, to a books or to 500 pages according to Smith’s (1981:5) treatment of several unique features. Though strictly speaking such qualifications

could be attributed to a size instead, since a format refers to “the shape and make-up of the physical presentation of an information consolidation product” (Saracevic and Wood 1981:92), the description is noted. A majority of TRs may have non-glossy covers or the cheapest form available (Henderson 1981). The section is silent on non-book or machine-readable formats, a feature that was perhaps remote in the 1970s when the discussion ensued. In the millennium, the dawn of ICTs which enables the channelling of online databases containing full text reports (Farace 1997; Chisenga 1999) is in a way updating Holloway’s (1976) thinking and teaching on “formats”. Some more recent literature on the impact of the advanced technology on the formats and other features of technical reports in this regard would adequately inform the Lesotho case study. On the role of machine readable formats, and specifically for technical reports, the literature is still lean. Parallels may, however, be drawn from the ground-breaking efforts of the Third International Conference of Grey Literature which indicated that formats are changing for all scientific and technological information channelled by technical reports. That notwithstanding, in the event of the overall inconsistencies and lack of standard terminologies, the conceptual framework is adversely affected. Seemingly, this is a persistent problem regarding key concepts within information science (Stanciu 1982:301). It is another challenge toward a solution. Confusion over the terms ‘reports’ and ‘technical reports’ for instance, apparently constitutes such a wide field that makes them “so difficult to identify” (Calhoun 1991:163). It is perhaps one of the reasons why several people and systems would rather refer to both generally as the “report literature”.

3.3.2.4 Types and broader categories of technical reports

Prior to their assuming status of types, seemingly technical reports fall within the broader categories that are temporary or transient. Holloway (1976:27-38) on his part categorises ‘reports literature’ lavishly under ‘kinds of reports’. Included in the list are Technical Reports, plus others - Internal Reports, Contract Reports, Progress Reports, Annual Reports, Final Reports, Committee Reports, Conference Reports, State-of-the-Art Reports and Government Reports. Lines of demarcation between most of them seem diffuse in the sense that even technical reports can be final or interim according to Cermakova (1975:12) who clarifies that “some technical (research) reports are rather an interim communication pending a final publication”. For one observes that technical reports undergo some metamorphosis if progress reports may be the formats of technical reports in their early stages. That is, the reporting is

still in progress prior to removing negative parts of reporting and approving it (Leondar 1968:85; Lundin 1978). Smith (1981:5) too, mentions only three time-related features of TRs as interim, progress and final. Holloway (1976:29) on the one hand concurs that technical reports offer confirmatory evidence to an earlier document which can be a “state-of-the-art”. On the other hand, Holloway (1976) is confusing or contradictory as his list of “kinds” are composed of ‘TRs’ as well as ‘state-of-the-art’ reports, as though they are distinct kinds. The understanding is that, in the event of no negative portions of progress reports being removed/deleted before it is issued, the same document that was labelled progress, or state-of-the-art, or interim remains as it is but changes the name to final report, all being various stages in the evolution of a technical report. This is one important point to be noted in the Lesotho case study framework as it predicts what amount and kind of data might be channelled at what stages of “reporting”. Predictions can be made in the assessment as to what kind of information is to be expected from the respective formats and from whom. It seems progress reports imply the inconclusiveness of the projects or schemes being reported. Distinct properties of TRs, therefore, are essentially determining the coverage or scope of the event for each category or a situation being reported.

Glaring confusion in the literature persists even among the professionals of the southern African region who are unclear if technical reports actually exist in this diversity in the region, let alone where the lines of demarcation run. An example is on the difference between government publications/documents/reports and technical reports. When interviewed about the latter, Prozesky (1999) asked if technical reports encompass government publications. Mark (1970:51) summarises the problems of TRs in the Canadian universities by saying ‘a similarly knotty area is that of government documents’, thus implying that both have certain similarities but fall in different categories. Balachandran (1991), too, refers to “Government publications as opposed to what are generically described as technical/report literature regardless of whether such document have been issued by federal or state government”, in that way illustrating the difference. But Sengupta (1978) discusses government documents concurrently with TRs, possibly for convenience of highlighting similarities where they exist.

In general, the *Anglophone Africa seminar on government information and official publications* (1994) highlights a number of issues relating to and synonymous with

information that is channelled by TRs. In that gathering, Ojiambo (1994:4) states that local governments and parastatals or such organizations, as national research councils, generate lots of TRs. He further regrets that civil servants seem to think that all publications by government are classified and restricted to civil servants only because such practices deny the citizens “valuable” (own emphasis). The implication is that not all TRs are not restricted, let alone to the officials only. As stated, Merrett (1994:43), indicates that it is common for governments, whether democratic or not, to be secretive about their own information. In that regard, TRs are a typical area of secrecy. These practices nevertheless deny the citizens valuable information which would make them knowledgeable.

Drawing from these arguments, therefore, an answer for Prozesky (1999) should be that some government publications/documents are technical reports, others are not. This hazy area will again be looked into in the methodologies on how to probe government officials on these characteristics of TRs. Regrettably the International Federation of Library Associations and Institutions (IFLA) as a professional body has not yet established any distinction either. IFLA has a section on Government Information and Official Publications (GIOPS). Interest in Technical Reports may thus be split along such sections as GIOPS, Academic and Research Libraries as well as Science and Technology Libraries. Overlap is also likely, but features which will operate in the study should be determined.

Alimena and Wang (1981:28) stipulate that there are four major sources of technical reports which may typify their varieties. Those sources are government agencies, the academia, research and industrial institutions. Categories are slightly different from Calhoun’s (1991:163-64) who recognises only four major sources of technical reports which in a way indicate types. They are private companies/corporate body-related, which have editorial review before release. The list continues with

- ▶ “separate” topical technical report: closest to the journal article in terms of style and type, and originating from either the sponsor or staff working on a project;
- ▶ “book” in report form: survey type materials, such as reviews and state-of-the-art reports; and finally
- ▶ committee-type reports being the findings and conclusions of research by scientific advisory groups.

Pinelli, Khan, Barclay and Kennedy (1993:330-81) observe similar categories plus “others”. Calhoun clarifies that reports issued by private companies have editorial reviews. This clarification is a challenge to Balachandran’s opinion that technical reports are not highly regarded because they do not go through editorial scrutiny. It is questionable then what effect edited or unedited versions have on the effectiveness of the channel. It may be questionable too, if that attribute actually depends on individuals’ impressions. In this respect, this framework notes the adequate choice of words relating to this channel. In specific terms, TRs are not “published, but rather “released” as Calhoun seems cautious on this point. Some works likewise use the term “issued”.

In the case of Lesotho, a lesson is also drawn from a survey (Ambrose 1984) pertaining to grey literature in Lesotho. The survey indicated types and major generators of grey literature collected at ISAS being academic institutions, donor agencies, government departments and semi-private bodies. Individuals and “others” seem a rare category in the literature.

Despite a comparatively longer history of technical reports (Hartas 1967), the emergence of development literature and the SIGLE’s attention to grey literature in the late 1970s, the latter seems to have attracted more attention so that the TRs are overshadowed by a wide embracing and topical term “Grey Literature” (GL ‘93; GL’ 97). Disentangling all the types is essential for information workers, who should to be conversant with the entire report literature, yet without losing a due recognition of peculiarities of each channel, and especially problematic ones.

What is evident thus far is that hierarchically and semantically *technical reports* are part of the *report literature*, and both possess the properties of *grey literature*. Moreover, all have the features of **development information** which will be discussed further. All these categories basically constitute **information** sources and channels. That is why it is stressed by many that the boundaries of technical reports within grey literature are difficult to establish” (Pinelli, Khan, Barclay and Kennedy 1993:320). This much is apparently true as it has been indicated also with government publications. Types are therefore different from categories. As the latter are a broader classification of TRs, types are narrower even within each of the categories. The time-related aspects of TRs also clarify that nature which can permeate all the categories.

3.3.3 Understanding technical reports types by the time aspects

For the ongoing study, the researcher would like to combine the thinking of Holloway (1976); Auger (1975:8); Cermakova (1978); Smith (1981:5) and Calhoun (1991:166), and put in place, a working taxonomy of six categories of technical reports. There may be overlaps between different categories and types, yet they fitted this framework as in the questionnaire for information workers (see Appendix 2).

- ▶ Incident/Enquiry reports - investigations into events, cases, crisis, and phenomenon, conducted by independent team
- ▶ State-of-the-art/Situation - survey or review done by recognised experts in the field concentrating on the most up-to-date position/information literature in a given subject, topic [or area,], or country reports for official gatherings. Reports can be in a bulky form and hallmarked by considerable editorial effort (Saracevic and Wood 1981:109,156)
- ▶ Project/contracts reports which can be monographic or be continuous like research reports, occasional/working papers, hence be numbered sequentially.
 - Feasibility: feasibility study reports often issued before the projects can commence; issued by and/or for sponsor and other direct benefactor of the scheme that is being examined in terms of its prospects
 - Progress : described by Auger (1975) as the most populous species of technical reports in circulation; primarily aimed at the sponsor, but also available to an extensive group of interested persons
 - Final: generally the most valuable species in the collection
- ▶ Organisational periodic Internal/Corporate/Committee reports -
 - Annual reports, mainly from firms, development agencies, and professional associations
- ▶ Conference proceedings
- ▶ Academic reports.
 - encompassing theses, dissertations, pre-publication manuscripts that precede, for example, the form of journal articles, and miscellaneous reports containing technical information

This taxonomy is used in the current study for assessing performance of TRs.

3.3.4 Understanding technical reports by function

Of importance again is classifying TRs by what one might call the function. The function is seemingly distinct from the purpose. Holloway (1976:24), as well as Pinelli, Khan, Barclay and Kennedy (1993:320;1997:50) support Ronco (1964) whom they cite in describing TRs in terms of the stimulus TRs have on the user/reader. Though both parties advocate that TRs share a similar nature, they diverge on the approach of conceptualizing the channel whether by function, its appearance, ownership, or value. The issue of value of technical reports will be discussed below. Holloway (1976) employs various methods of describing TRs only, but from an overall perspective of the report literature. The method is detailed but cumbersome to grasp. Pinelli, Barclay and Kennedy (1997) are specific on TRs, but more focused on the NASA experience which might not be satisfactorily typical for situations outside the USA. Nevertheless, that TRs exert particular influence on particular groups is common in the mentioned works and is a point to draw on for a framework of assessing technical reports by function. That feature is again employed by McClure, as quoted by Pinelli, Khan, Barclay and Kennedy (1993:320) with respect to grey literature. He says “characteristics may be defined etymologically according to the report content and method, behaviourally according to the influence to reader, rhetorically according to function to the system...” In this outline all the groups that participate at the production stage are surveyed according to a modified/simplified model from Dosa (1997:101). Along the same lines, Cronin (1982) devised a congruent model in assessing relatively the same value of information to different groups.

3.3.4.1 Conceptualizing technical reports by user groups

From the foregoing, the following tabulation is arrived at as also describing TR's by users

- ▶ Producers : Government offices/officials, aid agencies, parastatals organisations, commissioning bodies, authors/experts/consultants/
- ▶ Intermediaries: librarians, documentalists, information services/systems
- ▶ Users: blanket term for all that consume information channelled by technical reports especially from formal systems like intermediaries, visitors to the centres
- ▶ End users: beneficiaries of production and use of technical reports and their information services, systems, grassroots agricultural and gender related activists

3.3.5 Assessing technical reports by attributes pertaining to value

The reviewed literature is detailed about numerous features that provide a holistic nature of the channel. However, features that are mostly subscribed to are those upon which value is based from the point of view of users. They are yardsticks in measuring the performance of the channel in terms of “value-in-use” according to Saracevic (1983:124-5, 276-7), Menou (1993:24) and Badenoch, Reid, Burton, Gibb, and Oppenheim (Feeney and Grieves 1993:52-53). They are accordingly shown below as adaptable for the framework being designed.

3.3.5.1 Discussion of ‘timeliness’ as an attribute

Regarding information in general terms, Feeney and Grieves (1994:17, 33-36) argue that there is a relationship between its timeliness and value. The point is agreed by many regarding TRs.

One important feature that characterises TRs is their up-to-dateness with events (Henderson 1981; Smith 1981). Pinelli, Khan, Barclay and Kennedy (1993:322) observe that a technical report “permits prompt dissemination of data”. It is a high speed at which a technical report is issued, and for new or current information (Mark 1970; Holloway 1976:22; Sengupta 1978), while Lamberton (1990:xxi) and Saunders (Lundu:1995:50) note that an ideal information system for development is that which enables the user to get information at the time required. TRs are a channel and a service or system at the same time. Slobodyanik (1981) pointed out that the ability of TRs to report up to date information earns them popularity with researchers. Timeliness is one important feature of a technical report so that the channelled information is purposefully utilised for an identified problem on time (Hartas 1967:80; Slobodyanik 1980).

Though time may be a subjective indicator that depends on individuals’ judgement, in Africa, Southern Africa and Lesotho included, it is extensively documented how notoriously belated government publications can be (Zulu 1993; Ojiambo 1994; Musiker 1999). For example, their serial publications like annual reports are often delayed, they experience frequent lapses (Ambrose 1984) and are accompanied by high mortality rates. That does not indicate expertise that characterizes TR’s timely production, according to Mark (1970). Technical reports are a product of experts who will use their technical language and demonstrate their “art”. That notwithstanding, a government may commission professional consultants to assess a program or project. That was the case with the mentioned situational analysis of herdboys. The product

will still be a government publication, yet it would in that case, also qualify for the label of technical report if issued timeously.

Technical reports are produced and issued fast before they are subjected to editorial scrutiny or a wider peer reviewing which is common with published works. As such, TRs are described as belonging to a “rivalry” non-public domain, features which make them prone to secrecy (Leondar 1968; Oldman 1977; Pray 1998:1128). Whilst that feature of fresh and unique information may be convenient and raise a commensurate high demand, it may also affect their mortality. It may be deduced that reports rush into a particular scene or make an event as they quickly get out of topicality. Or, as Wang and Alimena (1981:29) put it, even producers are not prepared to cater for their reprints because of the “transient nature of information they contain”. But as it has been indicated - for the secondary function where they go public, they exhibit the ability to survive beyond that topicality, or the primary event/scene. Intermediaries’ role in this regard is to track down that elusive product in order to make it available for the ‘bonus’ or what shall be called a ‘secondary’ function too. It should be of interest to determine if the channel and its content bear the same or different levels of effect, if any, at the two levels of function. But it is apparently this aura of inaccessibility surrounding TRs that also discourages some intermediaries from reaching out for the channel.

3.3.5.2. Understanding TRs by format and form

By design, therefore, the format/form that TRs assume of transferring technical information is in a manner desired by producers/generators. But the form might not necessarily be suitable for the secondary consumers of the channelled information. The difficult format tend to impinge on ease of use. Saracevic and Wood (1981:265) state that “the effective formatting should be followed in terms of readability, viewability, audibility, identifiability and mnemonics”. This aspect has not been dealt with widely in the literature. The researcher might as well comprehend the terms as literally meaning legible, audio-visual and memorable where necessary. Presumably, however, the exclusiveness of the channel might not make an easy use by ‘others’ who were not regarded as part of the production. That is, ‘part of the production’ in a narrow sense because if the case of herders is taken seriously, they, as respondents, contributed ‘data’ to the writers at pre-production stage. Therefore, in the case of a demand

being made on the report by respondents, it would be incongruent that they are seen as 'others', and are denied access and easy use.

It is, however, crucial to determine if the seemingly difficult format is changing or not. Hartas (1967) argues that "Reports have been with us a long time, and in almost exactly their present form". Presumably he refers to the then difficult and non-conventional formats. Clearly there has been an emergence of machine-readable and audible-visual channels like CD-ROM, the digital facility, the Internet especially since the 1980s when they entered the library scene (Farace 1997). They are changes in the formats. The term "less conventional" as seemingly used in *The First International Conference on Grey Literature* in 1993, and as opposed to the previous use of "non-conventional" may again imply the transforming formats. That change may suggest that the formats are becoming less 'grey' and moving towards a conventional arena. Important then, is Lundu's (1996:50) point that information for development is not as scarce as it sometimes believed to be. Rather, the problem is with making it easily useable and appropriate for the betterment of societies. The level of influence on different groups, and in relation to the changing or unchanging formats in Lesotho, deserves some assessment too. Performance should be studied against the mentioned indicators, and especially the contribution of ISAS. "The format, or the way information is packaged cannot improve its content as such, but certainly can enhance its use according to Saracevic and Wood (1981:197), possibly by making the format attractive. It perhaps can facilitate the TRs' circulation and assimilation as well. That it is written/recorded data presupposes that it may be received by the literate only. That the channel is the work of experts in a field suggests it uses technical language that may be understood mainly by communities that belong to that field. The evaluation will also establish if there is any correlation between format and effectiveness/ineffectiveness; if the format affects the performance of TRs, and in relation to respective groups of users, and to what extent.

3.3.5.2.1 Conceptualizing TRs attribute pertaining to access

The assumption is that for TRs to effectively and efficiently perform the function of channelling information for development it must make such information easy to access "with minimum red tape, as well as minimal or no procedural delays, limited/restricted circulation or secrecy/confidentiality" (Saracevic and Wood 1981:126; Lundin 1978). But a lesson from the foregoing is that some of these features introduce a clash of interests among the various

regimes involved. Reasons have been advanced why it is normally economic for a producer to issue the channel once and, for instance, on cheap paper and in a non-glossy format since the channel's contents might have a temporary value. The format may cause problems for librarians and secondary users of (Smith 1981; Chilling 1970, 1978).

Another example is that while confidentiality and secrecy limit access to the 'excluded' public use, the producer who owns it benefits more from the same arrangement. Jermy (1966:220) postulates that in the field of commerce and industry, limited distribution of research and development results may be **justified** a) to protect concepts which may later be patentable and bring cash return to the rightful authority; b) to give the first benefit to those who collaborated or somehow deserved it and c) to safeguard against third-party information - that has been entrusted in confidence to the organisation. From the Australian experience, Lundin (1978) observes that experts/consultants are cautious not to report on issues that might be found negative and unacceptable to the donors. Otherwise consultants lose the chances of being commissioned again. Could such strategies that serve the interests of donors or/and consultants imply that there is a level of insincerity, and possible inaccuracy of facts that surround the content of TRs? What effects would they have on development? That would have to be assessed in the Lesotho case study. In Chapter 2 the discussion on ISAS's strategies included that of handling confidential items. The method simultaneously took into account the interests of library users and generators of TRs. The service will be evaluated with the view to determining losers and/or gainers from the "restricted" nature of TRs, and to what extent ISAS's strategy is or not effective. This further confirms the importance of assessing the performance of the channel therefore, from both the producer's and library user's perspectives, because confidentiality abounds in government circles too. As Gardner (1981:94) argues

Furthermore governments, by their very nature, are secretive about their operations, even in an open society as the United States. Thus they do not publicize many of the results of their work or research.

3.3.5.2 Understanding TRs in terms of availability

In essence, these protective policies [mainly] over technical reports appear to be some of the major causes for their difficult availability, hence poor acquisitions in libraries (Smith 1981; Leonard 1968; Sengupta 1978; Mark 1970; Neill and Sturges 1990; Balachandran 1991). Despite those difficulties, Gardner (1981) further observes that a large library in the USA may

still collect about 150,000 government items per year. Gardner's (1981) argument is that while some producers hoard TRs, intermediaries should overcome barriers to availability and facilitate access. This is the position of the study. It remains to be seen what estimated fraction of the produced materials is being acquired by the information centres in Lesotho as listed in Table 2.4.

3.3.5.4 Understanding the appropriateness of information channeled by TRs

Findings communicated by TRs are apparently valuable if they provide prompt, specific and accurate expert-led solutions to problems on hand or being experienced (Pinelli and Golich 1997:55). Appropriateness denotes credibility which Poole (1985:104) defines as "the expertness and trustworthiness of a channel as perceived by users" and "the belief that the channel will produce the desired information". Some other basic features which overlap with this criterion are size, costs and speed. Growth is another. Lack of growth is a state of stagnancy in subject matter, or inability to advance with the times (Saracevic 1983). There is quantity too, meaning volumes (or, the number of titles per topic or per subject) that may be manageable or be tantamount to overload. Technical reports have been increasing in quantities as mentioned. About thirty years ago, Leondar (1968:84) recorded that the channel was being generated at the rate of about 500 000 per annum in Canada. Smith (1981) also recorded an alarming growth in the USA a decade later. Farace (1997:69), in particular, affirmed that grey and report literature was increasing at about three or four times more than conventional literature. Increase in quantities should ideally imply growth, meaning new innovations across disciplines. Otherwise it leads to redundancy, according to Tudor-Silovic (1988). It seems, growth of quantities of information being channelled may on the one hand be advantageous if information is well synthesized and disseminated. On the other hand it may be disadvantageous because of overloading (Dervin 1989). Both conditions are therefore noted as determining the appropriateness or inappropriateness of the channel. Should the scope allow it, the quantities of technical reports being generated on and about Lesotho might in this respect be estimated and be assessed in terms of their appropriateness. The performance of TRs depends also on whether sufficient or insufficient quantities are available to lead to innovations in different fields such as agriculture and gender. While reporting about the development challenges in Lesotho, Maane and van Lugt (World Bank 1974:43,37) observed that the UNDP pilot project for Khomokhoana agricultural development, worth R1.5 million

in 1970, was the first substantial development scheme undertaken in Lesotho; and that information relating to trends in the agricultural sector was then scarce in the country. The point being made is, therefore, that there can be a direct relationship between the number of schemes undertaken or surveys conducted in a field, and the amount of information available in the related field. The more there are, the more the information and vice versa.

Not only the adequacy or inadequacy of channels is important in this regard, but the intermediaries' performance, in terms of their capacity to handle what may be regarded as appropriate amounts (Kochen 1985; Dervin 1989). As another indication of appropriateness, a channel will also be able to attract its audience, that is, draw patronage, even experts, around itself, be limitless, or instead accommodate even a wider readership than was intended. Poole (1985) confirms that the capacity of a channel thus varies as a function of preference, task, and or time for each use. The study is determining which TRs in the case of Lesotho are preferred for what tasks when and by whom, in particular; and how the channel performs in different situations.

3.3.5.5 Discussing quality and value of technical reports

In order to conceptualize the nature of technical reports in terms of quality and value, discussions are followed in the literature on what several writers' understanding is on the two concepts. Orr's (1973) work on *Measuring the goodness of the library services*, which is one of the earliest in the field (Goodall 1988), provides a framework for assessing quality and value simultaneously as seemingly the related features:

The ultimate criterion for assessing the quality of a service is its capability for meeting the user needs it is intended to serve, and that the value of a service must ultimately be judged in terms of the beneficial effects accruing from its use as viewed by those who sustain the costs (Orr 1973:318).

Through this criterion, TRs are assumed to have a capability to satisfy the aims of the commissioning bodies, to whom final benefits accrue as against costs they incurred for the production of TRs. According to Saracevic and Wood (1981:131), there are several criteria for evaluating quality of products or documents like technical reports. They set out a framework by which to assess documents retrieved for use within a documentation centre. The framework centres around user-driven features such as value and quality. Users are said to place quality of a channel on scientific/technical approach, credibility of source, uniqueness

of material presented, presentation, and impact/effect (Saracevic and Wood 1981:90, 277). Assessing a product or service by these features hypothetically means the object should possess those features. To carry the argument further, that a technical report should be a response to an identified problem implies it will uniquely inform about that particular situation, and be produced by a reliable source.

The mentioned framework for assessing TRs against these features will fit the Lesotho case study as it incorporates the method of assessment. The framework was also designed for scientific and technical information.

According to some scholars TRs' fugitive or ephemeral nature is associated with poor quality. It is believed that since they are produced quickly, they avoid the usual scholarly review which subjects them to a questionable proficiency of their designers (Jermy 1980:220). That feature too, according to Balachandran (1991) may relegate them to poor quality, less demand and low use. Both critics make sweeping statements that TRs skip peer reviewing or editorial levels. But Auger (1975:8) describes final contract reports as going through "considerable editorial" endeavour. Henderson (1981:18) and Newman (1982:47) dispute the issue of 'less value, less demand and use' in that TRs are of value to colleagues as they are the first to announce concepts and discoveries even before journals and books 'publish' those innovations. Likewise, de Witte (GL'97:5) is positive that grey literature avoids not only the red tape of publishing but the ensuing interference. Conkling (1991) supports the value TRs have for the entire academic community. The majority of these writers, therefore, do not associate the speed and short route followed in issuing with less quality or less value. The corollary might instead be true as it is conceptualized for the study because, the higher the quality of information, the better the performance or effects on the recipient (Thorngate 1995:196). It is a question of whether the receiver of information benefited from and valued the resource, or whether it was not exploited, or not worth the trouble, and to what effect.

Russell (1997:219) shares the same view with Orr (1973) on what the value of a channel entails. He describes the value of information in agricultural research by quoting Davis (1974) thus

in general, the value of information is the value of change in decision behaviour caused by the information, less the cost of information. In other

words, given a set of possible decisions, a decision-maker will select on the basis of the information on hand. If new information causes a different decision to be made, the value of new information is the difference in value between the outcome of the old decision and that of the new decision less the cost of obtaining it.

Costs may be in terms of money, the inconvenience and time it takes a researcher to get information channelled by TRs. Delays in providing information may therefore lessen the value, or they may be worth the effect. While still on the issue of value and time it takes to issue TRs, it has to be borne in mind that there are several other channels of information, let alone for development. How TRs effectively and efficiently perform in that state and those functions might as well be understood fully in comparison with other channels. In Lesotho, like most developing countries, immeasurable national resources in terms of human resource, finances and time are expended every year on the production of a wide variety of technical reports. ISAS's technical reports are presumed to contribute to the NUL expenditure whose subvention from government totals a quarter of the entire national budget (Senaoana 1996). Such costs include research findings which TRs convey or subsequent TRs are based upon.

In comparison with conventional items, however, TRs are produced in smaller quantities because they are often not meant for a wide circulation nor for sale. Even where they may be exchanged for money, it is questionable if it is at any considerable scale as Kwafo-Akoto (1995) suggests that *gl*, which is limited in quantities, should be priced and sold. Already, there are generally no good profits to textbooks in Africa. Due to small populations and low literacy rates, book sales may yield limited incomes (Bgoya, Billany, Lujanen, Noonan, Paajanen and Syrjanen 1997). Literacy, however, affects all the channels that use symbols or a written word. Incomes referred to are clearly from a commercial publisher/producer point of view. Yet in the case of academic, government-based or charity type of producers such as for TRs, 'incomes' or financial 'benefits' may not be so direct as seen from the purpose of producing, as will be elaborated in the section on development.

3.3.5.6 Discussing the nature of TRs versus that of conventional items management

For the period covering 1995/1997 the NUL library held the World Bank's grant worth a million Rand to purchase books (NUL Library Board Report 1996). Nowhere in the literature does one see such a huge grant being awarded to a centre specializing in technical reports or

technical information in the southern African sub-region, and specifically for the acquisitions of TRs. In a study on *The development and provision of scientific and technical information services in Tanzania: with reference to university libraries*, Kabudi (1997) describes funds for library acquisitions as generally for “books”. She makes no effort whatsoever to distinguish funds spent on books versus the expenditure for reports/documents. Yet it in the University of Dar es Salaam, for instance, library collections are distinctly classified and they include report-related materials (Kabudi 1997:174-77). Besides, her study focuses on materials that pertain to scientific and technical information. That information is, however, significantly overlooked in the libraries that handle scientific information in Tanzania. That is a common phenomenon. In the developed countries too, Blagden argues TRs (1980:135) may be treated marginally as “others” versus a prominent treatment of books and periodicals. But the phenomenon is glaring in Africa according to Sturges and Neill(1990:59). Further evidence is given in the way Aina and Adedigba (1995:89, 104-106) have glossed over this channel in the discussion of agricultural libraries in Nigeria. They start by admitting that these libraries acquire and store various types of materials including research/technical reports. The discussion then gives the statistics of the total collection in the categories of books and periodicals, thus leaving out the size of research/technical reports type. For that omission the authors might possibly blame *The World of learning* (1990) and Niang (1988) and other authors as the acknowledged sources. Whether it is the compilers or the initial sources who omitted technical reports is immaterial as TRs, have been overlooked, as they do not exist or matter. This is a concern of this study.

It is evident, on the contrary, that technical reports are prevalent in scientific and technical information (Smith, 1981). Or, as Karnitis (1997:75) puts it, TR as a type of *gl* are a segment of scientific and technical information, and, together with other channels, an integral part of a broad spectrum of information services. In specific terms, Harris (1990:578) asserts that fugitive material like technical reports are predominant in scientific and technical fields like agriculture which is being discussed by Aina and Adedigba (1995), and to a certain extent by Kabudi (1997). Challenged by a bias in favour of books in comparison with reports, Blagden (1983:89) downplays the value of books by affirming that by the time they are published, most of their content will have been published elsewhere like in reports and journals.

Following on the 'proto-type' metamorphosis of some TRs into journal form as seen in 3.3.3 above, it showed that they too are published in a format that may be termed the second 'release' of technical reports whose issuance is much earlier than that of journals. Libraries and users who may narrowly attend to journals, overlooking other important channels, may lose out on providing fresh information and innovations. They may be at a greater disadvantage in Africa as Aina (1994:37- 48) regrets the high mortality of African journals due also to high costs of production. Todorov (Tudor-Silovic and Mihel 1988) underlines the weakness of journal articles which are often a result of the author's orientation to publish, more than the reader's desire. But from inception, TRs are supposed to be purposely issued to inform about, and facilitate communication on an identified problem.

3.4 Conceptualizing specialized technical report information management as a global phenomenon

An extensive literature about the theory and practice of specialized information management, services and systems is available and examples from Africa, North America, Europe and Japan is given.

3.4.1 Specialized information management in ISAS and selected centers in Africa

That ISAS established a documentation centre and its subsequent specialized technical reports service that would appropriately channel information whose utilization would give impetus to development was not a unique practice. That particular program fitted with what is a global phenomenon.

The functions of ISAS documentation and publications division as a programme with the stated objectives are also based on realities about technical reports, their capability to channel information, and the putative relationship between that information channelled by technical reports, and development (Boadi 1987; McConnell; Meadow and Spiteri; Menou; Thorngate 1995). In specific terms Stone (1993:53) observes that

it is no longer sufficient that information and its carriers....
should be deemed relevant todevelopment process
because we [information] specialists believe this to be so
and have stories to support our belief. What is required is
a set of tangible criteria by which relevance or impact of
information on development can be measured.

It is with respect to ISAS's specialized information handling that information specialists try to support the stated conviction. Despite the fact that ISAS authorities also assumed so, it is a claim that needs to be substantiated. Specifically, it is to ascertain if ISAS's programme theory was well conceptualized in terms of goals, mission and needs to be met. In this respect, Weiss (1972:25) states that

program goals may be hazy, ambiguous, hard to pin down...

The program is a congeries of activities, people, and structures. Some of elements are necessary for the effects it achieves. Others are irrelevant baggage. Decision makers want to know what the basic and essential features of the program are, so that if (successful) they can reproduce them or (if unsuccessful) avoid them.

It is along the same lines that the ISAS mission is also assessed from the inception stage where goals are set and presumably stated regarding technical reports. ISAS has no written mission. Performance assessment is being designed to explore the goals of technical reports as an object, service and system from ISAS' institutional level. ISAS serves readers as researchers and governments officials for example, and their whose views will determine the efficiency, and effectiveness or otherwise for the information service in this study.

The Lesotho case study will not be concerned with quality of the channel nor the content in isolation, but as part of the "input" by an information system being assessed. TRs will be assessed within the setting of a parent body whose quality service as an external or internal factor also matters. *NUL Strategic Plan 1998/2000* as noted, aims at quality management and quality assurance which embraces ISAS services too. That is the why opinion of the administrators is required.

Since 1979 when it was instituted, ISAS has operated as stated in 1.1, developed with time. Twenty years later, its mandate remains almost the same. Specifically, the revised NUL Act, Statute 30 Section 13 (2) reiterates that: "The following Institutes are established : ISAS (and IE, IEMS, ILS)". It is then left to each institute or faculty from time to time to present their Strategic Plans on how they will achieve quality and successful services in their respective constituencies. Presently, ISAS states its mission as to "strive to serve as one of the principal centres for identifying, initiating, promoting and coordinating interdisciplinary, academic and policy and development oriented research (*NUL Strategic Plan 1997/98 to 1999/2000*). This

time, the statement counts on ISAS as one of the centres, not the principal one as it was previously. That is again why it is important to include other centres, if any. Therein, the focus of the Documentation and Publication Division continues to be “on technical support in terms of development of information technology, collection of grey literature which may be of general interest or be pertaining to on-going research projects” (*NUL Strategic Plan For the Period 1997/98 to 1999/2000 - Draft*, p.47). Goals, therefore, still exist upon which measures of success or failure may be focused.

ISAS of the 1990s operates in a more developed information terrain in terms of a number of centres which can handle TRs in Lesotho as compared to 1979. That notwithstanding, according to Chisenga (1999) the Institute is in the category which he labels large and ***specialised*** existing in Africa, and for which he suggests certain responsibilities of marketing information that pertain to the continent. The kind of duties he urges those large institutes to discharge comprise adding their publications in their local listserves, as well as contributing the African content into the Internet in the form of, for example, technical information, feasibility study reports, and annual reports. Hence, whereas one would on the one hand presume that possibly the task of specially handling the channel may either become easier due to newly established units with which ISAS could cooperate with, on the other hand, it seems the work may become heavier in terms of competition over the-hard-to-get channel.

Specifically, there are still some responsibilities expected from the large, more experienced centres, especially those within the research field. It is along these lines, too, that ISAS should be assessed at the same time as seeking an insight into how technical reports actually do or can perform in all the circumstances. For instance, the type of cooperation that apparently existed within the documentation centres of SADRA facilitated exchanges so that ISAS could satisfactorily collect technical reports pertaining to Lesotho, yet originating from outside the country. Most of those structures have altered in Swaziland, Botswana and Zimbabwe, for instance. Literature is still silent on how the changes possibly affected the markets of technical reports of the sub-region in general. This is pertinent to the study of performance assessment of ISAS and the channels it handles. In the 1980s, too, links of cooperation were fostered as noted with ISAS documentalist's visits to the US and to some members of SCOLMA. Mechanisms which ISAS should devise in the era of Internet should be commensurate with

information which, according to East (1984), is not getting cheaper but growing in volume and demand. In conceptualizing the programme theory of ISAS, the role of information management, especially information, communication and technology (ICTs) ever-changing soci-economic, political and cultural paradigms also play a part.

The study is again based on the assumption that efficient, effective provision and consequent practical utilization of technical reports are expected to contribute to development - a theory which will be unpacked below under 'use'. A major challenge to this assumption is actually how it may be detected that the management is effective and efficient. Could it be the skills of the intermediaries, their ability and capability to handle ICTs ? It is questionable. Most of performance assessment studies on libraries, as will be expatiated, espouse staff appraisal as part of the system to be evaluated (Morse 1968; Orr 1973; Lancaster 1977; Philp (1983). Even prior to a practical enquiry on the Lesotho and ISAS situation, it was found that literature abounds in support of the hypothesis that level of performance by management (as input) has a direct link to amount of outputs that a system can have (Boadi 1987; McClure 1983; Boon 1992).

Seemingly the programme that ISAS embraced was a global phenomenon, occurring in Africa and beyond. Below, the examples are shown of centres that compatible to ISAS and based Africa and then also those that are from outside Africa.

Regarding specialised handling per se, relevant literature is scant because, by observation, there is no absolute specialisation of handling technical reports in the Southern African region in particular. Subject specialisation instead refers to disciplines such as agricultural libraries, medical or health libraries. The discipline-based approach is becoming a trend for such fora as the Standing Conference of Eastern, Central and Southern African Librarians (SCECSAL). But incorporating types of channels that pertain to more special information services is still unattended to. In the USA, for example, as early as 1973 the Special Libraries Association already had as it theme "technical reports". This signified the in-depth notion of 'specialisation of handling' as referred to in this framework.

Centres that are recognised by the researcher stand out as partial specialists and are thus described below. Firstly, the criteria for their selection are given. Secondly follows the literature that illustrates their efforts to link technical report information to research and development.

The purpose for looking at other countries, is to have a general overview, and to anchor the study on a wider focus, that, TRs are a channel of information for development throughout, in any region, any country or organization. The coverage is general, it implies development anywhere, in Africa, in Europe, within Swaziland or within the UN system. Lesotho is only seen as a case embedded within a larger context of similar cases. The enquiry is not necessarily looking at an isolated phenomena. It is rather a prevalent one which should be understood as such, in order to allow “generalisation” afterwards. As a case study, the choice of ISAS within Lesotho is not random. It is targeting a program whose theory of technical reports handling for development is in question. Organisations having similar or comparable situations, and thus making one homogenous group, have already been discussed.

At the continental level, PADIS was instituted in 1980 with the aim of assisting Africa to link development information to use. That information system, which was highly regarded as poised to show the way, leaves a lot to be desired. PADIS/DISD has not only changed strategies like a number of international development related systems, but finally, has also admitted its inability to achieve plans which are said to have been unrealistic from the inception of the programme (ECA/DISD/CODI, 1999:1.10: par.4).

In 1987, the Eastern and Southern African Universities Research Programme (ESAURP) actually classified member research institutes into larger and smaller, even by orientation, it grouped nine which included IAS, ISAS and NIR as larger “centres which conduct research in the areas of development” (ESAURP 1987:108). This view is further supported by Chisenga (1999) who lists ISAS as one of “large and specialised centres” in the universities of Africa. Most of these research centres existing in the sub-region, including IAS, ISAS, NIR and IDS as similar and related, have also been members of the Southern African Development Research Association (SADRA). Secondly, the choice of the institutes in Botswana and Swaziland as part of the group to be reviewed here is due to the countries’ close proximity geographically.

As already shown above, the BLS countries have a lot of similarities historically and socio-culturally. Zambia and Zimbabwe are selected too, to represent the rest of the sub-region in this review to support the external validity of the case study.

Despite the restructuring that affected the existence of some of the comparable centres, at some stage or another all the countries had the kind of research centres under review. It can be concluded, therefore, that it is not necessarily the historical orientation, geographic location nor economic affluence which dictate that a development-oriented research institution should have its own documentation centre that concentrates on hard-to-get items required by users. The aim by authorities to invest in an information component, is to strive for effective, efficient research, and then high quality research output. In addition, West Africa was selected for inclusion in the review to represent countries outside the southern African region.

3.4.1.1 The NIR in Botswana

The National Institute for Research (NIR) was established in 1979 with a “national” mandate though based at the University of Botswana (UB). Its documentation centre too was assigned the duty of collecting the national non-conventional material for research for development (Kwafo-Akoto and Moagi 1993:205-14). NIR became the national focal point of the Pan-African Development Information System (PADIS) and announced its collection in *Devindex Botswana*. By 1993 NIR had over 12,000 titles of documents that only came from Gaborone, the capital city of Botswana, as staff had been unable to collect other relevant items from the districts (GL ‘93 :212). Yet the decision by the UB authorities to reverse the specialized arrangement of NIR’s Documentation Centre, and to amalgamate with the main library in 1998, was likely to subject the arrangement to the problems noted by Holloway (1976) and Mark (1970:47).

3.4.1.2 The SSRU in Swaziland

The University of Swaziland (UNISWA) authorised its own research unit to be attached to the Social Science Faculty as Social Science Research Unit (SSRU). When discussing problems of research in Swaziland, Daniel (1981:284) commended the then newly established SSRU as promising to overcome some major problems and obstacles (of development research). As was the case in NUL and NIR, the Documentation Centre of SSRU was appended later.

Though experiences of SSRU documentation centre in handling reports and other non-conventional material were recorded in the Annual Reports as continuous struggles, some *Indexes* of TRs collected were issued during its operation (Mkhonta 1986, 1988). Sooner than one could observe more progress, by 1989 the centre was already assimilated into the main library. Questions that may be asked are, firstly why was the documentation centre established in the first place, and secondly, if the centre failed to achieve its aim of handling reports effectively to promote development research ? It is worth mentioning at this juncture that in the University of Edinburgh, the documentation centre of the Centre for African Studies (CAS) was also closed down in 1982 apparently for economic reasons. Its collection then became a misfit in the main library (Moshoeshoe 1985:24).

3.4.1.3 A specialized documentation centre in Zambia

The University of Zambia (UNZA) established the Institute of African Studies (IAS) in 1975 when Zambia was 11 years' independent and issues of progress and development actively at hand. The then Director of the Institute introduced IAS by quoted Coleman (1972:307) thus:

Institutes established with (in) universities to perform (the) function (of applied social research) are at the centre of a great, and very healthy debate, namely, how can universities demonstrate their relevance in national development (and what is relevance indeed, what is development... (Serpell 1981:25).

Again, to accord the required special handling of technical reports and related literature a specially dedicated service was put in place. Problems of managing less conventional materials at IAS were enumerated by the documentalist (Kabamba,1985). That notwithstanding, the service was of a "special" type and for specialized information management according to Mushipi (Huttemann 1987:165).

3.4.1.4 ZIDS in Zimbabwe

It was in 1980, the same year that Zimbabwe got independence that the Zimbabwe Institute of Development (ZIDS) was established under the aegis of government yet with some semi-autonomous status. Unlike the mentioned examples, ZIDS library had a broader acquisition policy, understandably so, because it had no counterpart-library nearby. ZIDS also automated its system and recorded "a success" in major areas of managing information. (Makaya 1989).

Its clientele was exclusively ZIDS researchers, civil servants and authorised consultants. It paid special attention to its development related documents, then adopted methodologies of the Pan African Development Information System (PADIS). In 1991 ZIDS's structure was changed to become IDS and part of the University of Zimbabwe. IDS has, however, maintained its own library as one of the university site libraries. This was a trend in the sub-region.

3.4.1.5 West Africa's RESADOC

In West Africa, the drought-stricken countries of Gambia, Mali, Senegal, Cape Verde, Guinea-Bissau, Mauritania, Niger, Chad grouped themselves together into an Inter-State Committee in an effort to mitigate against the drought crisis in their SAHEL region. This was a development inclined initiative because the grouping attended to issues of land reclamation, control of water resources, agriculture and food security. In recognition of the role that could be played by the scientific information aspect to facilitate the mentioned initiative, in 1979 an Inter-State Committee formed a consortium of Réseau Sahélien d'Information et de Documentation Scientifique et Technique (RESADOC) - Sahelian scientific and technical information and documentation network, with the aim of harnessing national scientific and technical information. According to Sene (Wise 1985:56), in 1985 RESADOC was attracting a satisfactory donor funding and growing, hence it recorded heavy use of its technical documents mainly from researchers and development agents involved in economic and social development. Despite those success stories, ten years later, some national relays recorded complaints that the centralised structure of RESADOC tends to hinder effective provision to the end-user. "This can feed the well-known paradox in which users complain about lack of access to information while the information systems are, taken together, underused" (CTA 1995:200). The paradox itself needs not be overemphasised, as already alluded to. But the changes in the performance of RESADOC underscores the importance of continuous assessments for information centres.

3.4.2 Technical reports in Europe, the Far East and Northern America

Specialization in the technical report handling is observable throughout a number of countries in America, Eastern and Western Europe. A few are debated as examples.

3.4.2.1 Special information services in Germany

In Germany where the term “grey” for grey literature originated (Gehrke 1975) there exist not just information centres concentrating on development information. There are also concerted efforts to overcome the problems of technical reports. In compliance with the 1994 ISO Code number 10444 for handling technical reports, the clearing house was identified in Germany where capacity for attending to this type of literature had been demonstrated. The library of Fachinformationszentrum has been designated the *International Standard Report Number (ISRN)*, a newly adopted mechanism of bibliographically controlling this literature universally and as has been done with the International Standard Book Numbers (ISBNs). In this subregion, awareness for this bibliographic has not been shown yet. The standing bibliographic control committee for Southern Africa for example, has not made any specific recommendation regarding technical reports aside of grey literature (Musiker 1996).

3.4.2.2 Specialized development information services in the UK

Based at the University of **Sussex**, the Institute of Development Studies (IDS) was established in 1966 as a government department, with an arrangement almost comparable to the NIRs. By then, the British Library was already well established with its sections, and so was the University of Sussex library which already existed. But still, it was found desirable that IDS get its own information unit. IDS policy has ever since been to build up a strong library of information for development. Perhaps that is why IDS was one of information services selected by the Development Sciences Information System (DEVSIS) team while surveying the sample world’s development literature in 1975.

3.4.2.3 Specialized technical information management in Russia

Previously known as VINITI, and now titled the Scientific and Technical Information Centre of Russia (VNTIC) this centre, was established 30 years ago. Its mandate was to be a repository of scientific research, development reports, dissertations and grey literature. Some of its major activities were preparing abstracts for research and development reports, and publishing the centre’s own research results, engaging in document delivery, and information advisory services. VINITI’s reputation as USSR’s information backbone grew with the rise of that country as one of the world’s superpowers. Yet even in the post-USSR’s economic

decline, as a proof of the importance and value placed on technical reports, Russia still strives to continue this specialized service (Nechiporenko and Pavlov 1997:205-14).

3.4.2.4 Specialized information management in Japan

The Japanese Science and Technology Corporations conducted a survey in 1996 to find out the situation of the Technical Report Literature handled by these companies. From the response rate of 64.6%, most of them actually collected and handled the material while there were 26.9% of companies which also published technical reports, totalling 275, being the increase from the 1986 record of 219 (Tetsu 1997).

3.4.2.5 Technical and report information services in the USA

Whilst National Technical Information Service (NTIS) is the actual agency for managing technical information mainly from NASA, it is assisted systematically by Federal agencies. There are also independent, academic and commercial centres which pay meticulous attention to technical reports, an example being the Bell Laboratories in New Jersey. As early as the 1960s, through schemes such as COSATI, USA had started to bibliographically control and describe its technical information for users. By the 1970s, \$400 billion was expended over a ten year period for research and development (R&D). The product of that expenditure was in most parts recorded in a form of TRs (Klempner 1984:4) and its importance was observed by Smith (1981:17). Through the inputting centres such as in Italy, the NTIS specialised collection has grown to such an extent that it boasts of “a wealth of information that is not available elsewhere” (Taylor 1997:481). The description of TRs as “wealth” can be said to signal value, uniqueness and indispensability of the channel. That notwithstanding, its satisfactory use is not guaranteed (Henderson 1981:19-26; Caponio 1984:83-98; Pinelli, Khan, Barclay and Kennedy 1993; Mark 1970: 47-50). The implication is that there is a need to assess how its use can be intensified. By 1990 the NTIS website containing over 450,000 titles of technical and scientific documents could be searched for ordering US government documents (National Technical Information Service 2001).

A common factor with all the centres, especially ISAS, NIR, SSRU, ZIDS, IDS and RESADOC, was the objective of addressing development, and soon after to attach a specialized information infrastructure to it. That information element is of a technical,

specialised nature. And with the exception of IDS, all operate in the developing world where an issue of “development” should be taken seriously. In almost all these centres information workers express the difficulty of handling this “non-conventional” material even though they recognise it as a channel of indispensable information for development, as do the authorities that establish the services but seemingly fail to sustain them.

3.5 Conceptualizing use

The term ‘use’ may be understood broadly, but in the library and information field, the notion of ‘use’ covers a wide spectrum of applications. It encompasses a communication and utilization process that is conceptualized by Havelock (1979) and Blagden (1980:19). The starting point of application may be the information-seeking behaviour that indicates first steps taken toward ‘use’ (Ching-Chih chen 1982). The concept leads to either data collection or production in the case of producers. Use is led by awareness (Kaniki 1989); by availability and accessibility. It is availability of information again that leads to browsing or reading and comprehending a text (Coetzee 1977; Abbott 1989), or surfing the Internet on the part of practitioner, researcher or planner who, being fully literate, is well-suited to find out and utilize information on their own (Dosa 1997:56-7). ‘Use’ may also be viewed as an exposure to a system which is applicable to this enquiry evaluating ISAS. Conceptually, ‘use’ also refers to subjecting various channels to a search strategy based on what a user requires to solve a need, to fill a knowledge vacuum of not knowing how to carry out some task (Dervin 1983, Cotta-Schonberg and Line 1994). That kind of an urge, need, want would be satisfied by a particular information service, as in this case, presumably TRs and/or the system of ISAS that manages the channel. That notwithstanding, there are divergent views on what essentially constitutes ‘use’, let alone purposeful use leading to a beneficial effect.

3.5.1 Analysis of use

In a compilation of an annotated bibliography on *Collection evaluation in academic libraries*, Nisonger (1992) dedicates a chapter on Use studies, mainly in the USA. Major aspects in laying a framework for assessing ‘use’ in that bibliography entail i) in-house and circulation type or location of use; ii) occasions or purpose for use, iii) object, types or variations of use - by discipline or by channels and respective users; iv) cost of use; and v) the rationale and methodologies for assessing ‘use’. A majority of works reviewed look at ‘use’ of a library and

channels concurrently whereby two methods are analysed, namely library-centred **in-house use** (determined by items left on the reading tables, presumably read or browsed), and **circulation** borrowing and checking items out (Blagden 1980, Saracevic 1981). But Dervin (1995) criticizes methods of counting occurrences like visits and circulations as unreliable indicators of 'use' of either a service or the literature. A book may be taken from the shelves to the tables but not be read at all. This position is discussed by Abbott who (1989) refers rather to 'use' of the literature as involving a complex mental process of reading, understanding, retaining, remembering, synthesising, and accepting. The view is further supported by Blagden (1980:142) who advocates a method of face to face discussion with a user, to probe into the benefit of reading that is more reliable than recording that there has been an action of 'reading'. Yet, still, it can be argued that even a mere library-directed enquiry of information is an indicator of use of that service and its products as King and Bryant (Blagden 1980:54) point out. What matters apparently is subsequently making an informed decision to accept or reject what has been read (Coetzee 1977). The basis of the criticism is that a visitor, borrower, or reader may be viewed as having 'used' a service or a channel only after ascertaining that s/he went through a process of "understanding, retaining, remembering, synthesising, accepting", or not accepting information used. Some works are contrarily caught up in this trap of recording statistics without relating them to the outcome. For instance, Auger (1975) makes reference to 'use' of reports simultaneously with a full description of that literature and where the literature is prevalent, such as in the fields of agriculture, education, science and technology. According to this author, the mere existence of the literature in those subjects denotes 'use'. He therefore makes no further explanation as to whether or not 'use' should be evaluated in terms of some results, benefits, effects, or outcome. Morse (1968), too, focuses on library use in terms of the type and sizes of stock, in-house and on circulation. Other scholars, however, indicate that use is more of the results of the action. Ching-Chih chen (1982) discusses library use/non-use specifically from the level of information-seeking. In a simple way, he surveys users across disciplines in a particular setting, and determines to what extent their needs are met by libraries or other services.

Needs are therefore noted as a driving force for seeking information and then using it. That is why measurements for assessing if 'use' was made are based on needs, and measurement also assesses if needs were satisfied (Blagden 1980). Reading as one way of using a written

text is again conceptualized by Machlup (1980) who links reading to knowledge. Again, Coetzee (1977) argues that we cannot isolate the reading of text from its antecedent production. That view on production as 'usage' is in line with Pinelli, Barclay and Khan's (1997) argument that producers of channels of information/communication, like authors or consultants, may be called 'users', implying 'use' by applying certain faculties of knowledge. The results of reading - or comprehending and absorbing information, for instance, should apparently also satisfy the reason for producing that information, which has been described as communicating to a particular audience (Auger 1975). Cotta-Schonberg and Line (1994:56) point out that "the most valid indicator of an academic library's performance is the extent to which it contributes to the achievements of users and the achievements that meet objectives in teaching, learning and research. The same type of use applies to ISAS which in addition serves planners and decision makers, all of whom will be subjected to a survey.

The diversity of situations in which 'use' is applied demonstrates the complexity of the concept. 'Use' may be understood within the context of *Theories of the Middle range* whereby Poole (1985) shows varied situations and conditions of 'use'. Such 'use' is for wide-encompassing situations like services or use of systems, in a particular physical location or virtual; and they require mental involvement and object(s) being utilized. They also include occurrences such as visits to the centres and circulation of materials. Poole's description of use therefore differs from that of Auger (1975) and Pinelli, Khan, Barclay and Kennedy (1997) who, as mentioned above, also regard authorship as 'use', it being the process, or the intangible service of production, generation or issuing of a channel. 'Authorship' meets the criteria of Abbott (1989). Literature is, however, scant where TRs are assessed as a specific **object** of use, especially on the African continent. A majority of works as already shown, and as listed by Nisonger (1992), pertain to books and periodicals. Methodologies that are thus employed to assess use of books through the circulation desk as well as "counting journals left on tables by users" (Nisonger 1992:49) hardly suit the ISAS procedures that neither lend items out nor allow browsing directly from the shelves.

Types of objects being used are often compared in terms of disciplines they cover, and in terms of kinds of channels that are heavily or least used. Both Karnitis (1993) and Pinneli (1993) compare use of in-house TRs with the externally acquired items. Their studies indicate that

different types of users have preferences for particular channels as TRs are patronised by researchers and books by learners and trainers (Dosa 1997:56). In an assessment of use of U.S. government technical reports, Pinelli, Khan, Barclay and Kennedy (1993:327) designed self-administered questionnaires by which respondents were asked to indicate their use of and the importance of four types of the product, how many times they had used each product in the past 6 months in performing their professional duties.

This method suits ISAS which has both the internally generated reports and the externally acquired ones. Almost all the engineers use the types provided, as observed by Pinelli, Khan, Barclay and Kennedy (1993) There is no statistical difference in use among the academically-, government-, and industry-affiliated respondents. They rate the in-house reports as the most important. Despite the fact that 'use' of a library or channel is a result of varied occurrences that depend of individual's differences (Morse 1968) and though the population includes potential, light, heavy users and non-users (Ladendorf 1973:273); and since information they seek is assumed to describe a knowable reality (Dervin 1983) as well as it is a 'user-construct'. The current study has considered these diverse situations.

Blagden (1980:53-9) extensively reviews the literature that provides various methodologies on assessing use of products and the entire library stock, as well as use of the system or services. The analysis of use of a library service is nevertheless made in relation to user satisfaction, an issue which involves users's attitudes which can serve as helpful ammunition in defending a library's position.

Another important aspect of 'use' pertains to its cost. Lamberton (1990) elaborately discusses the economics of communicating and using information. Nisonger's (1992) bibliography refers to methodological issues involved in calculating cost per use, or per journal or per book. Costs as mentioned in ease of access (3.1.4.3 ii) likewise include users' time, and other efforts. The current study thus determines whether there is a correlation between costs and use. The reviewed literature affirms that an effective information delivery promotes use and cost-benefits as was also demonstrated by the IDRC case studies (Menou 1983; McConnell 1995). From the managerial point of view, economic aspects as 'costs' are included in this framework in order that successes or failures of a service, for instance for ISAS and its TRs, are weighed against what the management and users have invested.

Blagden (1980:75) supports the view that a library exists in order to facilitate exposure of individuals to documents of recorded experience. Again, as stated earlier on, TRs are communication channels that are also 'used' therefore, as Paquot (1995:107) argues, to inform users about experiences, about the state-of-the-art, and on what steps to take next. It enables communication among partners that share problems and achievements in development. In preparing for the Beijing+5 conference that was held in 2000 June in USA, participating individuals, government representatives, regional organisations, observer NGOs and others, seemingly recorded their experiences, positions, progress, and informed each other through TRs. Extensive and continuous use of technical reporting that takes place prior, during and after such gatherings is demonstrated, for instance, in Wichterich's (2000:9-11) article *Take Beijing home - Five years later - will the impetus of Action Platform be maintained ?* First, at the end of the preceding Beijing gathering in 1995 a "final communique, entitled Beijing Platform of Action" (PFA), was issued. This much celebrated report was viewed as a policy document and a touchstone concerning what was to be done. That was a situation kind of report channelling information for participants there. Second, the NGOs in particular rejoiced because they had contributed to their home country papers, and hence influenced their governments' state-of-the-art reports that also resulted in the PFA. Thereafter the UN urged member states, and they too strived, to implement recommendations contained in the document. Some months before the next conference, the reporting was done at NGOs, national and regional levels. That coverage on the achievements and successes, of technical and financial assistance by the donor community was yet another state-of-the-art. This brings the framework to a discussion on development and non-development.

3.6 Summary

The discussion in Chapter three has laid the theoretical foundation upon which to ground an assessment for ISAS and its product technical reports. Most scholars are explicit that TRs are purposeful products that respond to an identified problem. Those problems apparently pertain to the work of such constituencies like development agencies, researchers, decision makers, planners and the civil groups. A debate follows on TRs' nature, features, formats, types, and characteristics all of which explain why technical reports are often classified restricted use, secret to some particular user-groups, limited in quantities, difficult to acquire, and marginalized by the majority of information systems world-wide. A taxonomy of five categories of technical reports is set as well as a model depicting five user groups from producers (companies, government, donors), to authors, intermediaries, researcher/practitioners to 'end-users' or those that are labelled 'beneficiaries' by scholars like Chambers and Boissierre (1995). The 'user-oriented' features are highlighted by which technical reports have been assessed in the survey. The discussion then dwells on information and knowledge as concepts. Examples of the world's development projects that affected local communities, their knowledge and livelihoods are enumerated. A challenge is presented, not only to Lesotho which is suffering dependence in various sectors, but also to intermediaries, to attend to both exogenous and endogenous information/knowledge as a blend of the two lead to a synergistic information. Debate links to a concept of development information as a broader branch to which TRs belong. It is firstly shown that the ISAS mission and mandate to manage development information was not peculiar to it, NUL or Lesotho as such. The arrangement was an understandable facility and a global phenomenon existing within specialised information centres serving development-oriented organisations. Secondly, ISAS's own system is grounded on a programme theory (Weiss 1972) that justifies the rationale behind assessing the its inputs, performance and outputs. The aim for which ISAS was established, to contribute to development, is conceptualized. Analytical conceptualization of development as a process is drawn from various theorists who either perceive the process from the historical perspective like Rodney (1972), Nyerere (1974), Rist (1999), or from the gender perspective like Kabeer and Jahan. A majority of them, however, criticize the economic theories and measurements that have dominated the development discourse and paradigm. The consequence that also affects Lesotho is that development has never been easy to equate to progress as it should be. The Human Development Index by UNDP in 1990 and the idea of

Genuine Progress Index that attends to other sectors of development such as information, herald a new phase by which a 'least developed country' such as Lesotho may measure its progress holistically as opposed to a previously narrow attention. The relationship between theories of development and globalization processes were finally brought to the fore, indicating that for Lesotho, the processes are unavoidable as the country stands to gain and lose in the arrangement. Indicators which describe the ideal, desirable process and state are enumerated, based on the state-of-art of agriculture and gender in the country. The framework concludes with a conceptual framework for performance assessment and methodology. Justification is given for choosing a case study technique as a suitable methodology for the study. In addition, approaches which are being adapted are drawn from a number of previous studies in Africa, the Caribbean, (McConnell 1995) other regions, and globally by several international agencies.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter reports on the research design of the study, including the population, sampling and data collection procedures that were employed in the assessment. Performance assessment was conducted as an exploratory research within a case study approach and triangulated data collection methodologies. The Institute of Southern African Studies (ISAS) information services, systems, subsystems and, specifically its mechanisms of handling technical reports on and about Lesotho was concurrently subjected to this evaluative exercise. The chapter describes why and how data was collected from the different groups comprising the population.

As the study intended to make the assessment at three levels, namely at the performance level, effectiveness, and at cost-benefit or the outcome, it was firstly ISAS's input ranging from resources spent on information provision, to information workers' interface with users which were measured. As required by the case study methods and techniques, the survey obtained data from several sources that comprised human and object types of population groups. Measurement procedures comprised observation, studying ISAS operations and checking its official records and gathering views from relevant groups. Determining ISAS's effectiveness and efficiency was assessed through feedback from the actual and potential users, intermediaries, official records and observation as well. Performance of technical reports was evaluated in terms of input that producers and users make and the benefit or lack of benefit from the input made.

Data that informed the study on the cost-benefits or outcome were drawn by means of questionnaires and interviews. Observation as well as data from documentary evidence and the mass media (radio, newspapers and the Internet) was used. Sectorally, the study focused

on agriculture and gender (see section 5.3.3.4). The target population comprised the National University of Lesotho academic community, information workers, senior Lesotho government officials, aid agencies represented in the country and NGOs. The groups were considered as likely to have the information targeted by the study concerning production, sponsoring, distribution, management, use of TRs and ISAS. The groups provided their testimony on the consequence of these listed functions around which performance was being determined.

4.2 Description of population groups

The human population was the main source of data, and it was composed of groups that are described below in conjunction with reasons why they were surveyed. The object type of population includes reports and documentary records.

4.2.1 Description and the rationale for the choice of the human population groups

As stated, the human population constituted five groups of respondents; the academics and information workers of the National University of Lesotho, Lesotho government officials, aid and development agencies operating in Lesotho, and non-governmental organizations (NGOs). The following is the description and the size of the groups that provided data. The methods of selection are described in the subsequent sections, and the total size of respondents was as shown:

Academic community	52
Government officials	23
Aid agencies	12
NGOs	10
Information workers	15
<u>Total</u>	<u>112</u>

4.2.1.1 Members of the NUL academic community

As Auger (1975:8), Ambrose (1984) and Saracevic (1980) assert, academics rank high as producers and users of TRs. For this study, academics of NUL were surveyed in order to determine the extent to which their different categories produce, use and benefit from TRs. NUL academics constitute staff and students in different faculties. Within those constituencies

staff is further categorised according to tasks that range from administration, teaching, research, information management, consultancies to extension or community work. For this study, information management was surveyed separately from the general category. The Consultancy Unit was not included in the same category since its records were also studied separately. The *NUL Calendar 1997-2000* was used as a guide to the existing constituencies and the total size of academics. From that list, as shown below, the survey population was determined according to the percentage indicated in the third column of Table 4.1 below.

Table 4.1 A sampled population from the academic staff

<u>Constituency</u>	<u>Total staff</u>	<u>Percentage surveyed</u>	
ISAS	11	100% =	11
Institute of Extra-Mural Studies	25	33% =	8
Institute of Education	8	50% =	4
Institute of Labour Studies	2	100% =	2
Faculty of Social Sciences	58	33% =	19
Faculty of Law	20	33% =	6
Faculty of Humanities	42	33% =	12
Faculty of Education	29	33% =	9
Faculty of Agriculture	24	33% =	8
Faculty of Health Sciences	2	100% =	2
		<u>Total</u>	<u>81</u>

From the total number of ± 3000 , 3.3 % (1:30) formed the total sampled from the student population which was 100 to be spread proportional to their sizes in the faculties. The total was 181. In order to ensure that all the sub-group of academics were proportionately represented in the sample as Borg and Gall (1983:248) and Powell (1991:68-69) recommend, a stratified random sampling method was used from each of the groups and sub-groups.

Members of this group were questioned on whether, as individuals, they prepare, produce, and generate technical reports; and TRs of what type if they did, how and to what effect. They were questioned on how they read or used them, where, for what purposes and, if they benefit, how.

Views of the academic community were solicited in terms of the performance of ISAS, its role in comparison with other information services and its impact in Lesotho. Appendix 1 is a sample of the questionnaire for this group. Appointments were set mainly by telephone with the sampled respondents so that questions were delivered by the researcher and/or the assistant as agreed, and followup was done after three days. The grand total for a group of academics, minus the information workers, was 181. However, the total number that represented this group was finally 52. As the first intended users of information services, they were surveyed on production, distribution, use and effects.

4.2.1.2 Information workers

Though they were part of the NUL academic community, in terms of assessing ISAS and TRs at the level of effectiveness, intermediaries were surveyed as a distinct group of information workers. In that role, they were well disposed to provide data about where they got their collection from and how, and to tell if their services were utilized.

The group of information workers encompasses documentalists, librarians, archivists and all the professionals working in the information departments of NUL and affiliates. All of them were targeted as staff within

The main (Thomas Mofolo) library (Roma)	14
ISAS Documentation centre (Roma)	4
IE Documentation centre (Roma)	3
ILS Documentalist (Maseru)	1
Faculty of Agriculture library (Maseru)	2
Lesotho College of Education library (Maseru)	2
Faculty of Health Sciences library (Maseru)	1
<u>Total</u>	<u>27</u>

To hasten the process and to ensure delivery, telephone introductions were made with all the respondents who were asked to receive the questionnaires that were hand-delivered by the research assistant. Clarifications were provided by visits for a face to face discussion, and by a further telephonic talk. Incomplete questionnaires were returned by the assistant to solicit

full information. At the end, there were 15 information workers respondents regarding the management side of TRs within ISAS, NUL and Lesotho. Therefore, ISAS was assessed in relation to these neighbouring centres to determine levels of cooperation, if any, as suggested by Serpell (1981). Moreover, the boundaries of the phenomena of TRs and ISAS's specialized service, are not clear boundaries hence ISAS and its neighbourhood were included.

4.2.1.3 The Lesotho government officials

As indicated, ISAS was established with the aim of serving planners, policy and decision makers in the country and the region. For this study, that group entailed senior government officials, namely, senior executives within the civil service. *The Lesotho Telephone directory 2000* lists the Prime Minister's office as a ministry, plus eighteen others that form a structure of the Lesotho government. These ministries focus on all sectors of development for Lesotho: Agriculture; Defence; Education; Finance; Foreign; Environment, Gender and Youth; Health; Information and Communication; Labour and Employment; Law and Justice; Local Government; Planning and Development; the Prime Minister's office; Science and Technology; Tourism, Sports and Culture; Trade, Commerce and Industry; Transport Traffic; and Water and Natural Resources.

A purposive systematic sampling of key officials was made. According to *Women and Law in Southern Africa (WLSA1997:24)*, there is a category of upper senior servant and upper middle rank which cut across the ranks of principal secretaries, their deputies and equivalent or directors. For purposes of this study the level of the mentioned designations is regarded as senior. Officials in those categories were selected at the rate of two officials per ministry, thus making a total of $18 \times 2 = 36$. Responses came from 23 officials. As these tend to be busy executives who are not inclined to lengthy or too technical questionnaires the researcher conducted interviews concerning the role of government ministries in the performance of technical reports (see Appendix 3).

4.2.1.4 Non-governmental organisations

As shown in the literature review, the recent shift toward a 'development with a human face' (UNDP 1991) or a people-centred development has given an impetus to the emergence of various non-governmental organisations throughout the world. They have gained autonomy and access to international aid (Motebang 1999) and influence governments in issues of interest to the civil society (Wichterich 2000). As such they get engaged in several development activities. They were consequently selected as one major group that could inform the study on either or all of the TRs' functions in production, distribution, management, use and the effects, if they experience any in Lesotho.

Representatives of NGOs were selected by stratified methods from the *Lesotho Council of NGOs profiles* which are ideal for heterogenous groups like this one (Gorman and Clayton 1997:127). Organizations of gender, women and agricultural related were chosen as strata that met the purposes of the selected sectors. As the physical addresses of the selected NGOs were problematic, gaps of the inaccessible NGOs were filled by those which attended the *Lesotho Vision 2020 workshop*, and still met the criteria. There is a stratum of recipients of aid for development projects that generate technical reports, and that carry out the executive tasks for the general members. There is a category of members who neither write nor read reports about their organisation, yet may derive benefits or suffer losses for aid and reports generated in the name of their organisation. There are types of organisations which may, though labelled non-governmental, still be funded indirectly by government. These NGOs are self-help, independent associations, big or small communities which are interviewed for raw data by academics or any other section. They are in various forms that are often at the grassroots level and are targets for development related reporting like community-based feasibility studies. Some of these were identified from typical ISAS projects and IEMS community services programmes.

The Lesotho NGO Profile 1993 lists 20,000 members of the Lesotho Council of NGOs. They are not only spread throughout the country, but also change membership rapidly and are unwieldy. Bearing in mind that the study was looking mainly at the agricultural and gender issues, a purposive choice of the NGOs was also made. Regarding gender, it was observed that

by 1993, there were 46 NGOs that were classified as women's organizations (Women and Law in Southern Africa 1997:37) One third of these plus one third of the agricultural ones which were identified in various ways were selected.

The Maseru-based organisations were mainly targeted since they would be convenient to contact by telephone and to reach physically. Also, they were likely to have the characteristic of "authorship and readership" of TRs which was conveniently but not exclusively one method of determining 'use' of the channel. Finally research data was successfully obtained from 10 NGOs. The nature of questions that were prepared for this group ranged from productivity of TRs, distribution, use and the consequence to the organization and members.

4.2.1.5 Aid or development agencies based or represented in Lesotho

The context of the study in chapter two shows that in Lesotho, most of the development schemes were externally funded, implying the likelihood of having this category as another significant producer of the project related types of reports. Aid agencies were therefore surveyed firstly as direct producers and users of technical reports. Secondly, they were questioned as indirect producers and/or users in cases where they sponsored production or use. One respondent was targeted from each of the selected development agencies, programmes or their representatives that are based in Maseru. Though the total target was 20, the final response came from 12 which will be described in the next chapter. These agencies were questioned on the level of their involvement in the performance of TRs pertaining to Lesotho. By appointment with informants, the researcher conducted face to face interviews with all of them except one who preferred to reply on the faxed interview schedule.

4.2.2 Records and documentary materials

The survey included documentary materials such as official records, statements, statistics, annual reports, policy and position paper, budgets, sample TRs produced, and pertaining to performance of ISAS. ISAS 's annual reports, catalogue of publications and the *NUL Statistical bulletin, information flash* are the examples of sources that provided data.

During interviews, upon an affirmative response that an agency or government department produced a particular type of TR, a researcher made a request to be shown, lent or be presented with a copy for further scrutiny of the report. In this manner sample materials were collected which also formed sources for the case of study. The validity of this technique depended on availability and quantities of copies provided as examples, by producers. The number could not be ascertained prior to data collection. Finally there were 15 titles and four lists of publications on the one hand indicating organizations or information centres to which TRs were distributed in Lesotho. These TRs were studied in terms of availability at ISAS and in meeting the desirable requirements like numbering. They are described fully in Chapter 5.

4.3 Reasons for a choice of an exploratory case study methodology

The phenomenon of specialised centres handling technical reports as a channel for development information, and in development-oriented organisations, was studied, observed and described, according to the given theoretical framework of a case study method.

An exploratory case study was chosen as a methodology, an approach and a technique, with a concomitant body of theory, in order to enable the researcher to get an insight and detailed information on the TRs, ISAS and Lesotho situation. The multiplicity of definitions and the understanding of case study techniques which were found befitting and applicable to this study were as follows:

- ▶ "an in-depth study of cases under consideration" (Hamel 1993);
- ▶ "an enquiry that investigates a contemporary phenomenon within its real-life context";
- ▶ "more or less intensive investigation of one particular individual, group, organisation, or locale" (*A dictionary of social science methods*: 1983:8);
- ▶ a "popular form of qualitative analysis" that "deals with processes that take place and their relationship" (Kothari 1990:144). Performance assessment of TRs as a channel of information for development surveyed the information management of TRs and their relationship with the effects which were taking place at ISAS and Lesotho. As well, those processes corresponded to Machlup's (1980:8-9) understanding of "information

as a process” while knowledge denotes the content, and that influences production/productivity and development (Guiliano 1981);

- ▶ “case studies constitute the perfect type of sociological material as they represent the real record” according to Kothari (1990:145). ISAS, NUL and Lesotho constitute a real case. As such, it is a natural environment which allows a “naturalist approach” according to Weingand (1993) and one that Sturges and Chimseu (1999) applied in Malawi which like Lesotho exists in a relatively similar southern African situation;
- ▶ case studies are used “to generate findings of relevance beyond the individual case”. It was not ISAS alone whose phenomena of handling technical information for development was being studied. The Lesotho case study involved the relationships around production of technical reports, efficient or inefficient handling, use or non-use as well as the outcomes with special reference to the agriculture and gender sectors, all of which were expected to have outcomes beyond ISAS,
- ▶ a case study attempts to illuminate “decisions” about such objects as “individuals, organisations, processes, programs, neighbourhoods, institutions, even events” (Yin 1994:12-1). Yin (1994) moves on to say a case study enquiry therefore “relies on multiple sources of evidence with data needing to converge in a triangulation fashion, and maintaining a chain of evidence.

The technique was employed by the researcher, who probed deeply and analysed intensively phenomena that constitute the life cycle or history of managing TRs at ISAS as the unit, and how information channeled in those TRs pertaining to Lesotho was managed from production to the ultimate. An understanding from that view could be applied to a wider population of specialized information services (see section 1.1.7.1) to which the unit belongs (Cohen and Manion 1994:106), namely a group, community, clique of research centres that aim at specialising in technical reports service. ISAS, a selected unit that was understood to share characteristics with a number of information centres existing widely as described in Chapter 1, sections 1.5 to 1.6, and chapter 3 section 3.4, provided the focus for the case regarding it handling of TR literature.

The case study definitions complemented each other by emphasising in-depth, intense, detailed, comprehensive, exhaustive investigation, enquiry, study of real-life similar phenomena, or cases through one or more, in order to generalise where applicable. Based on the case study aims and mechanisms, a research design was arrived at to assess whether ISAS and its technical report were performing as expected, and in order to draw conclusions for predictive, therapeutic and administrative purposes (Kothari 1990:144; Gorman and Clayton 1997:97).

Where a case study is also an exploratory research, it demands several possible angles of collecting data. Sturman (1997:62) indicates that case studies are more likely to be concerned with pattern explanation than deductive. Likewise, Stoecker (1991:89) points out that case studies are inductively attempting to understand social life. Both points were applicable, because from a pattern, inductively drawn projections might be made. Stoecker (1991:139) goes on to say a case study is the best way by which a researcher can refine a general theory, then apply effective interventions in complex situations. He finally clarifies what he terms the “two dualisms confused in both the debate over case study and its definitions”, which are quantitative versus qualitative split on the one hand and inductive and deductive split on the other. Stoecker (1991:99) concludes that a case study “can employ the best of both”. Seeing that the suitability of the technique was stronger than otherwise, the Lesotho case study attempted to apply a similar dualism.

4.3.1 The purpose, advantages and disadvantages of the case study method

Nyamato (1999:4) noted the disadvantage of a case study approach as situation and time bound, and requiring immense data which can also be difficult to analyse. The indisputable issue of immense data was noted. But a time-bound aspect as a disadvantage did not apply since the case study also made reference to comprehensive statistics, experiences and records spanning over ten years, and thus making a continual instead of sporadic data collection. The study was not a post-test only as it also evaluated how TRs were performing the time of the study. The purpose was tallying with Mchombu's (1995:91) view that to measure impact [or performance] effectively, a researcher must monitor the process while it is on, and not wait to measure the end-result or post-test only.

The case study technique, its purpose and advantages have nevertheless been a subject of controversy for a long time (Hamel 1993). The one-shot case study, for instance, has been criticized by various researchers as extremely weak, yielding meaningless findings, and a post-test only (Borg and Gall 1963:491; Powell 1993:131; Neuman 1994; 1997:177; Bless and Higson-Smith 1995:68).

Critiques of this method and approach have also argued that one single case in a given setting lacks enough representativeness to allow generalisations from its findings to other different settings. Those who advocated the method contrarily argued that case study theory firstly enables a researcher an intense experience by which one may explain, contrast and compare like or unlike situations with ease. Secondly, to do so, a case must be constructed before it is validated. Godelier too, (1982:3) further clarified "any science must be able to reconstruct facts, give them meaning within the scope of... theoretical framework, and using a set of review procedures, provide analytical method". Within the context of this case study, a broad based understanding has been established between information and development as argued by Stone (1993). The study revisited that exercise as used by Stone (1993) before arriving at the widely embraced relationship between information and development.

Mini (1997) applied a one-shot case study technique comprehensively and successfully in a library situation which was not very different from the ISAS information service, as it existed in South Africa. In the Lesotho case study, in order to strengthen the validity of findings, ISAS was studied in relation to other NUL libraries and within the larger Lesotho information scene.

A combination of a case study and an exploratory research has its own disadvantages however. Elaborating on an argument raised by Rice-Lively (1997), Leach (1999:74) pointed out that the methodological perspective considered in the study was broadly qualitative, and exploratory would fall under that. He observed that one of the problems associated with the use of interviews under this methodology is that of the large amount of data retrieved and the subsequent difficulty of data analysis. This point was well noted.

As a result, though interviews were included, other potentially useful methods that are normally too demanding and elaborate such as focus groups were not applied. As well, in order to collect illustrative data (depicting a situation in its real life), consideration was made even before collecting from the field how it would later be organised and analysed coherently. Strauss (1987) further cautions researchers about common problems pertaining to case study data collection and presentation. Such problems as data flooding, line-by-line analysis, sometimes lack of dimension or central issue, were noted, hence the application of the pre-coded structured questionnaires which results in data that is easy to analyse statistically. Amidst such controversies, more advantages were discernible than disadvantages. They have been enumerated in the latest publications by several social scientists (Adelman 1980; Stoecker 1991; Neuman 1994; Sturman 1997). Of interest here are the attributes which a case study has as a tool for assessments and evaluations. Yin (1992) like Stoecker (1991) shows that a case study allows triangulation methods, and can serve evaluation needs directly by being able to assess outcomes and test hypotheses. The above mentioned advantages plus many other features of the case study method made it appropriate for this study.

4.3.2 Reasons for selection of the site

As illustrated in the previous chapter, in Southern Africa there is a cluster of similar information centres such as CAS in Zambia, IDS in Zimbabwe, after the absorption of NIR and SSRU by the main university libraries in Botswana and Swaziland respectively. They form one cluster that could be studied jointly or separately or comparatively. The reason for selecting ISAS is that it is typical of that group of specialized documentation centres which handle technical reports. It was made a case in order to study it in-depth so as to explore in a sharper focus and holistically what was going on there, to assist in diagnosing the seeming problems and solutions, as well as to make generalizations on similar situations regionally and, possibly, also globally.

Disadvantages of a case study include the likely biases. ISAS was not the only typical case. In this study, the evaluator's choice, familiarity and interest in ISAS was supported by all other facets that the phenomena displayed in the site. Familiarity with the site might arguably allow

subjectivity and invite a question of credibility. In disputing such concerns, Sturman in Keeves (1997:64) quotes Wilson (1977) who argued that “a case study, especially ethnographic, challenges the traditional stance of the objective outsider, personal judgement forms an essential part of all science, and is neither objective or subjective”. The researcher’s involvement should thus be scientific not subjective and the site of ISAS was therefore selected.

4.4 Library-centred impact indicators and measurements

The research methods used in this study borrowed heavily from philosophies of assessments that are advocated by the IDRC. The first of these is that of *Measuring the impact of information on development* (Menou 1993), secondly is *Assessment indicators and the impact of information on development* (Stone 1993), and third, is *Making a difference - measuring the impact of information on development* (McConnell 1995). In all these works comprising over seventeen cases mainly from Africa and the Caribbean, assessment focused on the inputs and costs, or the outcome; then on the effect or impact of information services and systems on development. In the majority of these case studies researchers applied more or less the same approaches which have been embraced for performance assessment of technical reports as a channel of information for development in the Lesotho case study.

In specific terms, Chambers and Boissier (1995:103-122) focused on the impact of information on policy formulation in the research institutions in the Caribbean, and applied three levels of assessment, namely, performance indicators, effectiveness and impact indicators. Another similarity in both studies was the focus on information and its relationship to research. In the Caribbean as well, it was noted that research activities were uncoordinated, and dispersed throughout the university and government structures. The case study looked at information use and policy-making by groups almost similar to that of the current study. The study in the Caribbean focused on the groups as beneficiaries from the outset, but the term “beneficiaries” has since been criticised (CTA 1995:7), on the basis that all the groups, whether producers, users or not, are supposed to be “beneficiaries” in one way or other. This was the point of departure for the Lesotho case study which surveyed all the groups in terms of their

respective tasks: for producing and distributing information management and 'use'. Thereafter, a question could be asked if there had been beneficiaries and if they had performed any of the those functions.

The current study also drew a little from Mchombu's (1995:87-103) research which was closer to Lesotho in some respects. It covered countries of southern Africa, namely Botswana, Malawi and Tanzania, and it assessed the impact of information on rural development. This study differed in that it was not specific to a 'rural', but rather a 'development' focus. The former concentrated on two levels of performance. The first was efficiency and effectiveness, while impact measurement was the second. For the latter, the study showed the importance of monitoring the process of information delivery right until its use in order to assess the impact, or end result. That is why in the Lesotho case study, 'use' as defined in Chapter One denotes all those functions that commence from the production or the generation of technical reports as the channel of information. Regarding the study of the *Impact of the Semi-Arid Tropical Crops Information Service (SATCRIS) at ICRISAT*, Haravu and Rajan (1995:48-69) evaluated a system as well as its products the same way that ISAS and technical reports were concurrently assessed. The SATCRIS/ICRISAT report covered the variety of user-groups and services in the agricultural field whose activists are often found to be diverse (Aina, Kaniki, Ojiambo 1995; CTA 1995, 1999:97).

Whereas the SATCRIS/ICRISAT study applied all the five levels of measurements as contained in the framework of Menou (1983), the levels of this study conveniently, and for a sharper focus, adapted the approach to use three levels of performance. Furthermore, at the stage of methodologies, "user" has rather been narrowly applied by the SATCRIS/ICRISAT study. In the Lesotho case study, the term 'user' has been avoided in other levels but applied at the information consumption level, and even then, applied for lack of a better word, for in the entire chain of TRs evolution, producers, experts and intermediaries have been described as 'using'. Authorities whose intention is to establish information system and their technical reports services, also 'use' TR to achieve the set organizational mission, objectives and aims.

Finally, another lesson learnt from both of these studies was testing if 'users' make progress, if they are well provided for with information services, systems or their products. Respondents in the current study were therefore probed concerning benefits.

Outside the aegis of IDRC, the same methodologies were reiterated by Menou under the auspices of CTA (1998:23-24), in *Assessing the impact of information and communication management on institutional performance*, where emphasis was on the field of agriculture. Again, the methodologies were compiled and discussed by Feeney and Grieves (1994) with regard to the United Kingdom experiences. Therein, three examples were a lesson to this study on performance of TRs. The first was Marshall (1993) who assessed the impact of information services on decision-making. Administrators and physicians were sent self-administered questionnaires on inputs and outcomes. Impact measurements were used. Collier (1993) reported about *The impact of information on the management of a large academic institution*. The principle of looking at the cost during the assessment still obtained. However, Collier focused on the cost of managing faculties and their courses, a dimension which did not apply to a library management and its products. A third example is offered by William (1993) who looked at the stakeholders' perceptions about the library in their work. The Lesotho case study used the same technique of assessing the performance of ISAS, from the groups that were covered by the Institute's mandate.

4.4.1 Total quality management

As ISAS provided a unit of analysis, Total quality management (TQM) was examined for likely examples of assessment. Orr (1973), Pritchard (1996) and Weingand (1998) write about total quality management - and TQM theory. The TQM approaches and criteria read as closely related to those of assessments and evaluations. TQM was not found to be strong in describing the stages of production, processing, use and impact with a view to diagnosing and making value judgement. In critiquing TQM methods for not being user-oriented, Lancaster (1993:305) further argues

While this type of activity is undoubtedly valuable, it is difficult to see how a service organization can commit itself to 'quality' without collecting data reflecting the success or

otherwise of its service.

4.4.2 Benchmarking

Another method that was considered for assessing performance of ISAS and TRs was benchmarking. According to Allan (1993:123-30), this is a way of weighting and comparing performance by measuring progress against high standards set by industry “best practices” (Benchmarking 2001). Since neither ISAS nor any library in Lesotho has set formal standards by which to assess or compare, the method was found inapplicable. However, benchmarking was applied in assessing and comparing the performance of TRs in terms of the international conferences that are used as a development strategy. For the current study, therefore, the first task [was] revolved around that of collecting data to enable a performance assessment.

4.5 Triangulated methods of data collection and the instruments used

Case study methodology demands an intensive approach. The study was designed to apply qualitative as well as quantitative methods and therefore required a holistic view. This approach also suited a *triangulation* technique, which according to Terre-Blanche and Durrheim (1999:431) applies multiple methods such as participant observation, questionnaires, surveying, interviews, and review of documentary materials. Semantically, triangulation implies tackling from not less than three methods, utilising a variety of positions and procedures. Yin (1994:13), agrees that triangulation, especially for a case study, is an all-encompassing method to increase the reliability of data collected. The method which has apparently characterised much social research, and as confirmed by Gorman and Clayton (1997:31), is described as enriching research findings. The use of triangulation was seen by the researcher as offsetting some of the negative aspects of the case study approach. Where relevant situations presented themselves and converged into the survey, indirect observations were also made.

4.5.1 Questionnaires

According to Rea and Parker (1997:27) “there is no questionnaire that can be regarded as ideal for soliciting all the information deemed necessary for a study. Most questionnaires have inherent advantages as well as inherent flaws”. Both open and closed questions were used for the study. Where straightforward responses were expected, closed-ended questions were

prepared and coded. In cases where varied views were sought, open-ended questions were asked so as to get as wide a response regarding people's experiences as possible, for they are "the most effective route to that end (Silverman 1993:10).

Structured questionnaires were designed in the order of the objectives of the study, and they were administered on the group of information workers and members of the academic community. The reason for sourcing information from these groups in this way was to afford them time to answer all the questions. Moreover, they were thought to be easy to access, and they could also seek clarification from the researcher who was based within their reach. While on the one hand the advantage was that the respondents were given ample time to attend to the questions, on the other hand the disadvantage was that reminders had to be made to return the distributed data. Again, where some respondents did not understand the question, they normally did not have an instant chance to seek clarification.

4.5.2 Interviews

In order to elicit more data about the phenomenon being studied, both structured and open-ended interview protocols were scheduled for government officials, aid agencies and the NGOs. Yin (1984) assures that unstructured interviews which just pose topics and sub-themes at interviewees tend to benefit more from the latter who thus become 'informants' instead of respondents who are likely to be restricted to the structured questions. For advantages and disadvantages already shown above, a balance was struck within the study, whereby in between structured questions, more discussions on the topic frequently ensued with respondents. There was a blend of both open and closed-ended questions. The disadvantage was that only two respondents agreed to being tape-recorded during the interviews. That kind of sensitivity was common among the senior government officials. As a result, talking and taking notes was cumbersome, and at some stages, points were bound to be lost. Appointments were confirmed prior to every visit, despite that some appointments would not be honoured. One aid agency preferred to be sent the questionnaire by fax so that they could respond as an office and at leisure. In that respect, interviews proved to be costly in terms of time, travel fees and in other respects.

That was why, in order to cut on costs and to be on time the researcher ensured that:

- ▶ there were no telephone interviews
- ▶ there were no email interviews and questionnaires, especially because, though such modern facilities tend to be convenient, they are as yet not widely available in Lesotho
- ▶ there was no comprehensive note-taking from respondents who talked fast, and tape recording was used only a little where it was permitted, so as to observe a code of ethics as urged by many, including Dixon, Bouma and Atkinson (1987:164).

4.5.3 Observation

Kothari (1990:119) recommends unstructured observation for exploratory studies as opposed to structured which are suited merely to descriptive research. Consequently, informal, unobtrusive even participatory types of observation were made. At irregular intervals the researcher participated as a desk assistant, especially at ISAS, and as a borrower in other NUL centres. A direct or systematic observation was avoided. Webb, Campbell, Schwartz and Sechrest (1966:139) caution that whilst on a systematic observation for a particular question, an observer may naturally get tired, bored or through distraction of some kind, miss one important issue. Playing a double role of being a researcher and a desk assistant systematically in this manner would have therefore run such a risk. Indirectly a visitor of user or borrower, the researcher observed the information centres, *inter alia*, with a view to assessing the service quality in handling technical reports. The criteria that are supported by Pinder and Melling (1996:32) as involving responsiveness, competence, courtesy, communication skills and methods of checking speed and success in document delivery or “fill rate” and as proposed by Poll and Boekhorst (1996) were taken into consideration in the Lesotho case study.

4.6 A pretest of instruments

Prior to the data collection, the two sets of questionnaires and three sets of interview protocols were tested on three persons drawn from the intended groups. All were returned with no major structural or semantic queries. A common concern pertained to ambiguity on Special Committee Reports for the NGOs and aid agencies. Both groups were linked to various

committees within and outside the country but authors of TRs for those committees might not often involve the Lesotho offices/branches or chapters, or beyond. In some cases they did. The type was found too unwieldy to be assessed by the NGOs and aid agencies. During the pretest, the training of the two assistants was concurrently done. But later, research assistants were released as the intricacies of research required the researcher herself to tackle.

4.7 Data collection procedures

Various procedures were applied as there were several sources of data to be contacted in line with the requirements of a case study methodology. Pre-tests started during the last two weeks of November 2000. By the first week of December only a few questionnaires had been sent, and the period coincided with the vacation. The distribution started in full swing in January 2001. Questionnaires were distributed through the NUL internal mail system for the academic community and information workers based at the main campus at Roma. The researcher and two research assistants hand-delivered another batch of questionnaires to respondents working in the Maseru campus. Though training of research assistants also involved them in the initial distribution of questionnaires and taking appointments, assistants were later abandoned as the demanding procedures of case study became rather daunting to them. The researcher proceeded on her own in order, also, to get full experience of the reactions and difficulties that respondents might face regarding answering the questionnaires (Mukangara 2000:107).

These distribution was followed up by telephone enquiries to verify that the instruments reached the addressees. That gave assurances to the researcher as well as to respondents who needed to seek further clarifications. Explanations were sent where needed and extra questionnaires were sent to those who indicated after some weeks that they had misplaced their copies.

Telephone and face to face appointments were requested from government ministries, aid agencies and the NGOs. In most cases, the researcher was given a later date, especially after the Principal Secretary had identified the actual respondents and advised them of the research, as happened with the Principal Secretary of Finance. In few cases contacts were ready for

interviews at the first face to face meeting. As stated, interview protocols included both structured and unstructured questions. By answering unstructured or open-ended questions, interviewees from the government departments, aid agencies and the NGOs served as informants, providing as full and unrestricted information as they could. In a way, they were discussions with the researcher. At the same time, structured questionnaires through closed questions were faster and later easier to analyse.

Unsystematic observations were conducted upon all the groups, whilst attention was also paid to other sources in the media. In particular, the NUL information centres were visited at irregular intervals to experience the service provided by intermediaries and that received by the users. Records from NUL, government, aid agencies and NGOs were referred to in order to triangulate data collection. As it will be elaborated in the data presentation, requests were made for the sample TRs produced by government ministries and aid agencies. The purpose for requesting the sample was three-fold:

- ▶ to find out where the TRs under discussion were kept and how respondents retrieved them
- ▶ to obtain evidence that the term describing any type of TR mentioned was understood and categorized by respondent
- ▶ to afford the researcher an opportunity, to further look at the obtained sample of reports in terms of their subject/discipline, audience, format and such matters of relevance to the performance of TRs pertaining to Lesotho.

During data collection, an attempt was made on a daily basis to continue sorting data as it came in by five files, note-keeping and compilation of documentary materials. This enabled data cleaning in advance.

After more questionnaires had been resent to non-responding academics, subsequent to several reminders for the returns of questionnaires, further in-coming of data was given up by the 31st March 2000. The first round of data entry was started and completed in Lesotho in order that

the researcher could verify that sufficient data had been collected whilst she was still close to the collection field.

4.8 Data analysis

Questionnaires and interview protocols were arranged separately and numbered. Appropriate SPSS files were opened for Academic community, Information workers, Government officials, Aid agencies and the NGOs, and therein the pre-coded responses from closed questions were entered. The SPSS enabled data analysis as well as the generation of figures as appearing in the next chapter. For open-ended questions, content analysis was made whereby major themes were drawn from the diverse responses. As Leach (1999) indicated, some data from open-ended questions were difficult to reduce for analysis, and therefore not easy to consolidate.

The next chapter provides that analysis in detail.

4.9 Evaluation of the methodology

An exploratory survey methodology through a case study technique and approach was used in this performance assessment of technical reports as a channel of information for development. Through an exploratory survey, an assessment was carried out of two units of analysis, namely, technical reports and an information centre, ISAS. Sources of data for that assessment constituted individuals and groups that were the actual and potential users of both TRs and ISAS. In that way, a large and diverse kind of population was surveyed. However, according to Mukangara (2000:107), survey methodology is an excellent vehicle “for measuring attitudes and orientations in a large population”. The methodology applied was consequently suited to this assessment which was wide-encompassing, not only in the size of its population, but in its number of variables, namely production, use, management, benefits. The researcher was able to experience through a live situation what was going on in ISAS, at NUL, and in Lesotho more generally where TRs were produced, used or not used.

Using the triangulated sources, the method was successful in collecting as much comprehensive and in-depth data as was desirable in, and as required by, the case study methods; and through a "holistic" approach that Strauss (1987) recommends. Respondents provided their testimony

on the functions of TRs and ISAS. Evidence converged to indicate aspects of production, management, use, non-use and the impact. Nevertheless, the exploratory case study method, as Leach (1999) and Nyamato (1999) cautioned generated massive data that required meticulous sorting and reduction. Upon sieving, information collected enabled the researcher to draw conclusions for predictive, therapeutic or administrative purposes (Kothari 1990:144; Gorman and Clayton 1997:97).

4.10 Summary

The chapter has presented the way the study was designed, which is to collect data quantitatively and qualitatively from the human and object types of research population in Lesotho. Focus was first of all laid on the description of the total population and the corresponding samples which were used to source data. Five groups of respondents emanated from the human population, and two groups of TRs came from the donated sample and from the examples that were mentioned by respondents in various ways. Secondly, the description was made of a case study method, technique or theory as a design for collecting data. Advantages were stated for choosing a case study method as opposed to other techniques. Disadvantages of a case study were, however, noted and mechanisms of overcoming some of them were highlighted. Discussion then delved in the nature of this study as exploratory, and implication of that combination of a case study and exploratory research. There was one major approach of choosing technical reports to be analysed. This was as depicted in Appendixes 3 and 5 for government officials and aid agencies respectively, from whom sample copies of TRs were obtained. The chapter made a detailed description of triangulating research through observations, interviews, questionnaires, records, to whom they were applied, and why. The design concludes with means and ways that were employed to analyze the collected data in this case. Both the manual content analysis method and computer programmed software called Statistical Product for Support Services (SPSS, formerly called Statistical Programme for Social Sciences) were identified and applied. Interpretations, extrapolations and drawing of conclusion were made by inductive and deductive inferences where each logic fitted.

CHAPTER 5

FINDINGS OF THE STUDY

5.1 Introduction

This study aimed at assessing the performance of technical reports (TRs) as a channel of information for development, using Lesotho as case study. The specific objectives of the study as outlined in Chapter 1 were:

- ▶ to determine the production and distribution of technical reports in Lesotho
- ▶ to determine the adequacy of ISAS mandate with regard to technical reports
- ▶ to establish mechanisms used by ISAS to manage technical reports
- ▶ to assess the effectiveness of technical reports management by ISAS
- ▶ to determine use, and or non-use of technical reports managed by ISAS
- ▶ to establish cost-benefits from technical reports pertaining to Lesotho

The data for the study were collected from a population that consisted of five groups, namely, the National University of Lesotho (NUL) academic community and information workers of NUL and one affiliate, the Lesotho College of Education, plus the Lesotho government officials, aid agencies represented in the country and non-governmental organizations.

This chapter presents the findings of the study obtained from these groups as well as from documentary sources and observations. The first part of the chapter presents the description of the population and provides demographic data for the three groups, namely government officials, information workers and the academic community. It also presents the detailed description of the two institutional groups, which are the aid agencies and the NGOs. The types of technical reports that were found in the survey are simply enumerated as their discussion comes later. The rest of the chapter is organized according to research questions and data collected that generally pertain to the production, distribution, management, use or non-use of technical reports, and the effect of all these functions.

Data from these groups were collected through three sets of questionnaires and two sets of interviews. These data were analyzed with the assistance of Statistical Product and Service

Solutions (SPSS) for windows, version 9.0, which was formerly called Statistical Package for the Social Sciences. The data are hereby presented, starting with types of the target population.

5.1.1 Characteristics of population and respondents

The study targeted five main groups. Table 5.1 below presents the data on the total population by survey groups, respondents in each group and the percentage of response rate.

Table 5.1 Target population and respondents by survey groups

<u>Survey group</u>	<u>Contacts made</u>	<u>Respondents</u>	<u>Percentage</u>
Academic community	181	52	28.7
Government officials	36	23	63.8
Information workers	21	15	71.4
NGOs	15	11	73.3
Aid agencies	15	12	80.0
Total	268	113	42.1

The lowest (28.73%) response rate was from the biggest group, the academic community, while the other four groups responded at a satisfactory average rate of 72.16%. The groups are then described according to their characteristics per group.

5.1.1.1 The academic community

One of the main groups surveyed was the academic community since it is the most likely group to produce and use TRs. The academic community was made up of full time members of academic staff and students at the National University of Lesotho. For the purpose of this study, the group included the teaching, research and key administrative cadres in Lesotho who totaled 247. An attempt was made to contact at least a third of each academic constituency. Full time postgraduate and undergraduate students were targeted as part of the academic community. Student enrolment at NUL in the academic year 1999/2000 was about 2300. As stated in the methodology, two percent, or a total of 100 of student population were sampled, whom, together with staff, made a total of 181 cases.

5.1.1.2 Information workers

Information workers comprised librarians, documentalists, archivists and similar professionals who act as intermediaries at the NUL and NUL-related information centres where channels of information such as technical reports are likely to be managed. Fifteen information workers responded to the questionnaire. These information workers were drawn from seven centres, three of which were located on the main campus at Roma. They are the NUL main library (Thomas Mofolo), ISAS and Institute of Education Documentation Centres. Four were located at the Maseru campuses, and they included the Faculty of Agriculture branch library, Institute of Labour Studies Documentation Centre, the Maseru branch library that is housed at the Institute of Extra Mural Studies, and the library of the Lesotho College of Education.

5.1.1.3 Government officials

Data were collected from another distinct group of potential producers and users of TRs, namely, the senior government officials. Two government officials were drawn from each of the eighteen government ministries, and were included in the survey. Thirty six contacts were thus made at the level of either principal secretary, deputy or the immediate chief executive. The exceptions were the ministries of Finance and Planning where more than two officials per ministry were surveyed. This was because more than two interviewees were at once readily available and their sections offered uniquely different perspectives. At one interview, two officials opted to respond on behalf of their office jointly and at the same time. Demographic details supplied related to the most senior official. Non-responses were experienced from four ministries, namely, the Employment and Labour, Local Government, Home Affairs and Defense. The actual names of the ministries represented in the survey are reflected in Table 5.6 below in the section that covers the description of respondents by designations.

5.1.1.4 Non-governmental organizations (NGOs)

A sample of NGOs to be surveyed for the study was generated through a purposive sampling technique. Fifteen organizations located in and around Maseru which had a bearing on either or both agriculture and gender and interacted with other groups in one way or other, were targeted. The only available sampling frame, *The 1990 Lesotho NGO's profile*, was used at the time of research design though it proved to be out-of-date in parts, particularly with respect to the contact addresses. During the field work, the researcher identified and located three

more relevant NGOs and these were added to the study. The draft list of the NGOs invited to the stakeholders symposium on *Lesotho vision 2020* held by the Lesotho government in Maseru in January 2001 provided one additional source of information about the NGOs. From the two lists, the researcher contacted 17 NGOs and 11 responded.

5.1.1.5 The aid agencies

For the purpose of the study, aid agencies were defined as international organizations represented in Lesotho as donors, development partners, or special agents for cooperation through diplomatic missions accredited to the country. From the total of twenty two agencies that appeared in the *Lesotho telephone directory 2000* and the Ministry of Foreign Affairs diplomatic list, contacts were made and twelve interview protocols were completed.

5.1.2 Demographic characteristics

As it was expected that the performance of technical reports would be affected by the demographic dynamics of respondents, demographic data were sought from all the human population. Some data were comparable among different groups. For instance, age and gender were pulled together from among the three groups and academic qualifications for the information workers and government officials were looked at together. Other demographic data were unique to particular respondents like the NGOs and aid agencies only. These details are presented separately for a group or combined for groups that responded to some common questions.

5.1.2.1 Distribution of respondents by age and gender

This sub-section deals with the demographic data of the academic community, government officials and information workers. Respondents were firstly questioned about the age groups that they belonged to and their gender. Table 5.2 shows distribution of the population for the three groups by age and gender.

Table 5.2 **Distribution of respondents by gender and age group**
N = 90

Gender	Age of respondents in years					Total
	Unspecified	30 and below	31-39	40-49	50 and above	
Male	1	9	4	15	5	34
Female		9	8	26	13	56
Total	1	18	12	41	18	90

The table indicates that there were 56 (62.2%) females as against 34 (37.8%) males in the survey. To the nearest whole, the figures make a ratio of approximately 2:1 females to males. That gender ratio determines gender variations in the study. Within the academic community alone the numbers were 31 (59.6%) females and 21 (40.4%) males. The government officials' gender distribution was 15 (65.2%) females and eight (34.8%) males, while the figures for information workers were 10 (66.6%) and five (33.3%) for females and males respectively. In all these cases the population pattern reflects a higher proportion of females than males, and this pattern in turn generally prevails in the gender ratios both at NUL (*NUL Annual Statistical Bulletin 2000*) and within the country (*1996 Population gender statistics: 6*).

Amongst the three communities surveyed, the largest age group was the range 40 to 49 years with the total of 41 (43.3%). It was followed by those below 31 years, comprising 22.9% of the population. The largest age group in the survey also generally corresponds with the economically independent group as existing in the labour force within Lesotho, according to the same 1996 Census. The other age groups that became symmetrically smaller on either side of the largest group made a statistically normal distribution according to Rose and Sullivan (1993:89). This age distribution pattern in the work force is an issue that is worth noting especially at the stage of making inferences that pertain to development.

5.1.2.2 Academic community statuses, gender and age

Mindful of the fact that one's academic status may have an effect on one's disposition towards TRs, the study asked members of the academic community to specify their status at NUL. The aim was to determine if a respondent was staff and if so, of what academic rank, or if he/she was a student, and to indicate whether he/she was at the undergraduate or postgraduate level of study. Responses are given in Table 5.3 indicating the status by gender and age groups.

Table 5.3 Academic community statuses, gender and age groups**N = 52**

Statuses at NUL	Gender	Age groups of respondents in years					Total
		Un-specified	30 and below	31 - 39	40 - 49	50 and more	
Undergraduate students	Male		5	1	2		8
	Female	1	9	3			13
	Total	1	14	4	2		21
Postgraduate students	Male			1			1
	Female		2	1	2	1	6
	Total		2	2	2	1	7
Lecturer	Male			1	3	1	5
	Female		1	2	4	3	10
	Total		1	3	7	4	15
Assistant Registrar	Female				2		2
	Total				2		2
Sen. Lecturer/Research Fellow	Male				3	2	5
	Total				3	2	5
Senior Assistant Registrar	Male				1		1
	Total				1		
Associate Professor	Male					1	1
	Total	1	17	9	17	8	52

The total figure for the status of the academics along the Y axis were in excess by one because of a member who stated that he was both student and staff while on study leave. Understandably, more (14) undergraduates were found to be in the younger rather than the older age groups. Senior academic ranks such as a senior lecturer were mainly within the 40 - 49 age group, and rank increased with the age of academics. At a senior lecturer level and above, the majority tended to be male. At the lecturer's level there were three females to two males, but at the next senior lecturer's rank, there were five males and no females, indicating that the males move faster than the females to the ranks of seniority. This discrepancy was found, notwithstanding the fact already shown, that there were fewer males than females in the survey, at NUL and in the country, especially within the age group of 40 to 49 years old.

5.1.2.3 Government officials designations at work by gender

Determining use of technical reports among senior government officials was of importance to the study. It was therefore necessary to describe this population group by all relevant demographic characteristics that were likely to influence use and perceptions of technical reports. Respondents were asked to specify their positions at work and their gender.

Frequencies of responses from the academic community indicated that from the total of 52 respondents there were 25 (48.1%) staff, 26 (50%) students and one (1.9%) a staff member on study leave at NUL, who thus belonged to two categories at the same time. In Table 5.3 above, statuses for the academics which were also cross-tabulated by gender and age meant a clear-cut progression in rank from undergraduate student to professor. With regard to government officials, designations were, on the contrary, not easy to categorize. However, an attempt has been made to list them according to seniority in the civil service where acting principal secretaries are above the deputies who are followed by directors, then the deputies and the rest. Those positions are listed in Table 5.4 as they were stated together with the respective ministries and the gender of the officials.

Table 5.4 Designations and gender of government officials

<u>Title of designation</u>	<u>Name of the responding ministry</u>	<u>Gender</u>
Principal Secretary -ad interim (ai)1/		
Deputy Principal Secretary	Ministry of Agriculture, Cooperatives and Land Reclamation (MOA)2	Male
Deputy Principal Secretary	Ministry of Development Planning	Male
Deputy Principal Secretary	Ministry of Natural Resources	Male
Auditor General	Parliament, and Ministry of Finance	Male
Chief engineer, rural roads	Ministry of Public Works and Transport	Female
Director and Deputy Director	Ministry of Public Works and Transport	Male
Deputy Accountant General	Ministry of Finance	Female
Director, Customs and Excise	Ministry of Finance	Male
Director Human Resources	Ministry of Public Service	Female
Director, Trade, Marketing (ai)	Ministry of Development Planning	Male
Director of Planning	Ministry of Health and Social Welfare	Female
Director of Youth	Ministry of Environment, Gender and Youth Affairs	Female
Director of Culture	Ministry of Tourism, Sports and Culture	Female
Director (ai)/Deputy Director		
Food Management Unit)	Prime Minister's Office	Female
Deputy Director	Ministry of Communication, Information and Broadcasting	Male
Deputy Chief of Protocol	Ministry of Foreign Affairs	Male
Chief Planning Officer	Ministry of Education	Female
Chief Education Officer	Ministry of Education	Female
Chief Economic Planner	MOA	Female
Chief Legal Officer	Ministry of Justice, Human Rights, Law and Constitutional Affairs	Female
Principal Economic Planner	Ministry of Development Planning	Female
Statistician	Ministry of Health and Social Welfare	Female
Collector of Tax	Ministry of Finance	Male

1. ai - ad interim, means that an officer is not substantively in that designation, but rather, acting.

2. MOA - Ministry of Agriculture

The fact that in the hierarchy of each ministry the topmost civil servant was commonly the principal secretary who was then followed by a deputy and/or the chief executives, shows that the respondents covered in the survey were senior as they were the second or third in seniority. Taking into consideration that the ratio of females to males in a population was about 2:1, the gender of these officials being 13 females and ten males did not tally with the ratio in a population. In this respect, the male officers were gaining a slight edge over the females. But contrary to views (Sen 2000, Wichterich 2000) that “soft” ministries were usually headed by females whilst the “hard” ones like Agriculture, Defense, Finance and Public Works were dominated by the males, at this rank in Lesotho, that discrepancy was not discernible. It should be emphasized that the balance does not refute the possibility that perhaps at the first levels of hierarchy the imbalance existed. This distribution refers to the particular rank of principal/deputy secretaries and the subsequent rung of the ladder. For instance, there were female principal secretaries, deputies or directors in such ministries as Finance, Agriculture and Works. It was observed that even the principal secretary of Defense was then a female although the researcher failed to interview her or anyone else in that Ministry. Therefore, the global trend highlighted in Chapter Three, section 3.2.9.3 that the hard sectors generally were entirely dominated by males is not born in the case of the ministries of Agriculture, Finance, Defense or Works in Lesotho, at the level surveyed.

5.1.2.4 Academic qualifications of the academic community and government officials

Performance of technical reports is dependent upon information needs and use, and needs and use may be a function of people’s academic aptitude, consequently, the civil servants and intermediaries in the survey were asked to state their academic qualifications. Responses were categorized into five sections that were also tabulated against age and gender as depicted in Table 5.5.

Table 5.5 Distribution of information workers and government officials by age, gender and academic qualifications
N =38

Age	Gender	Academic qualifications						Total
		Un-specified	Under-graduate	1st degree	Post graduate diplomas	2nd degree	Special professional certificates	
Unknown	Male			1				1
Below 31	Male	1			1	1	2	5
	Female			1		4		5
31 - 39	Female					2	3	5
40 - 49	Male	1		1			2	4
	Female	2	1	1	2	2	3	11
50+ above	Male			1		1	1	3
	Female			1	1	2		4
	Total	4	1	6	4	12	11	38

In the younger age bracket both genders were equal, and in the oldest age group the ratio was three males to four females. Of significance is that out of the total of 38 (73%) respondents, 23 (44.2%) were the holders of the second degree and special professional certificates and among these 23, the females were in the majority. Yet, at the undergraduate level, the number of men and women was equal, suggesting that the females were more likely to have the postgraduate, second degree and special certificates than their male counterparts.

5.1.2.5 Length of service of government officials

Length of service at work and designation were other relevant demographic areas that were collected from both library professionals and the senior public servants. On the part of the latter, the length of service could influence the nature of their experiences with TRs, and therefore influence their use or non-use. On the part of the intermediaries, their length of service and thus experience could be a factor in the effectiveness of managing information and particularly the TRs. In that respect, respondents were asked to specify their service from among the four categories given in Table 5.5. Members of the academic community were not questioned about length of service because they included students, most of whom were not employed and to whom length of service was not applicable. In the first instance, length of service as a variable was cross-tabulated for the two groups against age and gender. The analysis is shown in Table 5.6

Table 5.6 Distribution of the information workers and government officials by gender, age group and length of service
N = 38

Gender	Age	Length of service in years				Total
		5 and less	From 6 to 9	From 10 to 19	20 and over	
Male	30 and less	1				1
	40 -49		1	2	4	7
	50		1		4	5
	Total	1	2	2	8	13
Female	31 - 39	3				3
	40 -49	3		11	3	17
	50			3	2	5
	Total	6		14	5	25
GRAND TOTAL		7	2	16	13	38

Information workers and civil servants in the survey were distributed throughout all the four brackets of length of service. Service of between 10 and 19 years scored the highest with 16 (42.1%) respondents, followed by the longest serving period of 20 and more years with 13 cases. In the government service, this finding was to be expected as seniority is likely to be attained after long service. Most of the government officials tended to fall within the longest serving period because the study purposely targeted the senior officials. Among the groups which were interviewed about age, there were 56 (62.2%) females to 34 (37.8%) males. There were no male information workers nor government officials between 31 and 39 years of age. Furthermore, there were no females who had served for a period of between six and nine years. There was a significant increase in the third category of service (10 to 19 years) where the females were more than the males in the proportion of seven to one. Yet the females decreased sharply to five in the the last bracket, thus leaving the male gender to dominate the longest serving category at the ratio of eight males to five females.

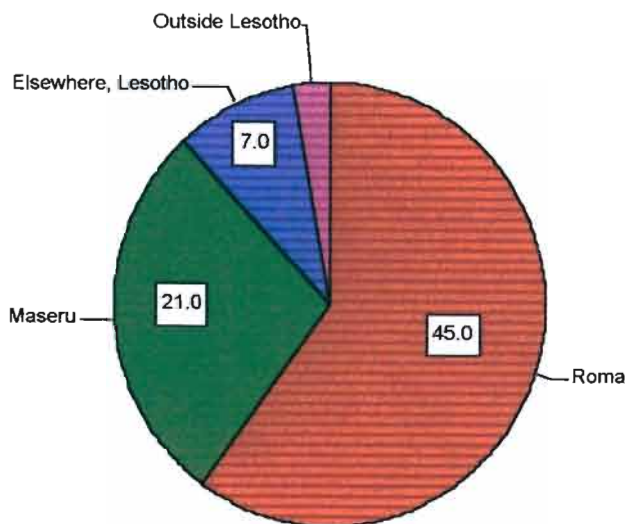
In the second instance, it was necessary to determine if there were any different or common aspects regarding length of service among the two groups taken separately. There were no government officials in the first and second brackets. As shown, the reason could be that the selection of this group was made from senior people who could have risen through the ranks over a long time. At the third bracket of between 10 and 19 years, those senior officials numbered 12 (52.2%), while in the age group of 20 years and more there were eleven (47.8%) officials. Librarians were on the contrary distributed throughout the four brackets at an almost a reverse order and rate. Those who served five years and less equalled seven (46.7%), while

in the next bracket of six to nine years, there were only two (13.3%). There were four (26.7%) librarians who had served for a period between ten and 19 years. The last the longest serving category of 20 and more years contained two (13.3%) respondents. The number of government officials at the longest serving period was almost double that of the information workers.

5.1.2.6 Physical location of academics and government officials

The final questions relating to demography were put to the academic and the civil service communities. They were asked to indicate the locations in which they lived and operated from. The reason for asking the question was based on the assumption that the proximity of a location to an information centre could have a positive impact on the use of that centre. Conversely, if the place of abode was far from key information services(s), it could impact on use of an information centre and its TRs. As the information workers worked in the various information centres, thereby having daily access, it was not necessary to ask them this question. Figure 5.1 shows responses from the academic community and government officials.

Figure 5.1 **Physical location of academic community and civil servants**
N=75



It is revealing from this figure that the majority 45 (60%) of respondents lived in Roma which is the location of the main university campus. The analysis of data for the location of government officials alone indicated that out of 23 only one (4.3%) lived in Roma and another lived elsewhere outside Maseru and Roma. It is deduced from that spread, therefore, that most of the inhabitants in Roma were mainly the academic community, and especially so during the university term. Government officials were 21 (13.4%) out of 19 (90.4%) respondents who were living near their work places in Maseru. There were seven respondents who lived elsewhere in the country and only two (1.3%) members from the academic community lived outside Lesotho. By observation, nevertheless, when the university is closed, respondents relocate and reduce in numbers from Roma, suggesting that they lived in Roma where it was convenient to closely operate their official and academic business, including information use if need be. Aid agencies and NGOs were not asked to specify where they lived since ISAS services were not necessarily focusing at them as institutions.

5.1.3 Description of Aid agencies and NGOs in the survey

Aid agencies and the NGOs formed the last groups whose descriptive details did not entail demographic data. This was because they were surveyed as institutions rather than as human individuals in the manner in which they related to technical reports. The two groups are described separately in the following sections.

5.1.3.1 The profiles of aid agencies surveyed

Prior to sending a questionnaire or confirming an appointment for interviews, the researcher telephoned and or forwarded an introductory letter describing the study and its data collection component. Subsequently, the agency directed the research to an appropriate office or desk. It was observed that despite their being ‘international’ or foreign by origin, the agencies in most cases had the local person as a respondent. In a way, this was reasonable in that a local related better to the focus of an agency, with the Lesotho community in general, and with the study as an instance. The official name of the agency was verified, which also described the work of the agency. The next question requested the respondent to indicate his/her designation. The following table shows responses and the observations regarding the respondent as either a local or non-local labeled as “L” or “N”, respectively.

Table 5.7 The names of aid agencies and corresponding designations of respondents

<u>The name of an agency</u>	<u>Designation of respondent</u>
African Development Fund	Country Liaison Officer (L)
European Commission to Lesotho	Unspecified
Food and Agriculture Organization (FAO)	Programme Assistant (L)
International Fund for Agricultural Financial Enterprise Supply Project	Development (IFAD) / Lesotho Rural and Project Coordinator (L)
Ireland Aid	Programme Advisor (L)
MS (Mellempfolkeligt Samvirke -Danish Association for International Cooperation)	Resident Representative (N)
Skillshare (UK)	Country Programme Officer (L)
United Nations Development Programme	Public Affairs Officer (L)
UNESCO - National Commission	Secretary General (L)
UNICEF	Publicity/Information Officer (L)
United Nations Industrial Development Organization (UNIDO)	Program Technical Advisor (N) and Component Manager (L)
World Health Organization (WHO)	Administrative Officer (N)

Key:

FAO - Food and Agriculture Organization

IFAD - International Fund for Agricultural Development

UNESCO - United Nations Educational

Scientific and Cultural Organization

UNIDO - United Nations Industrial Development Organization

UNICEF - United Nations Children's Fund

WHO - World Health Organization

5.1.3.2 The Non-governmental Organizations (NGOs) that were surveyed

Since the study paid attention to technical reports as a channel of information for development, data were collected from the development-oriented institutions like NGOs and their activities. The year when an NGO was established would determine when the development activities of the NGO possibly commenced. The findings indicate that the NGOs represented in the survey were established from as early as 1966 when the country gained independence. They increased significantly and at the rate of 9.1% between 1966 and 1988. The vast majority of the NGOs were founded after 1988, with nearly half (45.5%) of the total in the survey having been established in the decade 1988 to 1998. The significant increase during this decade will be interpreted in the next chapter, however, it may be useful to point out here that, compared with the information centres or libraries that were established at the rate of 33.3% before 1966, and increasing by 6.7% between 1966 and 1976, the NGOs have grown more in numbers within

a shorter period of time than the libraries, the number of which appears to have stabilized between 1988 and 1998.

As mentioned in 5.1.3 NGOs whose functions could relate to agriculture and or gender were selected for inclusion in the study. It was assumed that their use and generation of technical reports would similarly be determined by their foci. These organizations were asked to state their sectoral foci. Data indicated that the NGOs covered some fairly broad fields, and it was not easy to categorize them by one particular sector. Instead, the official names are listed below in their alphabetical order and the corresponding foci of the NGOs.

Table 5.8 The names and foci of NGOs

<u>The name of an NGO</u>	<u>Focus</u>
Anglican women/Christian Council:	Religious and women desk of the Lesotho wing of World Council of Churches, attending to disputes/socio-economic, human rights and spirit counseling nationwide
Business Advisory and Promotion Services (BAPS)	Agro-industrial development body that assists the indigenous investors
Christian Council of Lesotho	Lesotho chapter of the World Council of Churches, working for peace, welfare, justice among the Christians and their communities
FIDA (Federation Internationale pour droits' advocate) Lesotho	An affiliate of an international federation of women lawyers, advocating legal justice and equality, and in favour of women's rights
Hlokomela bana (Care for Children)	Country-based women's association focusing on children's welfare and development, and an affiliate of Lesotho Council of women
Lesotho Council of NGOs	Inter-disciplinary and an umbrella body for all the country-based NGOs
Lesotho Dairy Farmers Association	Country-based organization on dairy farming-
Lesotho Micro-millers	Country-based organization for small
Women and Law in Southern Africa	Lesotho chapter of the regional research network on law as affecting women in the sub-region
Women in business	Country-based body for women in business
World Vision	Lesotho chapter of a global NGO that aims at the disadvantaged and socio-spiritual healing

Key:

BAPS - Business Advisory Promotions Service
NGOs - Non-Governmental Organizations

FIDA - Federation of Women Lawyers

5.1.4 Types of technical reports in the study

The above-mentioned population groups, as was debated in the literature review, had the potential to produce, distribute, manage and use TRs. The groups were therefore surveyed according to the objectives of the study, and with regard to the groups’ views, their involvement in and contribution to the performance of TRs. There were seven types of technical reports identified in Lesotho. These are listed in Table 5.9 according to their categories and the nomenclature used in this thesis.

Table 5.9 Types of technical reports in the study

Project Reports:	project documents comprising feasibility study papers, proposals, progress, interim or mid-term, and final reports.
Academic Reports:	reports that include scholarly types such as dissertations, seminar papers, university staff and student research reports.
Conference Reports:	proceedings for, or from pre-, during or post-conference, colloquia, symposia relating to a particular theme and event.
Situation/Survey Reports:	situation/survey/state-of-the-art reports often giving reviews by experts or activists in a particular field and area.
Incident/Enquiry Report:	reports emanating from investigations into crises, cases, events, and so on carried out expeditiously by independent commissions for prompt solutions to ensuing problem or identified crises
Official Reports:	reports that constitute organizational or corporate’s own periodic and routine reporting that constitute annual reports, budgets, highlights, and so forth, often written internally by staff but for public use as well.
Special Committee TRs:	documents emanating from intra-regional or inter-governmental, bi- or multi-lateral committees, standing and ad-hoc bodies as well as task forces, written at any of these levels .

The subsequent sections deal with the corresponding research questions that were directed to the five groups, and the findings are accordingly presented.

5.2 Productivity of technical reports by producer group by gender

The objective of the study was to assess how TRs perform from the chain of functions that start with their production, up to the consequences of their utilization or non-use. All four study

population groups, namely, the academic community, government officials, aid agencies and NGOs, were surveyed mainly with regard to the production of TRs. The types of reports studied and their respective descriptions were enumerated for the respondents as listed in Table 5.9 above. A question was posed to these four groups on whether they produced reports. Whereas the total of seven types of TRs were the subject in the study, as stated in Chapter 4, during the pre-test Special Committee Reports were found to be nebulous and problematic especially with the aid agencies and NGOs. Special Committee Reports were thus omitted when questioning aid agencies and NGOs. Respondents were able to select more than one type of TR that they produced if applicable. The extension of that question required them to indicate the level at which they were involved in the production of each type of TR. Data gathered in this way were analyzed and have been tabled below, reflecting the type of reports produced by each group.

Table 5.10 **Productivity of types of TRs by producer group by percentages**

Types of Technical Reports

PRODUCER GROUP	Project		Academic		Conference		Enquiry/ Incident		Official/ Internal		Situation/ Survey		Special Committee	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
	%		%		%		%		%		%		%	
Academic Community	42.3	28.8	53.8	17.3	32.7	34.6	15.4	48.1	36.5	36.5	24	42.3	46.9	40.4
Government officials	60.8	17.4	17.4	78.3	64.7	2.9	26.4	41.2	64.7	n/a	55.8	8.8	82.5	8.7
Aid Agencies	75.0	16.7	15.4	46.2	46.2	38.5	46.2	30.8	61.5	23.1	25	66	n/a	n/a
NGOs	83.3	8.3	n/a	n/a	83.3	8.3	40.7	50	83.3	8.3	58.3	25.0	n/a	n/a
Average %age	65.35	17.80	21.65	35.45	64.22	21.07	32.17	42.52	61.50	16.97	40.77	35.52	32.52	12.27

The above calculations were percentages of the productivity of each group, out of the total of 98 respondents comprising 52 academics, 23 civil servants, 12 aid agencies and 11 NGOs.

As seen from Table 5.10, members of the academic community are identified as the main producers of Academic Reports. From the same table, out of 52 respondents, 28 (53.8%) confirmed that they produced the Academic Reports. Only four (17.4%) out of 23 government officials stated that they produced Academic Reports, while aid agencies and the NGOs were not asked if they produced Special Committee Reports due to the problem noted, hence their columns show that the question was not applicable. The NGOs surpassed all other groups in the production of Project Reports, Conference and Official/Internal Reports where ten (83.3%) out of the eleven NGOs that were interviewed indicated their involvement. This may in fact be due to their being highly action-oriented. The next highest producers of Project Reports were aid agencies with nine (75.0%) out of 12 whose involvement is mainly through the funding of NGOs and government organs. At the rate of 82.5%, government departments were the most active producers of Special Committee Reports. Though aid agencies and NGOs appeared to produce more Enquiry/Incident Reports than the government, the latter was the single major commissioner of this type of report which is often prepared by consultants. The same applies to Situation/Survey Reports whose authorship is jointly done by government officials and the external experts as will be shown later. Similarly, the Enquiry/Incident Reports were generated more by experts to whom the government was out-sourcing particular tasks. Consequently, there was less participation of government officials as authors.

Two types of reports most produced by the four groups were Project and Conference Reports at the average of 65.35% and 64.22% respectively. For development-inclined activities like reporting on the progress of a particular agricultural or gender-related scheme, for instance, the finding showed how much activism there was by each producer group. The finding in a way was also a guide to groups that served as sources for varied and large quantities of the related TRs in the country.

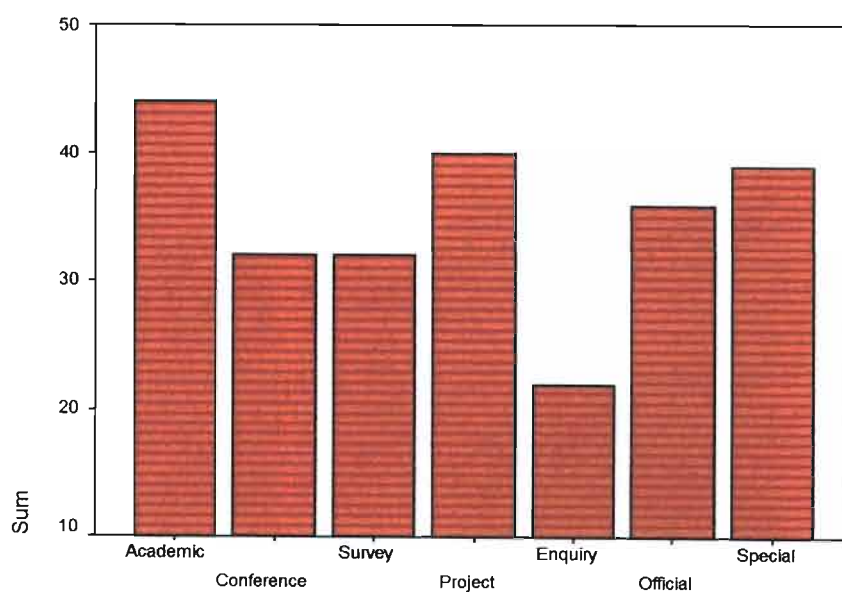
Government officials ranked second to the NGOs as the most active in the production of papers for and from conferences. This high productivity was also due to the fact that the question enquired about production by the responding official, and or his/her department. Hence, even if the respondent as an individual was not productive, all officials taken together in the respondent's department or ministry yielded a high productivity rate. The finding was that attendance at conferences was common among government officials. Common as it was, some

respondents intimated that the officials could easily attend conferences without necessarily presenting papers. However, they were required to report back to the employer after attendance at the conference. Though this ‘reporting back’ dimension could not be probed further, it reflected how wide the spectrum of Conference Reports being produced by governments are.

Levels of production of Official Reports by the academic community was low (36.6%). Half (26 out of 52) of the respondents from the academic community comprised students. They were predominantly unemployed undergraduates who were unlikely to author Official Reports. That was why the production of Official/Internal Reports was low since it related to the involvement of only 19 (36.5%) academics as staff members that prepared official reporting. But on the whole, the academic community produced unexpectedly low output in all the types except the Academic Reports. For that sub-group of the academic community, which comprised 25 full time staff, a separate data analysis of the productivity was therefore made to reveal how much the academics per se write and issue technical reports. The results are illustrated in Figure 5.2

Figure 5.2 Productivity of TRs by NUL academics

N = 25



Productivity of TRs by the NUL academics confirmed the earlier finding that this sub-group was heavily involved in producing Academic Reports, followed by Project Reports. It would be expected that the productivity of academics would be higher than that of government officials and the interpretation of this seeming anomaly is in the Chapter 6.

As has been elaborated on in Chapter 3, technical reports by nature are products of experts in a given field. Of importance to the survey was finding out whether experts partook in the production of government TRs, and whether or not government officials participated in joint authorship with consultants. The example of Survey/Incident Report was chosen to present to the respondents since its difference from Project Reports was rather blurred, as stated in the previous chapter. The two types could in this regard be represented by one. Government officials were requested to state specifically who authored the Survey/Situation/state-of-the-art kind of report. This type was produced by all the groups at about an average level. The majority of six (26.1%) indicated that staff often prepared this type of report with the external experts, or consultants being drawn in from the private firms or the academic institutions. The other seven responses ranged from authoring by experts alone, rarely, often, by staff jointly with donors, to rarely being authored by staff only.

The researcher was also interested in finding out how various types or categories of experts like those from the academic community get involved in consultancy or commissioned work, the end-products of which often culminate in technical reports. It was established that the commissioning authorities advertise, head-hunt even from the lists of experts that the authorities would have already compiled, or employ a combination of methods to find suitable people. Some academics got involved by being sub-contracted by colleagues into consultancies. Others became consultants as part of the job that was assigned by employers.

On completion of commissioned work and the resultant reports, authors are often given complimentary copies of reports. This, therefore, is one way in which TRs are distributed. It is conceivable that these experts, especially the academics, may further “distribute” these technical reports to colleagues and other members of the community. It must be stated that ownership of the resultant TR is retained by the commissioning authority and not the author.

Table 5.10 further showed that the NGOs were heavily involved in the production of Project, Conference and Official/Internal, Situation/Survey Reports, but did not produce Academic and Enquiry/Incident Reports.

As seen with the description of TRs above, Projects Reports, like Conference Reports are generated prior to, during and even after a particular practical activity or relevant gathering. Academic Reports on the other hand include the types of report for which the influence on the community is often, seemingly not immediately evident. Compared to the academic community, the NGOs ranked higher in being commissioned as enquirers about eventful crises or incidents that result in Enquiry/Incident Reports.

Aid agencies' participation in the production of TRs, which was largely in the form of sponsoring the production of Enquiry/Incident Reports, was ranked the highest among the four producer groups. Though it would be expected that academics would be the highest, Table 5.10 illustrates that, with the exception of the academic reports, the academics were the lowest producers of other types of TRs. In order of high productivity by groups, the types ranked as Project at 65.3%, Conferences at 64.2%, Official/Internal at 61.5%, Situation/Survey at 40.7%, Enquiry/Incident at 32.1%, Special Committee by 32.5% and Academic Reports at 21.6%.

5.2.1 Production of technical reports by four producer groups and gender

As an important aspect in development, gender was considered as a variable in the production processes. As depicted in Table 5.2 the male respondents were in the minority 34 (37.7%) compared to 56 (62.2%) females. Apart from the data on the gender ratio, this study was also interested in looking at whether or not the ratio of TR production corresponded with the gender distribution. In order to find out, the production of types of reports by both genders was analyzed.

Table 5.11 presents the breakdown of production of TRs by producer groups and by gender respectively. The data reflects only respondents who indicated that they produced the TRs.

Table 5.11**Production of technical reports by types by gender**

Types of reports	If any production	Gender of respondents		Ratio of productivity	
		male	female	male	female
Academic	No response	8	9		
	No	14	15		
	Yes	12	32	3	8
Conference	No response	7	11		
	No	10	15		
	Yes	17	30	1	2
Surveys /Situation	No response	6	11		
	No	13	16		
	Yes	15	29	1	2
Project	No response	6	10		
	No	12	17		
	Yes	16	29	1	2
Incident/Enquiry	No response	8	12		
	No	20	25		
	Yes	6	19	1	6
Official	No response	7	8		
	No	12	15		
	Yes	15	33	1	2
Special committee	No response	8	11		
	No	7	16		
	Yes	13	20	1	3

Data reflected in Table 5.11 above were received from all the producer groups of academic community, senior government officials, NGOs and aid agencies surveyed. Looking at the ratios of productivity which have been calculated to the nearest whole, for the seven types of TRs above, they appear to correspond to the ratio of distribution of respondents by gender as reflected in Table 5.2, except in the case of Incident/Enquiry Reports. In those two cases the production of the Academic and Incident/Enquiry reports by the females outnumbered those of the males by far more than half. It is significant that TR productivity varied by type and so by producer groups and by gender. The females generated more than the males while the academics seem to produce unexpectedly lower than non-academic groups.

5.2.2 Classification and timeliness aspects that affect the distribution of reports

For TRs to make an impact they should be distributed on time to facilitate timeous use or application, but there are features which this channel embodies which may negatively affect timely use as well as adequate content, distribution, availability and accessibility. The classification of material according to restricted, limited or secret are imposed from the production stage as seen in section 3.3.1.1 of Chapter 3. In order to establish if TRs pertaining

to Lesotho also demonstrate these above-mentioned characteristics, two producer groups, namely, the government and aid agencies, were questioned about these aspects. This section reports the findings. The two institutions were selected for reasons noted in the literature review which are associated with their publication involving access.

5.2.2.1 Timeliness of Annual Report as a type of Official/Internal Report

It has been pointed out that it is expected of producers to issue TRs quickly so that they respond to an identified related problem expeditiously. Thus, the question of timeliness was essential in the enquiry on performance assessment. In determining how long it took TRs to come out of the production process, government officials were asked to estimate the length of time it usually took them to issue an annual report as an example. The production process entails the intention and reason to commission or to produce, the preparation, the approval, the distribution and or the release.

One specific example of TR was selected from the type of Official/Internal Reports, because the frequency requirements of an annual report made the annual production of these a necessity. It was also assumed that the issuing of this kind of report is obligatory for every ministry. Out of the 23 government officials questioned, seven (30.4%) said that it took more than a year to produce the report, nine (39.1%) said it took less than a year or approximately six months. Five (21.7%) respondents estimated that an annual report could be processed for a year, while two (8.7%) officials observed that the time varies with circumstances regarding the competence of the government of the day. Whilst the majority estimated about six months, on the whole, that array of responses confirmed views raised in Chapter 3 section 3.3.2.3 that the processing of this type of Official Report from Africa, Lesotho inclusive, was often delayed and infrequent.

To establish whether delays were caused by production processes like revision, editorial work, or classification for access and authorization, a question was put to agencies about whether or not they modified TRs at all. It was found that modification of reports was regarded as a fundamental step that aid agencies followed during the production stage. According to aid agencies, more often than not, prior to their release, reports had to be modified in order to meet the specifications and desires of aid agencies and government authorities that need, want or commission the production. Most (33.3%) of the agencies indicated that very often TRs were returned to authors or consultants for modifications so as to conform to the set guidelines before they could be approved. Three (25.0%) respondents from aid agencies also indicated that

modification was often done. One respondent said modification was always carried out . Combining the three categories of “always”, “very often” and “often” a total of eight (66.6%) out of 12 concurred that technical reports undergo a rigorous checking, editing, and amending process. Such stages and functions are termed modification in this thesis.

For comparative purposes, the same question was directed to government officials whose responses did not differ much from that of the aid agencies. In the civil service, out of 21 officials who responded five (21.7%) said TRs were modified all the time. Sixteen (69.5%) indicated that TRs were subjected to editing, returning to authors for modification, or even disapproval or rejection. By comparison, aid agencies tended to a greater extent to provide guidelines to be followed by consultants in advance. Yet the aid agencies’ inclination was also to return reports for revision at a higher rate than government departments did. As one government official put it, alterations depended largely on the type of report, the implications of its content, or sensitivity of its message, all of which determined the intensity of modification, if any.

From both the aid agencies and government officials, the finding was that this kind of modification was common. It showed also that rigidity regarding the necessity for modification pertained to some TRs and not others. However, this kind of modification did not seem to affect the timeliness of TRs, possibly because such guidelines used by these agencies allows time for such modifications in advance.

5.2.2.2 Timeliness and synthesis of technical reports

In order for technical reports and such channels to perform effectively, it has been emphasized that they should be issued in their full versions as well as in the synthesized form such as summaries and abstracts. Translation into local languages and the use of other methods that promote repackaging and a wider utilization are also found. A question whether syntheses were done was directed to aid agencies. Responses from aid agencies related to TRs used by other groups as the agencies, besides preparing some TRs for themselves, produced and sponsored some TRs jointly with government, and commissioned others from academics or the NGOs. Asked if they advocated the idea of synthesis of TRs five (41.7%) out of 12 aid agencies responded positively, but three (25%) were not interested in that notion of synthesis. One (8.3%) stated that it depended on the circumstances. There was a sense that the syntheses process had its own disadvantages like costs, time and related demands. Since the issue of

timeliness of TRs, was supported by nine (75%) respondents from this group, it implied that the synthesis factor was comparatively not a priority nor as important as the timeliness factor.

5.2.2.3 Restrictive classifications applied to technical reports

On the issue of classifying reports as limited, restricted and secret, descriptions which were often said to characterize TRs, the study sought to enquire from government officials if in the case of Lesotho those features obtained at all at the levels of production, distribution and dissemination. The broad question was deliberately put in an open ended form in order to assess if any distinction could be made, or parallels drawn between the levels of the classification methods. The officials were asked to state if their ministries produced restricted, secret and or classified reports. Two respondents hesitated for a while and were unable to tell. The majority, 13 (56.5%) out of 23 reported that they did not, as a rule, produce classified materials. It was not clear what a matter of a rule actually meant. One could speculate that it denoted that, ideally, all activities of the civil service were supposed to be in the interest of the nation, therefore all information should be open and not be restricted. In practical terms this appeared not to be the case. Subsequent clarification revealed that reports followed a long route and that 'red tape' did finally delay availability and limit access. One officer gave an example of an *Auditor General's Report* which was issued after mini-reports had been consolidated from all the ministries and parastatals. The kind of process that very often subjected the reports to a secret, limited, restricted state came about from awaiting those mini-reports, preparing the consolidated whole, presenting it to Parliament, and awaiting parliamentary consideration for approval or rejection before the report could be available for public consumption. A smaller number of eight (34.8%) out of 23 government officials agreed that they produced restricted, classified and or secret reports. Both the government officials and aid agencies estimated that classified materials comprised about 30% of this TR output.

5.2.3 Purposes for which technical reports are produced

Performance of technical reports, as conceptualized in Chapter 3, begins at the moment that a producer group or authority expresses the need to produce or commission reports. The purpose for which technical reports were produced was consequently one important focus of the study. On the understanding that aid agencies were not only a producer group, but also funders of technical reports produced by other groups, their purpose could be seen in some cases to overlap with the purposes of the sponsored groups for example, the NGO producers whose production often is sponsored by the aid agencies.

Government officials and aid agencies were therefore asked about the production of TRs but in different ways. Aid agencies were asked to tick six categories of possible organs for which they produced TRs. The categories were, for “the agencies themselves”, for “government”, for “the NGOs”, for “the academic community”, for “the agency jointly with government”, for “the combination of the agency, NGOs, and government”, and for “others to be specified”. The reason for requesting aid agencies to tick six, and specify others, was an attempt to find out if they could be clear about all others not listed. Seven (58.3%), out of 11 responded. Some respondents stated that they produced for joint ventures in the category of the agency, government and the NGOs. Three (25%) indicated that TRs were produced for both the agencies plus government. One (8.3%) agency representative stated that it produced mainly for government. None produced for the academic community. Instead the academic community produces for them. Government officials on the other hand were asked to indicate which of the listed purposes related to them. In Chapter 3 section 3.3.1.1, seven purposes were identified but the pre-suggested list of purposes was not exhaustive as it contained only four purposes. As in the case of agencies, it was made deliberately so, in order to find out if respondents could enumerate all other possible purposes. The four categories were for “in-house managerial purposes”, “as obliged by contracts with donors”, for “monitoring and evaluation”, and for “the combination of those”. Respondents selected in-house managerial purposes, as obliged by contracts with donors, monitoring, the combination of these, and/or other purposes that they could specify. The most common answer was that the production was for the government internal administrative reasons. Some unwieldy responses that failed to be restricted to those categories generally ensued from respondents. Though not mutually exclusive, the reasons for producing TRs by government ministries were given as “in-house managerial purposes”, “monitoring and evaluating”, and the combination of both. Notably there were none besides those specified and respondents did not mention any other.

Government officials indicated “in-house purposes”. This seem to suggest limited access and distribution, in spite of the fact that in section 5.2.2, the majority (56.5%) of government officials implied that about 70% of their publications were not restricted. Notably, similar contradictions came to light, which will be addressed in the discussion of distribution and availability of TRs by different producer groups. The finding was that a smaller proportion of TRs produced by government and aid agencies, jointly or separately, were not meant to be distributed and be accessible. Amongst civil servants, there was no common understanding of what the purpose was and what should practically follow the production. It would seem that

a wide spectrum of factors come into play in determining the performance of TRs *vis a vis* the purpose, access, availability, use and consequences of use of the channel.

5.2.4 Obtaining the sample technical reports and their identification

In cases in which aid agencies and government officials replied positively that they generated a particular type of report, the next question asked was whether they could donate, lend or show a copy to the researcher. In some cases respondents were asked to direct the researcher to where the reports could be obtained if they were unavailable from the responding agencies or departments. The reason for asking this question is elaborated on at the end of this section. Table 5.12 below indicates which reports were collected by these methods and from whom they were received. Deliberately, the request for samples of TRs was made to the responding government officials and aid agencies. Such a request was, however, not made to the academic community. As mentioned in section 5.2 above, the academics constituted several individuals who were commissioned as experts in preparing TRs on behalf of aid agencies and government. The samples that they would have were likely to be found with the commissioning authorities. Moreover, it was presumed that the academics were unlikely to own multiple copies, or be able to spare their own few copies. NGOs too were intentionally left out as they are generally loosely arranged networks and the NGO respondent would not necessarily be physically occupying an office that housed the NGO's collection. One respondent, however, voluntarily donated a catalogue of publications of the NGO/consulting firm which he was involved with.

As outlined in the last chapter of research design, the purpose for the request was three-fold:

- ▶ to find out where the TRs under discussion were kept and how respondents retrieved them
- ▶ to obtain evidence that the term describing any type of TR mentioned was understood and categorized by respondent as described by researcher in 5.9 above
- ▶ to afford the researcher an opportunity to further look at the obtained sample of reports in terms of their subject/discipline, audience, format and such matters of relevance to the performance of TRs pertaining to Lesotho.

The sample collected is described in Table 5.12.

Table 5.12 Sample TRs collected, by producer group, type, title and description

<u>Producer/ donating group</u>	<u>Type of TR</u>	<u>Title and description of report collected</u>
Aid agency	Conference	Social Summit +5 Geneva 2000 : A pre-conference report and a position paper on seven developing countries of southern Africa with which the MS - Lesotho (MS) had partners and projects on social development. It raised issues pertaining to the theme of the Summit such as Lesotho and its civil society.
Aid agency	Official -	MS's Annual report 1999 for four southern African countries. In particular, for Lesotho, it highlighted MS's role in the Lesotho development which was seen within the context of the region, especially South Africa. It focused on themes like Human/ Women's Rights, Gender and advocacy, Environment, Natural resources and partnership.
Aid agency	Situation/Enquiry -	The UNDP poverty assessment on the post 1998 conflicts in Lesotho Reports
Aid agency	Project -	Project papers by BAPS under the Ministry of Trade and on UNIDO's funded schemes
Aid agency	Project -	Rationalisation of Small and Medium Enterprises (SME)s Support Organisations: reallocation and integration of BAPS Services. Prepared by F. Baffoe Consultants June 1992.
Aid agency	Conference	Ministry of Industry, Trade and Marketing and UNIDO : Proceedings of the National Workshop on the skills upgrading training. Les/94/005.
Government	Conference	Conference papers by Ministry of Justice on Anti-corruption conference held in Lesotho (organized by University of Free State and of London).
Government	Project -	Project paper by Ministry of Works on Moeaneng - Kubung Rural Road. Project Report No. DRR/2000/07
Government	Situation/Survey -	Report by Ministry of Works on Fire damage to government buildings during the 1998 political crisis
Government	Situation	Ministry of Finance: Sales Tax Department - an internal paper, Official report on implementing Value Added Tax (VAT)
Government	Official -	Monthly revenue reports/ by districts. Statistics Unit (Amended Report 2000/7/03).
Government	Conference	Auditor's General conference papers and Official (Annual) reports
Government	Situation	Ministry of Agriculture Situation analysis report 1989/90 - 1996/97 - 2000 Edition. (Prepared by Molumeli and Mokhahlane, respectively Directors at MOA and Ministry of Planning)
NGO	Many types	Catalogue and consultancy papers and by the Sechaba consultants.

Key:

BAPS - Business Support Advisory and Promotions Service.

MOA - Ministry of Agriculture

UNDP- United Nations Development Programme

UNIDO - United Nations Industrial Development Organization

Four types of technical reports were represented in the sample while the Enquiry/Incident, Special Committee and Academic Reports were not. Most of the reports addressed issues that were indicative of the development process as discussed in section 3.2.13. The examples were reporting on the situation of the agricultural sector, road construction, women's rights, anti-poverty and anti-corruption efforts as example. Out of 13 subjects covered by reports listed in the catalogue of the Sechaba consultants 45% of them pertained to Agriculture. Two reports indicated the involvement of South Africa, and one of the Southern African region. Almost all except Science and Technology matters were dealt with.

5.2.4.1 The physical description and contents of the sample TRs provided

As explained in Chapter 4, assessing technical reports in Lesotho required a human population of producers and users. In addition it required perusal of the actual reports provided by respondents to the researcher. These were TRs pertaining to Lesotho which were examined in relation to the features and nature of TRs as described. The general trends with TRs pertaining to Lesotho were noted, that on the whole, the sample reports fitted the descriptions of TRs as briefly described in section 5.1.4 above, and as they were introduced to respondents in the questionnaire and interview.

- ▶ Issuing of reports was often belated. This was the case not only the Official/Internal Reports as seen with the annual reports above but with the Situation/State-of-the-art/Survey types as well. *The Ministry of Agriculture Situation Analysis Report* which was said to be the latest in that serial, was however issued in 2000, eleven years after the period it was meant to cover. This confirmed that government producers often fail to achieve a timely production.
- ▶ reports that were available were of recent release, meaning less than five years old, implying that the earlier reports were difficult to retrieve
- ▶ they covered a wide range of development sectors such as road construction and food production
- ▶ reports by aid agencies contained executive summaries, which fitted the synthesis treatment which respondents claimed to be providing
- ▶ Incident/Enquiry and Situation/Survey were not easily differentiated in certain cases
- ▶ there were only three titles (21.4%) out of 14 which were sequentially numbered, a situation that revealed that production processes entailed very little report numbering by both the aid agencies and government departments

- ▶ reports did not indicate how and from where they may be obtained
- ▶ none of the reports provided was labeled, limited, restricted or secret, an indication on the one hand that if they did exist, as it was reported, they could not be given away; on the other hand, showing that still very many non-classified reports were available
- ▶ government reports were authored by staff as well as consultants, but from the limited number of those collected, the extent of the joint authorship as opposed to any other could not be established
- ▶ there was no report that was written in a local, or any other than the English language

5.2.4.1.1 Technical reports retrieval methods used by officials and the general description of the sample

Only one out of 12 aid agencies and 23 government officials spontaneously ordered photocopies from his departmental library which retrieved the report instantly. From both groups the officials did not have a systematic way of tracing the reports they had produced. Their first recourse tended to be to the shelves in their offices. This did not appear productive as most reports could not be found. Other methods involved telephoning a colleague in the vicinity to enquire if s/he had the report, and requesting secretaries to assist locate the reports elsewhere in the department. Several respondents opted as a last resort, to trace the items for some days in order for the researcher to collect items, or for the office to deliver to her at a later stage. Five titles of reports that producers promised to locate and deliver to researcher were never located nor found, suggesting that they were possibly not retrievable.

Conference papers that emanated from or pertained to fora outside the country were the most problematic. For example, a country paper to the Food Summit 1996 and the proceedings from it were not found from the Ministry that was supposed to be responsible to the subject, not from the relevant aid agency nor an individual who produced the report. The official that authored the report had since been promoted to another ministry and did not have it himself.

Of the seven types of TRs in the study, only four as shown in Table 5.12 had been made available to the researcher. The four reports which were obtainable belonged to the types that were commonly produced, as presented in Table 5.10 above. In that Table as well, Academic, Enquiry/Incident and Special Committee Reports were not listed as part of technical reports donated or lent copies.

5.3 Distribution of technical reports

Another objective of the study was to investigate the distribution and availability of TRs in Lesotho. Production of technical reports is not an end in itself. Their distribution, availability, and accessibility were important because without these important functions there can hardly be any use, and technical reports may not make the required impact. There are several means of distribution of reports. Some are efficient and effective while others are not. Distribution entails acquisitions, deposits, exchanges and deposits. Though all these areas were linked, an effort was made to highlight and present them as distinct entities. Methods of distribution also vary by group. As the largest institutional producer groups, government and aid agencies were asked about distribution mechanisms if any that they incorporate at the production level. The study showed that in one way or another, the producer groups performed a dual role of production and of distribution of technical reports too. As reported in 5.2.2.3, nine (75%) out of 12 aid agencies like the government employees agreed, that their publications were available to the public. They submitted that only about 30% of their materials were either restricted, limited or classified as secret, but the findings of the study suggest the percentage could be higher. Although these terms are not synonymous, the effects on the distribution function was almost the same, namely, that technical reports were inaccessible to the public. These agencies mentioned libraries besides ISAS which also receive copies and partners that were recipients of their technical reports in Lesotho, thus promoting the distribution of technical reports in the country. The list of the depository libraries is in Appendix 6.

In addition, these agencies affirmed that they produced technical reports that covered various fields for a number of institutions and people, for instance, aid agencies produce technical reports for themselves, then jointly for themselves and governments, or that combination plus NGOs, and the academic community. To whom they distributed almost corresponded to the purpose for whom they produced as shown in the section of the purpose of production in 5.2.4 above. As another way of determining the distribution of types of technical reports, a question was put to the NGOs as to what amounts of the selected five types of reports they received. Details about whether they received a type, and at what level were generated by SPSS in counts and percentages as shown in Table 5.13.

Table 5.13 **Amounts of technical reports received by the NGOs by type, counts and percentages**

	N = 11			
	<u>None</u>	<u>Low</u>	<u>Average</u>	<u>High</u>
Enquiry	6(54.5)	0.0	3(27.3)	2(18.2)
Survey	2(18.2)	2(18.2)	4(36.4)	3(27.3)
Project	2(27.3)	2(18.2)	1(9.1)	4(36.4)
Conference	1(9.1)	4(36.4)	5(45.5)	1(9.1)
Official	4(36.4)	4(36.4)	2(18.2)	0.0

According to Table 5.13 Project Reports were the highest (36.4%) received by NGOs while the Enquiry/Incident, together with the Official Reports, were the least received, at the rate of 54% and 36.4% in the column of “None”. The two scored very low against the measure of “High”. Significant scores (45.4%) for Conference Reports in the range of “Average” meant that they were received in some substantial amounts. As seen in Table 5.10 the Enquiry/Incident was generally one of the least (15.16%) produced types by all the groups, including the NGOs, and for the NGOs, that type is also the least received.

In general there appears to be some association between the number of TRs that a group produced and what it received. That notwithstanding, as seen in the case of joint authorship and in Table 5.10, the relationship did not preclude the fact that certain groups, like NGOs and the academic community which produced on behalf of aid agencies and governments, received less than they authored. In a case where an academic is sub-contracted as an author, for instance, s/he may get not more than one copy. Project Reports ranked the highest (36.4%) received by the NGOs. That level also corresponded to the situation described in section 5.2 which depicted a high level of activism in projects and conference attendance by the NGOs. As with their level of production, NGOs finally received about average number of Situation/Survey Reports produced in Lesotho.

There was a discrepancy however regarding a small number of Official/Internal Reports that NGOs received compared to high productivity of the same type of reports. That could be ascribed to the fact that the NGOs produced the type heavily, yet other groups, especially governments, produced very little and infrequently. Moreover, as stated in 5.2.2 the limited

distribution of Official Reports should be attributed to government officials' reluctance to distribute TRs beyond their ministries, like to the NGOs. It was also, however, attributable it seems to the attitude that was well described in the literature review, that Lesotho and government officials appeared over-sensitive and cautionary about government reports being secret. A number of respondents from aid agencies and the NGOs, on the other hand, were generally relaxed about their methods of production. One senior government official referred to a court case of a female officer who was convicted of releasing confidential files to a foreign country in the 1980s. Whereas one would try to draw a distinction between the classified files/records and classified TRs, that was difficult since a number of government officials would instead go further to refer to the *Oath of Secrecy* which they should take and adhere to, it seemed within a wider frame of reference than the officially restricted TRs.

5.3.1 The role of a national research council (NRC) in the distribution of TRs

On the understanding that TRs may be effectively harnessed if their production and distribution is recorded under one national body, the issue of a national research council was regarded as an important one in terms of the distribution of TRs in the study. A question about the absence of a National Research Council (NRC) in Lesotho was directed to two producer groups, namely, aid agencies and government officials. Ironically, though it appeared to the researcher that some government officials would rather hoard information and reports, they agreed as the aid agencies did that there was a need to have a national pool or repository for information channels like TRs. They stated that it was bad practice that a national research council (NRC) did not exist in the country. They asserted that its importance would not only be for posterity, but also for monitoring, storage, facilitation, collection, and distribution of reports and information. According to information provided by two officials for the Ministry of Planning, the process toward the establishment of the Lesotho Research Council had commenced, and the steering committee constituted among others, representatives from NUL including ISAS.

5.3.2 Distribution of TRs of the global Women's conferences

Since the study aimed at assessing whether information that was channeled by TRs had a bearing on development, activities that related to topical issues in development were identified and were used as a benchmark to assess attendance, the presentation of papers and distribution of proceedings. The logic of this benchmark with conference reports was also

based on the aim of global conferences as discussed in Chapter 3, section 3.2.4; and as evidenced by key development related summits. Those key global fora started with the Women's International Conference held in Copenhagen in 1980. They comprised the Social Summits in 1995 and 2000 in Copenhagen and Geneva, the Food Summit in Rome in 1996, Population Summit in Cairo in 1998, the Human Rights Conference in Vienna in 1993 and latest international Women's Conference held in York in 2000. The idea is for a number of them to be held after every stipulated period like ten or five years. Hence, in such series, each of Social Summits and women's conferences adopt the title of their last venue "+5" (plus five).

The first questions put to respondents focused on attendance, and the second enquired about the availability of proceedings that emanated from those fora. Findings from both the NGOs and the government officials indicate that the attendance at global women's conferences was low. There was one out of eleven (9.1%) NGOs at the conference in Denmark in 1980. Government officials surveyed could only guess that there was about a 13% participation in Copenhagen in 1980, suggesting that there was a weak corporate memory at government level in this regard. Attendance improved in Nairobi five years later, where three (27.3%) out of eleven NGOs in the survey confirmed that they were represented. The government officials' estimated attendance of 13% in Denmark, for instance, increased to 28.6% in Nairobi. In Beijing, the attendance by the NGOs and government officials was at a peak with 36.4% and 31.8% respectively attending. At the Women's Conference in New York which was held five years after Beijing participation by NGOs declined by 4.4% and only 30.0% of NGOs attended. The government officials' attendance also reduced from 31.8% to 4 (17.4%). One NGO respondent remarked that, after all, there had been no progress, achievements, nor success stories to tell in New York. Interpretation of that anti-climax situation is offered in Chapter 6.

The *Food Summit* that was held in Rome in 1996, the *Social Summit* in Copenhagen in 1995, and the next *Social Summit +5* in Geneva, all attracted government officials to a greater extent than other groups. As well, they were attended by a higher proportion of males than females. On the contrary, as was to be expected, all the International women's conferences up to Beijing +5 in New York in 2000 attracted a greater proportion of females. In addition, all the women who participated had been drawn from all the groups represented in the survey, namely the academics, the NGOs, aid agencies and information workers. The gender imbalances that favour males for such fields as agriculture and social development, as well as

the imbalance that favours women in the gender issues, was apparent in the conferences selected for the study.

In response to a question whether they only attended or participated by also writing a report, it was recorded that out of 23 government officials and eleven NGOs only four (17.4%) respondents from both groups that stated that they wrote TRs for this purpose. Others could not confirm that this had or had not been the case, especially where they had not personally attended. By implication, most of those who did not attend conferences were not knowledgeable about the kind of reporting that was going about Lesotho, even about their own ministries. Figure 5.2 in section 5.3.2.1 below reflects the picture.

5.3.2.1 Distribution of the Women's Conference Reports by participants by gender

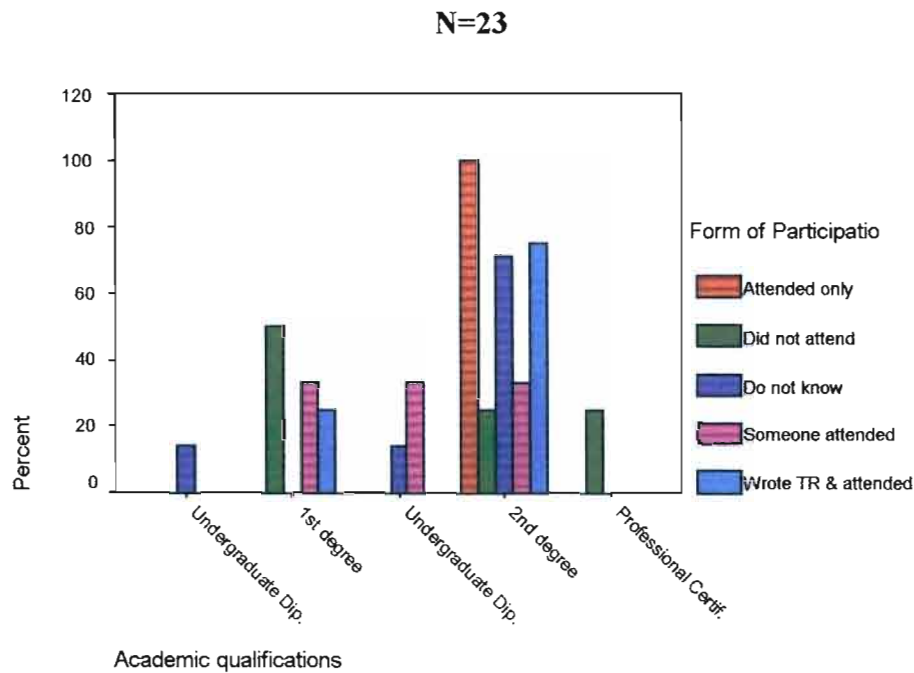
With the purpose of again testing the assumption, that women participants write and carry papers to the women's conferences and/or bring home more TRs, the Beijing Conference was used as a test, and a question was put to government officials to find out how many males and females were involved in the distribution of the proceedings. Out of 23 government officials that responded, there were 15 (65.2%) females and eight 34.8% males .

Out of eight of the male respondents, only one knew that someone attended, the rest either did not know or had not attended. There was no question pertaining to those who wrote papers without attending. Similar to their being the dominant gender in the population of the survey, females were more involved and by inference more involved in that kind of distribution. When in Beijing, they distributed TRs they wrote on and about Lesotho. Amongst themselves as the Lesotho delegation, they were likely to interact and exchange TRs about Lesotho. They brought home TRs from other countries on gender and development. Nevertheless, in this study, the ratio of the females to males as seen in the description of demographic features was 62.2% to 37.8%, or approximately two females to one male. Figure 5.2 also shows that attendance by gender were at the ratio of six females to males. The standard deviation of this particular ratio from the obtaining average of about two to one means that the representation of females at that gathering was higher.

5.3.2.2 Academic qualifications as a factor for participation in the distribution of TRs

In response to whether academic qualifications had an effect on the level and kind of participation, data were also analyzed by form of participation at the Beijing Conference by academic qualifications. The generated results are in Figure 5.3.

Figure 5.3 Government official’s form of participation at the Beijing Conference by academic qualifications



Key: Dip.: Diploma
Certif.: Certificates
Participatio: Participation
TR: Technical Report(s)

The data showed that four (17.4%) attended without necessarily presenting reports. Seven (30.4%) did know if their ministries were represented, and eight (34.8%) did not attend. Four (17.4%) attended having participated in the report writing.

5.3.3 Sources of stock for NUL information centres as depicting the general distribution patterns

In the self-administered questionnaire for intermediaries, information workers were asked to indicate if they got their materials from the fourteen pre-suggested areas listed as possible sources of their entire stock. Also, they were asked to rank in order of from 1 to 5, representing very low to very high, sources of acquisitions. Scores that ranged from 1 to 5 from fifteen respondents were therefore added up from each source against the frequencies of each rank and the average ranking was calculated. That accounted for a score of how much a source was approximately providing to an information centre. A proviso was given to respondents to state "Other" source(s) applicable to them, but they did not add any to the fourteen already provided, as listed below. Respondents indicated that they acquired materials as shown in Table 5.14 in the five categories from very low to very high. The four categories of very low to very high altogether denote acquisitions whose average is in the last column.

Table 5.14 Rankings of sources of acquisitions by information workers

N = 15							
Sources	None	Very low	Low	Aver-	High	Very	No
	(0)	(1)	age		high	Response	(0)
			(2)	(3)	(4)	(5)	
Academic comm.	5	—	—	2	2	5	1
Administration	2	1	—	3	5	2	2
Aid agencies	4	—	2	—	4	5	—
Bodies in SADC	2	—	3	2	3	4	1
Bookshops		2	—	1	2	6	4
Consultants	5	—	—	3	2	4	1
Faculties —	3		3	2	5	—	2
Govt. Ministries	2	3	3	1	1	2	3
Individuals	7	—	1	2	1	4	—
Institutes 3	1		3	1	2	1	4
ISAS 1	1		2	—	2	6	3
Libraries 3	1		3	1	1	5	1
NGOs 5	—		1	1	1	7	—
Overseas bodies	2	3	5	1	2	2	—

Key: comm. - community
 Govt - Government.
 ISAS - Institute of Southern African Studies
 NGOs - Non-Governmental Organizations
 SADC - Southern African Development Community

The rankings reveal that four sources, namely, the government ministries, faculties, individuals, institutes and overseas bodies, provided materials least to the surveyed information centres. Amongst the high ranking sources were aid agencies, consultants, ISAS and the academic community. The low level of materials acquired from individuals confirmed the finding made in section 5.2.4 that the academics were unlikely to own as much as to donate. As sources of library materials, consultants too, were ranked as average, and only by four respondents.

5.3.3.1 Quantities of acquisitions by types of TRs as determining levels of distribution

As another way of determining the level of distribution of TRs in the country, information workers were asked to indicate types of TRs that were acquired, and to estimate quantities by which those types were acquired. The Special Committee Reports which were problematic in most cases at the pre-test (see section 5.2) were omitted. The estimated quantities acquired were ranked for the six types of TRs at a None’ = 1, ‘Low’ = 2, ‘Average = 3’, or ‘High = 4’ levels. The frequencies and percentages for those that were acquired at low, average and high were calculated and are reflected in Table 5.15.

Table 5.15 Quantities of TRs in the collections by type and by scores and (%)

N=15						
Level of acquisition	Academic	Official	Conference	Enquiry	Survey	Projects
None	n/a	2(13.3)	2(13.3)	2(13.3)	2(13.3)	n/a
Low	2(13.3)	1(6.7)	3(20.0)	5(33.3)	3(20.0)	4(26.7)
Average	7(46.7)	7(46.7)	5(33.3)	3(20.0)	7(46.7)	3(33.3)
High	6(40.0)	3(20.0)	4(26.7)	1(6.7)	3(20.0)	6(40.0)

Table 5.15 reveals that Academic and Project Reports were viewed by the intermediaries as representing large quantities in the collections. These were rated at 40.0% by the respondents who rated acquisitions from the two types.

One of the key methods of distributing publication outputs including technical reports in a country is through the depository law or simply the policy of depositing material in libraries and information centres. Since there is no national research council (see 5.3.1) nor Legal Deposit Law in the country, the academic community and aid agencies were asked if they

voluntarily ever deposit or donate their materials in any libraries. The two groups expressed almost the same practices. Out of 12, (41.7%) five aid agencies affirmed that they did while five (41.7%) did not. The two remaining were not aware whether their offices did or not. A few, 11 (21.2%), academics deposited as opposed to 22 (42.3%) who did not deposit free copies. Similar to the other group, two (3.8%) out of 52 members of the academic community did not know that libraries would welcome deposits of free reports. A follow up question on which centres the depositors donated copies to, was answered through a mention of the centres listed below, which therefore serve as distributors too.

The Information centres in which aid agencies deposit were those of the British Council, Central Planning and Development Office (CPDO) of the Ministry of Planning, Lesotho National Library Services (LNLS), Lerotholi Polytechnic Library, NUL Institutes, NUL (Thomas Mofolo) Library, Transformation Resource Centre, United Nations Information Centre (UNIC), US Embassy and the World Health Organization (WHO) Library.

The information centres in which the academics deposit materials are Agricultural Research Library (MOA), Institute of Labour Studies, ISAS, NUL Library and respondent's own Departmental Collection (Public Administration). As it would be expected, and due to the comparatively more multiple copies of each title that aid agencies were likely to own than the academics, the former distribute materials more than the academics. The importance of these centres is again raised in the next chapter in the discussion under the role of ISAS.

5.3.3.2 Acquisitions of global conference reports in relation to participation at those conferences

As a way of finding out if information workers participated in distributing proceedings, for instance of the gender related information, intermediaries were questioned if they made any acquisitions from the mentioned key global conferences. It was noted that the acquisitions corresponded with the participation of government officials in these gatherings as is depicted with the three types below.

Table 5.16 Participation at Women's conferences and acquisition of proceedings

	<u>PARTICIPATION</u>	<u>ACQUISITIONS</u>
Denmark 1980	33.3	20.0
Beijing 1995	75.1	53.3
New York 2000	30.4	13.3

The increasing proportion of acquisitions appeared to have a positive association with the high proportion of participation in a conference. Similarly the decreasing participation in a conference reflected a decline in the amount of acquisitions. The finding was consequently that, though librarians did not necessarily attend all these fora, with the exception of one at the Beijing Conference, the participation of other groups from Lesotho stimulated the distribution and availability of the respective Conference Reports to the information centres in the country.

5.3.3.3 Processing costs and mechanisms bearing on the distribution of TRs

Factors that were likely to stimulate distribution were, among others, assigning a portion of the budget to information dissemination, providing current awareness services (CAS) like selective dissemination of information (SDI), generation of abstracts, indexes and synthesis of reports plus announcing reports on the Internet. But the question about the entire budgetary allocations for the past three years was poorly answered, indicating that a good number of workers had no clue as to the issue of costs of their services. In response to whether they engaged the mentioned mechanisms that stimulate distribution, the majority nine (60%) said they did a little announcing on the Internet. Abstracting was done fully by one (6.6%) and partially by two (13.3%) out of 15 librarians. SDI and Synthesis engaged only two (13.3%), while eight (53.3%) did not apply them. There was a high non-response of 40% regarding detailed processing mechanisms, being an indication that respondents were not familiar with those issues.

5.3.3.4 Availability of Agricultural and Gender materials in the collections

The aim of the study was to assess performance of TRs in channeling information for development. According to the scope of the study, two sectors of development were selected, namely agriculture and gender. With that in mind, the evaluation was carried out in terms of both TRs and ISAS performance regarding agricultural and gender information. Again, ISAS, together with other NUL information centres were surveyed in this regard. Though theoretically other information centres might not be specializing in TRs, that assumption needed to be verified. Moreover, reasons have already been advanced in Chapter 3 as to why TRs should be studied in relation to other channels, and not in isolation as Karnitis (1997) stressed. Other NUL information centres which collect several channels other than TRs as well were questioned on this issue.

The methodology that was used for assessing the sources of the entire stock was also applied for measuring the availability levels of the gender and agricultural related TRs. Firstly, the aim was to gauge how much was acquired and distributed by the NUL information centres generally from the source or distributor or producer to the end users. Secondly, it was partly a way of establishing the prevalence of the selected disciplines of agriculture and gender materials in the collections of all the NUL information centres located in both the Roma and the Maseru campuses, (see section 5.2.2). Notably, it is ISAS that holds a specific mandate regarding the production, collection and dissemination of TRs, and its performance in relation to its mission is a core focus for the study. Accordingly, information workers were asked to estimate the prevalence of agriculture and gender within their stock, to measure the quantities that were distributed and hence available. A descriptive analysis by SPSS generated the percentage regarding prevalence by types of TRs as is shown below. In this particular case, the Special Committee Reports were included, as the question required no distinction to be made between the reports that pertained to Lesotho and those that did not.

Table 5.17 Availability of Agriculture and Gender TRs at NUL by types

Levels of prevalence	N = 15						
	Academic	Conference	Situation	Project	Official	Enquiry	Special Committee
Very low	1(6.7)	2(13.3)	3(20.0)	–	5(33.3)	2(13.3)	3(20.0)
Low	3(20.0)	3(20.0)	3(20.0)	4(26.7)	–	1(6.7)	1(6.7)
Average	2(13.3)	1(6.7)	1(6.7)	2(13.3)	–	–	--
High	1(6.7)	3(20.0)	–	2(13.3)	–	–	--
Very high	4(26.7)	–	–	3(20.0)	–	–	--

The non-response for Special Committee Reports, as well as Enquiry/Incident and Official/Internal Reports was very high, a likely indicator of their problematic nature.

As observed from Chapter 3 of the literature review (Auger 1975; Harris 1990; Cotta-Schonberg 1994; Aina, Kaniki and Ojiambo 1995; Alemna 1995) agriculture as a subject and sector covered a broad spectrum of development. This pertained to grey literature in agriculture that comprised all types of reports in the survey. However, prevalence may vary in degrees and according to the foci of information centres. As recorded, information centres in which respondents worked, differed in clientele, history and seemingly even effectiveness. For instance, one specialized in agriculture, two in education, one in labour studies and others were sectorally interdisciplinary. It was, however, necessary to determine if the availability of

agriculture and gender was affected by those disparities, and to what extent if so. Out of fifteen information workers, four (26.6%) estimated the prevalence and availability of agriculture and gender TRs to be high in Academic Reports. There were three (20.0%) respondents who rated the subjects high in conference proceedings while two (13.3%) estimated the same high level of intensity in the Project Reports. The rest were six (46.6%), which gave conflicting figures, which suggested a possible lack of certainty.

In order to portray the picture in a diagrammatical form, non-responses were ignored and data for the availability and prevalence of agriculture and gender are illustrated in Figure 5.4 below.

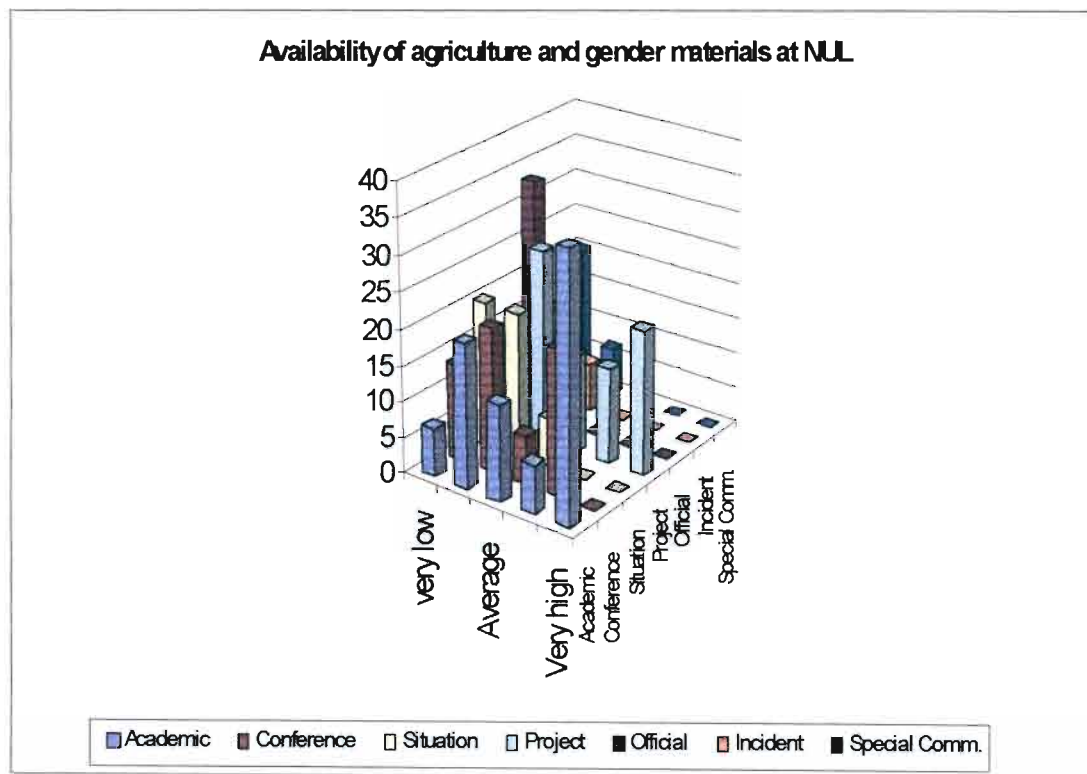


Figure 5.4 still confirmed that availability of these sectors was low in the types of reports that were less produced like Enquiry/Incident, but high in the Academic Reports, for instance. The foregoing presented the findings on the first objective of the study, the production and distribution aspects of technical reports in Lesotho. From the overall data a distribution model

may be designed depicting how technical reports are disseminated from and among the groups in the survey.

The next sections present the findings on how technical reports perform, on the basis of the next five objectives.

5.4 Adequacy of ISAS' s mandate regarding technical reports

The second objective of the study was to determine how adequate the Institute of Southern African Studies (ISAS) mandate was for a specialized information centre that was intended to manage information channeled by technical reports. In order to establish if information management, and particularly a dedicated, specialized documentation centre was a factor in the effectiveness of TRs, ISAS was regarded a unit of analysis. An attempt was made to put into a sharper focus the relationship between the obligations of ISAS as a development-research unit, how it handled research results, development information generally, and specifically management of information channeled by technical reports. Official records since 1979 when ISAS was established were used to answer the adequacy of the NUL mission with ISAS. In addition the opinion of interviewees plus observations provided the required data.

5.4.1 Perceptions of information workers on adequacy of ISAS's mandate

Since the question of adequacy of the mandate pertained to information management, information workers were asked if they found the mandate adequate for ISAS to specialize in the management of development information that included technical reports. This was both a closed and an open question. Firstly, respondents were expected indicate if the mandate was adequate or inadequate, and if it was adequate according to the three stipulated degrees of adequacy which were 'a little', meaning barely adequate, 'average' and 'a lot' or very adequate. Secondly, respondents were asked to give reasons for saying it was inadequate.

According to the overall views of information workers, ISAS's obligation as set and in the mandate was barely adequate. Firstly, responses were analyzed without necessarily cross-tabulating them against the academic qualifications of respondents. In that case, none of the information workers rated the adequacy at a high or average, which were other scales provided in the instrument. Specifically, only two (13.3%) out of fifteen information workers found the obligation inadequate. In the second instance, as in section 5.3.2.2, the answers were analyzed by the academic qualifications of respondents, in order to assess if academic qualification and

aptitude would make an effect in the way information workers view the issue of adequacy. That factor did not make any impact either.

Responses from the information workers were analyzed according to the academic qualifications of the group. Three (5.7%) who did not mention their academic qualifications comprised one each whose responses were that the mandate was inadequate, that it was adequate to a low degree, and one (1.9%) was unable to tell. Two (3.8%) who had a first degree also said they were unable to tell. The last group of ten who held a second degree or higher gave diverse reactions. One did not respond. Six were unable to tell if the mandate was adequate or inadequate. Two said adequacy was slight and another said there was none.

Probed further into giving reasons for their views about the adequacy or inadequacy of ISAS's mandate, 11 (78.8%) information workers did not answer. The remaining four (26.6%) gave responses that have been content-analyzed as shown below:

- ▶ two explicit views that ISAS was meant to handle up-to-date in-house databases which should satisfy user needs at NUL, thereby serving specialized users as it was doing
- ▶ the Centre had a unique multi-disciplinary and research-oriented information, which meant a specialized centre by type of collection and clientele
- ▶ another indication was that ISAS contained a diverse literature on databases, and it had many facilities that provided an environment conducive to enhancing scholarship, as well as promoting a sharp-focused service
- ▶ There was an isolated case indicating that ISAS was little known, and more so regarding its mandate.

5.4.2 Adequacy of ISAS mandate from the academic community's viewpoint

The academic community's views were also sought employing the same measure that was used for information workers. In response, just like with the intermediaries, the academics indicated that ISAS obligation varied. First, the mandate was described as very adequate by three (5.8%), as adequate by nine (17.3%), and as inadequate by three (5.8%). The range of views ended with one (1.9%) respondent who found the mandate very inadequate. Another stated that it depended on many circumstances. Finally, 17 (32%) were undecided while 18 did not respond. Generally therefore, out of 52 respondents, 12 (23%) were positive, four (7.6%) were uncertain, while 36 (69.2%) were negative about the mandate of ISAS.

On motivating their opinion about ISAS's mandate only ten out of the 36 who were negative, and the 12 who were positive, gave reasons for their views. Respondents expressed both their criticisms and comments which are listed below in the order of from the most positive and general, to the specific, then the least important, and criticisms. They were expressed in such a general way that they are taken to carry the same weight.

- ▶ Adequacy of ISAS mandate was affirmed by 12 respondents in that:
 - the problem literature for development was addressed,
 - it was the way in which NUL officially and formally pronounced itself, through a specialized service, by relating to research development, how to manage information
 - NUL also obliged ISAS to collect and provide additional information to and for the academic users
- ▶ ISAS mechanisms towards achieving its goals were commended by two respondents,
 - for its duty of providing recent documentary materials, especially when available upon demand
 - for offering good facilities, its staff had aptitude and commitment, ISAS even operated like a semi-autonomous institute that made it exclusive with a flexible characteristic that accommodated specialized information needs
- ▶ There was a widespread perception, clearly from seven academics who knew ISAS's for a long time, that its aim was historically adequate with TRs as envisaged in the early 1980s, and in the light of the Southern African Development Research Association (SADRA), the secretariat of which ISAS hosted
 - at the time of data collection when even SADRA was dormant to all intents and purposes, the aim, purpose and mandate of ISAS needed to be revisited
- ▶ ISAS provided some service, the kind that was, however, not desirable as was insinuated by two respondents
 - the centre served as a reference centre that was hardly ever convenient to users who needed to borrow and use technical reports outside the centre
 - most of the technical reports in ISAS were not for teaching purposes; and ISAS was little known nor viewed as a library by several members of the teaching faculties
- ▶ According to two respondents, the mandate would be adequate
 - if ISAS information management constituted more than merely collecting, keeping, circulating and making technical reports available, and only upon demand
 - the centre was not often closed during lunch, on weekends or after work

- if generally staffed by skilled desk assistants who were efficient
- if its semi-qualified staff were not failing to trace some technical reports from the collection, especially the backlog that was not yet in the data bases

Some answers, it should be noted, did not relate to the obligation of ISAS independently of the ineffectiveness or effectiveness of ISAS at the time of the survey. ISAS could fail or succeed to fulfill its mandate irrespective of the latter's adequacy or inadequacy.

5.4.3 ISAS's mandate in relation to the NUL Transformation

In 2000, the NUL Council authorised the setting up of a Transformation Task Force to steer the process of transforming NUL. The objective was said "to discover and re-affirm the core business and the mission of the institution" (NUL Transformation Action Plan: no date [2000]) among other aims. The study of performance assessment of TRs and ISAS coincided with the transformation process of evaluating, *inter alia*, the information services of NUL as a whole. In 1979, for instance, when ISAS was established the Institute of Education (IE) and Institute of Labour Studies (ILS) were yet to be mooted and established. The mandate of ISAS was to be understood alongside a perceived need for transformation. It was reaffirmed during the data collection, for example, that the collection within the documentation centre of the Institute of Labour Studies (ILS) had no documentalist yet its collection comprised TRs. During the interview with the respondent from ILS and a member of the Transformation Task Force, it became evident that more coordination and consolidation of NUL documentation centres was necessary. Filling the gaps if any in the services would be one among other benefits of the consolidation. Therefore, there was a felt need for an adjustment of ISAS mandate that could be more embracing and more cost-effective in the technical reports management.

5.5 ISAS's mechanisms of managing technical reports

ISAS mechanisms were assessed in terms of the way it fostered links with producers, its efforts to self sponsor or seek additional external funding for technical report management, the way its internal and external mechanisms were viewed by the groups and the authorities through records and other means. A good or poor performance of TRs as a channel of information for development depends on various factors such as applying appropriate or inappropriate strategies for managing the channel. Views on how good or bad the management should also be expressed by NUL and or ISAS researchers, as part of an institutional self-assessment. Such views may also come from the observers and affected parties. For that reason relevant questions

about whether such mechanisms could fuel or stifle TRs' performance in the case of ISAS were put to all the groups in the study.

5.5.1 ISAS's mechanisms for reaching out to the producers of technical reports

For an information centre to be successful in its TRs's acquisition, it should put in place definite mechanisms for locating and interacting with the producers and sources of TRs. With this thinking in mind, ISAS mechanisms were evaluated. The NGOs were asked if they had any cooperative links among themselves and between them and the academic community, which in this case included ISAS. Seven (63.6%) affirmed that linkages existed, as against four (36.4%) who said links did not exist. The sort of ties with NGOs were said to constitute collaboration and cooperation in joint development projects, joint funding, academic expertise given to the NGOs, joint lobbying, perhaps to government and the like. In spite of the fact that such links included all other academic sectors, there was no mention of collaboration that specified information management within the NGOs group as such. It could be implicit, however. This is again despite the fact that, as shown in Chapter 2, when it closed, the UNDP donated its gender collection to ISAS, just as an example of the rapport the Institute had established and enjoyed then. The question did not, nevertheless, set the time limit of when the mechanisms seem to be effective, ineffective, improving or getting redundant. The documentalist stated that in recent months they had had several problems, especially pertaining to transport that would facilitate outreach to the sources of technical reports.

5.5.2 ISAS as a depository of technical reports

The responsibility for encouraging the depositing of reports lies with the relevant information centre. In that respect, an enquiry was made on what strategies were in place to acquire TRs in that manner. Aid agencies were asked to mention where in Lesotho they made free deposits of TRs if at all. There was no specific mention of ISAS. It did however fall within "institutes of higher learning" which were specified. Depositories that featured were libraries or information centres of the United Nations Information Centre, World Health Organisation Reference centre, libraries of the National University of Lesotho, Lerotholi Polytechnic, UNESCO, National Library, US Embassy, Central Planning, British Council, plus certain schools, and about 25 local partners such as the Transformation Resource Centre. It was further observed that on the initiative of ISAS, the NUL Senate Committee which is responsible for funding Research and Conferences (RCC), authorised that ISAS, together with the NUL main Library, be the depositories of reports produced through the funds of RCC. This was seen by

researcher as one mechanism of managing technical reports emanating from NUL. The effectiveness of that method warrants a separate study.

5.5.3 Strategies of attracting aid for technical reports' management

Moreover, as it would be expected that sponsoring ISAS's development related activities would also translate into the production of proposals, feasibility studies, progress or final project reports, the issue of the financial support of TR management was investigated. Aid agencies were interviewed about whether they had cooperated with ISAS at all in its development-related endeavours as a whole, or sponsored the Institute in any way. Sponsorship for ISAS was confirmed by only two (16.7 %) out of 12 aid agencies that were surveyed, six (50%) did not know, and four (53%) either did not know or could not remember. It would have been helpful to ask respondents to indicate the length of time they had served their respective aid agencies which would have thrown light on their knowledge of when the sponsorship to ISAS started, increased, reduced, ended, or whatever had been the case historically.

5.5.4 ISAS's own costs of managing technical reports as seen by aid agencies

The commitment to mechanisms for managing TRs, could be used as a point of assessment for an information centre. Aid agencies, as the group that seemed to have interacted with ISAS in project funding, were asked about their view on this issue. In cases where ISAS's costs were directed to mechanisms for managing the channel, aid agencies regarded the cost to be high. The opinion was given by those who sponsored and others who did not necessarily sponsor ISAS. Out of 12 respondents, seven (58.3%) found the question not applicable to them. Only one (8.3%) said the costs and inputs were somewhat high. The rest four comprised two (16.7%) and two (16.7%) who assessed the costs as between average and low, and as very high, respectively.

According to the official records, it was unclear how much ISAS had spent on inputs into its information management in general and specifically for TR-related operations. That notwithstanding, the budget for NUL had barely increased in the period around 1997 to 2000. Consequently, the allocations for ISAS Documentation and Publication Division which had separate line items for salaries and overhead expenditure had been negatively affected. For its budget, ISAS operated one line item called 'publication' which was not solely for purchasing or acquiring of TRs. In terms of its mandate, ISAS has to collect TRs as opposed to conventional library books. The mentioned budget item was for purchasing the photocopying

paper for users in the reading room, for editing, printing and binding research results that were published as other reports and documents. For the transport allocation a distinction was not made between what was spent on acquisition trips per se and other trips. The data for the financial costs were therefore not very reliable. Implicitly, financial requirements for TR management were not specifically assured. The available physical facilities were generally commended by respondents, though their bearing on the effective mechanisms of handling TRs might be remote and indirect.

5.5.5 ISAS's capacity to attract technical reports distributed by government

Government officials were asked firstly, if they distributed reports outside their ministries, and secondly, who were on their distribution lists. A similar question was asked in another way, requesting the officials to mention information centres that were recipients of their reports. The idea once again was to determine how well-known ISAS was, if at all, and how effective ISAS mechanisms were for advertising itself to government ministries and departments as producers and distributors of TRs. Questioned about centres which received reports from the ministries government officials did not mention ISAS at all. But regarding specific mention of information centres that were on the mailing list, ISAS was mentioned by three (13.04%) out of 23 respondents whose list also included four other centres. This demonstrated ISAS weak capacity to attract, technical reports from government departments. In addition, it showed that information centres were competing with individuals, institutions and several bodies that entered a long distribution list of government departments. The Central Planning and Development Office (CPDO), for instance, showed its mailing list for the serial title, namely the *Five year development plan* which was being distributed to more than 2000 recipients within and outside Lesotho.

5.5.6 ISAS's current awareness service for TRs, from the intermediaries' viewpoint

In terms of TRs being obtainable and utilized, performance of TRs to a great extent depends on the performance of specialized centres like ISAS. As an intermediary, it was obliged to announce and make known its own TRs, research results and other sources. In evaluating ISAS from this angle, information workers were surveyed since the issue pertained to their scope of experience. They were asked to rate the quantities of TRs that were acquired from ISAS. This applied to all items that other NUL centres obtained from ISAS as primary or secondary sources, either through sales, exchange, free distribution and so forth. ISAS scored very high with six (40%) respondents, with two (5.3%) rating the Institute at high, and two (5.3%) at

low. One (2.6%) reported that nothing was acquired from ISAS. From the intermediaries viewpoint, it could be deduced that the Institute on the whole had in place several, recognizable strategies for the dissemination of its materials inclusive of TRs. The results of this question also tallied with the earlier finding (see Table 5.13) that ISAS ranked among the highly dispensing sources of acquisitions for NUL information centres.

5.5.7 The Centre's information retrieval mechanisms as seen by the academic community

For TRs to channel information to users, not only were librarians required to acquire and store, but to have efficient ways of recalling swiftly the needed TRs or relevant information. Finally, questions were posed to the NUL academic community about the methods that were available, or that were used to know, retrieve, get access to and utilize ISAS resources, including TRs. For enquirers who already knew ISAS and used the centre, identifying a report by author, subject, title or combination of all these points was an easy and effective way that enabled desk assistant to retrieve information. As discussed in the literature review, for unknown items and remote enquirers, the mechanisms would be inapplicable. Moreover, it was observed that even for the known item, ISAS had a closed-access collection whereby enquirers were in most cases served by a desk assistant who resorted to manual and automated indexes often by herself. That arrangement was also criticized as inhibiting browsing by readers and limiting the performance of TRs. On the question of whether they served themselves, and what reference tools they utilized in the event that they were familiar with the item they needed, 44 (84%) out of 52 members of the academic community did not respond. By observation, printed copies of indexes were no longer available for enquirers at the desk. In addition, there was only one computer terminal for browsing through the databases. There was neither a guide on how to use the computer while searching ISAS databases nor on surfing the internet. Recorded evidence was found in the mentioned *ISAS 1995/96 - 1996/97 Annual Report* (1997:14) that the databases represented only 27% of the fully indexed collection. The rest, being the semi- or unindexed collection, was a substantial resource yet almost inaccessible to potential users.

5.6 Use of ISAS and technical reports managed by ISAS

So far the findings have spelt out performance of TRs from the production, distribution and sponsorship levels. The next objective of the study determined aspects of use or non-use of the end-product that was supposed to be or to have been managed by ISAS. In that case, the Institute was evaluated at the level of use.

5.6.1 Usage of ISAS Documentation Centre

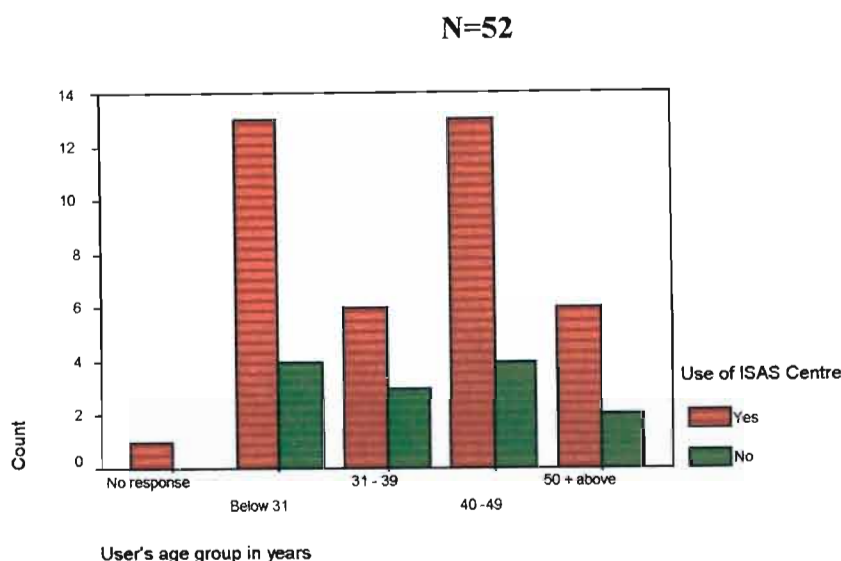
Performance assessment of TRs as a channel of information had to be carried out in a real-life situation as described in the case study methodologies. The case had to fit the context as described in the section of world-wide specialized documentation centres in Chapters 1 and 2. That is why a typical centre was identified as a site where the other units of analysis converged were recorded for observation and data collection. As a result, determining use or non-use of ISAS documentation centre was done concurrently with use or non-use of TRs another crucial function in this evaluation. A question about usage of ISAS was asked of the NUL academic community which was composed of 31 (59.61) females and 21 (40.38%) males. From that total of 52, 39 (75%) said that they used the centre, 13 (25%) said that they did not. This made a ratio of about 3:1 for use against non-use.

Table 5.18 Frequency of visits to ISAS documentation centre
N=52

FREQUENCY OF VISITS	SCORE	Percentage
No response	3	5.8
Once per month	13	25.0
2 - 4 times per month	9	17.3
1 to 5 times a week	8	15.4
+ 5 times per month	3	5.8
- once per month	6	11.5
N/A	10	19.2
Total	52	100.0

Most, 13 (25.0%) users visited the centre once per month, while 3 (5.8%) frequented it more than five times per month. According to arguments raised by most scholars in Chapter 3, this was a debatable issue since the visits might not necessarily determine the intensity of utilizing information in terms of applying one’s intellectual faculties as Abbot (1989) and Dervin (1983) assert, let alone any benefit from using the report, for example. Usage was further presented by age as in Figure 5.5.

**Figure 5.5 Level of usage of ISAS Documentation Centre by the academic community
by age**



Non-users were almost spread evenly throughout the age groups, becoming understandably fewer in the oldest age group that comprised only eight academics (see Table 5.3). Age of users also corresponded to the size of population in the shown age groups where the age 30 and below was equal to the age group 40 and 49 as shown in Table 5.3. There are more users than non-users in all the age groups.

One finding was that use and or non-use was linked to the location of the population.

There was a link between where one lived and where ISAS was. The majority, 45 (60%), of respondents lived in Roma during the university term, followed by 21 (28%) of those living in Maseru, and the third category of nine (12%) who lived elsewhere in or outside Lesotho. Though users visited the centre for their typical information needs, it was a very small percentage from these categories who traveled to Roma specifically for use of the documentation centre. ISAS has not devised alternative or supplementary mechanisms of serving remote target users especially the majority that were likely to need the services but lived in Maseru, the capital town. Notable too is that, data had been received from students more than staff. Response rate from the most senior academics had been low. That imbalance

was likely to produce an unreliable picture. As well, this could be understandable where, for instance, all the users are served mainly by an assistant, and with little self-service.

5.6.2 Purposes for use of ISAS Documentation centre

The next most important question was to find out the purposes respondents used the centre. The questionnaire provided eight possible purposes for which could all be ticked, but each could be ticked once if it related to the purpose for using the Centre. Those clusters indicating purposes for use are shown below together with counts or frequencies of use by the academics.

Table 5.19 Purpose of visits to ISAS Documentation Centre by frequencies

N=52			
<u>Type of purpose</u>	<u>Frequencies</u>	<u>Type of purpose</u>	<u>Frequencies</u>
Student assignment(s)	20	Conference/seminar work	9
Student project(s)	17	Consultancy work	8
Staff, research assignments	16	Staff, teaching preparations	7
A mix of several purposes	11	Administrative duties	3

As listed in their order of frequency, data showed that students visit the centre for purposes of reading for their regular assignments like a short discussion on a given topic. Secondly, the centre is used for final projects that account for mini-theses or dissertations. Staff research assignments were the next. It was a point worth noting in the discussion that ISAS reports were used for projects and consultancies more than for teaching and for administrative work. This finding was confirmed by the two neighbouring desk assistants serving in ISAS and IE respectively. They had been advised by the researcher that she was from time to time visiting them in order to observe, among other things, who could be using their centers most. The situation demonstrated that both places were patronized by students more than staff. Yet, both received special visitors from beyond Roma and Lesotho who specifically traced reports pertaining to development, consultancy and project work. An example was a researcher who came from World Vision Lesotho. He indicated that he was working on the World Vision project proposal for joint Lesotho and South African offices. The search was for information on poverty eradication among the rural areas, and had to refer to 1982 ISAS research report by Judy Gay entitled *The household survey among the rural women of Lesotho*. For emphasis and cross-checking a related question was asked as to the report that was used recently and for what purpose it was used. Generally, reasons for use of the recently used report were broader as they

encapsulated student project supervision, official research, consultancies, student assignments, student project writing and the combination of all these.

5.6.3 Disciplines of the recently used technical reports

In order to assess if ISAS was multidisciplinary as it was intended, the academics were asked to specify the disciplines of the reports they had used most recently. The reports were later checked in the centre, to verify that they were available. Two of the cited reports were not found, but that did not necessarily mean respondents did not since find them. Misplacement had, however, been an issue of concern by users. That was also why the recalling mechanisms were sometimes ineffective. Content analysis approach was used to group the subjects of the reports that had been cited. The analysis also indicated the corresponding frequencies.

The top-ranking discipline of the report recently used in ISAS was Economy and Finance with three scores. It was followed by Education, Gender and Water resources at a score of two. The next score of one each were for Environment, Education, Food and Agriculture, General References, History, Children, Politics and Security.

The subjects of the recently used reports did not quite reflect the supposedly multi-disciplinary nature of ISAS. Use from the natural sciences, health and technology ranged from low to non-existent. The absence of materials in science and technology was evident in Africa according the point of Saracevic (1980) as raised in section 3.2.4.4.

A look at the 1999/2000 report of ISAS Documentation Centre, shows that use of documents increased or reduced systematically by season rather than by themes. Peak months of use were during the preparation of examinations and project submissions which were around April, May, then October and November. Use of agricultural materials in ISAS also declined in 1999 when the Faculty of Agriculture moved to Maseru where it merged with the former Lesotho Agricultural College. Though agricultural materials also touched on a number of disciplines, agricultural items had got special attention due to a number of agricultural research projects that the Institute has operated in the past. Additionally, as a special service to the newly established Faculty of Agriculture in 1991, specialized organization of agricultural collection and subsequent indexes for this sector were relatively in order. Other than that, uneven use across the sectors was observed. Gender, in particular, was not easy to assess as it was classified either under the *OECD macro-thesaurus* category of culture, or scattered throughout

several fields such as human rights, population, food and health. Understandably, the sector permeated all those subjects.

5.6.4 Use of ISAS's technical reports from global conferences by the academic community

Use of ISAS's TRs by the academic community was further assessed against use of proceedings from the selected global conferences. The objective was to determine further if the centre was relied upon for TRs covering topical issues in development. The analysis of responses is tabled below by percentage of frequencies of use.

Table 5.20 Use of ISAS's technical reports from global conferences
N = 52

<u>Conference</u>	<u>% of Use</u>	<u>% of Non-use</u>	<u>No response</u>
Women's conference (Copenhagen - 1980)	—	13	39
Women's conference (Nairobi - 1985)	1.9	71.2	26.9
Human Rights (Vienna - 1993)	7.7	69.2	23.1
Population Summit (Cairo - 1994)	5.8	69.2	25
Women's conference (Beijing - 1995)	7.7	71.2	21.2
Food Summit (Rome - 1996)	1.9	71.2	26.9
Social Summit II (Geneva - 2000)	1.9	75.0	23.1
Women's conference (New York - 2000)	1.9	75.0	23.1

In all those events use was lower than non-use, though the Beijing and the Human Rights Reports scored the highest equally, followed by the *Population Summit* (Cairo). One (1.9%) respondent indicated among other things that s/he used the *Food Summit* TRs from ISAS. As it was observed that the Food Summit proceedings were difficult to retrieve from the relevant aid agencies and government officials, it was checked if indeed relevant reports were available in ISAS. One was found, but its source could not be established. The bulk of papers from the Human Rights Conference were found. It was established that they had been requested and deposited by one individual who attended the conference representing an NGO in Lesotho. The table shows that, in this case, use depended more on topicality and availability than on any other variable.

5.6.5 Use of ISAS and production of TRs by the academic community

It is reasonable to assume that the performance of ISAS regarding the use of TRs also depended on how much its own community was performing. The higher the productivity by the academics, the higher potentially the collection figures for ISAS, and vice versa. In that respect, a cross-tabulation was made to determine if levels of production of the Academic and Project reports, taken as examples, were dependent on levels of use of ISAS, or whether there was no relationship. An analysis of that was done through the assistance of SPSS. The analysis revealed that out of 52, 39 (75%) academics who used ISAS Documentation Centre also made a higher production of the Academic Reports. Conversely, the remaining 13 (25%) who produced less Academic Reports, had also used the centre. The finding is therefore that there was a strong positive association between use of an information centre managing TRs, and high productivity of yet more TRs. The same question was asked regarding use of Project Reports. The analysis showed that of the 39 (75%) who used ISAS, they also participated in the production of Project Reports on a seldom or regular basis. Out of the 13 (25%) who did not use ISAS Documentation Centre, neither did they produce this type of reports.

To test the level of this relationship statistically, Pearson’s method of calculating a chi-square was applied for ISAS usage as one variable, and the level of the respondent’s participation in the production of both the academic and the project report. Table 5.21 provides the analysis.

Table 5.21 Association of use and production of Academic and Project TRs

N = 52

	Usage ISAS documentation centre	Participating in production of academic report	Participation in Project report
Chi-Square	13.000	26.66	34.22
df	1	3	3
p. value	.000	< 0.001	< 0.001

Analysis of the results shows that there was a significant relationship between the two variables, thus showing a strong positive association between use of the centre and the production of the Academic Reports on the one hand, and the production of the Project Reports on the other, by the academic community. As noted in Table 5.10, however, the academic community produced the Academic Reports more than the Projects. But in terms of the association with use of ISAS, the linkage with the production of Project Reports was stronger. This means that for the academic community to generate the latter, they apparently required and use the centre more than they did for the Academic Reports.

The above three tables indicate that respondents who used ISAS documentation centre tended also to produce Projects reports more frequently. They were followed by those who produced Academic Reports. The finding is that those who either did not use ISAS, likewise, did not produce both types of reports.

5.6.6 Use of ISAS Documentation Centre by government officials

As shown in Chapter 2, ISAS Documentation Centre was meant to target on the one hand the development-oriented academics. On the other, it had to serve development information to development planners and policy makers on and off the campus. Since government officials in the study constituted, among others, the mentioned group of development decision makers, they were asked if they used ISAS Documentation centre. The majority of 19 (82.6%) out of 23 said they did not. Some justified their non-use in that ISAS was located too far from them. Two (17.4%) agreed that they used ISAS. The other two responded differently. One said he used to, about eight years ago when he was in another ministry that worked closely with ISAS for joint research and co-publishing. Another admitted having indirectly benefited from ISAS's TRs and other publications that were sold in the bookshops or available elsewhere.

5.6.7 Readership rate among government officials

A follow up question related to the rate of readership in general among government officials or in the respective ministries. Performance of ISAS and that of TRs depended mainly on the function and the rate of reading. In reacting to the question, though a few believed the rate varied enormously with individual officers and circumstance, government officials on the whole agreed that readership of reports ranged from low to very low and to none. Reasons forwarded for non-use was content-analyzed into two themes as follows:

- ▶ Organizational structure and of civil service and its institutional problems
 - no incentive to read technical reports because of being busy with other office chores
 - no need to read since being an informed, knowledgeable, and well performing employee did not always made any difference in terms of a reward to the employee from the employer
 - organizational structure of civil service was on the whole traditionally designed to communicate by brief records like letters, minutes, memoranda, circulars, notices and not by technical reports which pertain to a few that deal with projects, plans and policies

-non-use was one of the indicators or effects of poor governance in the civil service whereby even the few who should read TRs prior to monitoring and in-house managing usually do not read related TRs

- Lack of information support systems or management that would enthruse them into using through CAS, SDI and such facilities
- reports generally contained difficult, unusable and off-putting information that was applicable to only few users, thus implying the need for re-packaging of information they convey.

Finally some did not know why there was that low readership, yet they imagined it was necessary that officials should read, be knowledgeable and become effective.

5.6.8 Information centres that are used, other than ISAS

The effectiveness of ISAS in managing TRs may be gauged in relation to the effectiveness of other information centres operating within the context of ISAS. That kind of effectiveness was assessed by all the groups that were asked to state the libraries they used other than ISAS. Members of NUL academic community, aid agencies, government officials, information workers and NGOs were asked to mention centres that in one way or other were used in TRs and its information management. There were other thirty two centres that were used as supplementary or optional to ISAS Documentation Centres. Thirteen of them belonged to government departments while nine belonged to non-Lesotho organizations. The rest were for NUL, parastatals or locally-based private institutions. These are listed as Appendix 7. In addition to these, there was a mention of Internet, and of ministries's collections yet to be organized, or in the process such as the Ministry of Education; as well as informal private holdings of TRs. The implication of this level of information infrastructure in Lesotho, on TRs and ISAS performance is interpreted and discussed in the next chapter.

5.7 Effectiveness or lack thereof in the management of TRs by ISAS

The last but one objective of the study was to assess the effectiveness of ISAS inputs as shown. Specifically, it was to determine what happens after the Institute has applied the strategies, mechanisms, costs, and supplied the finished product, or what finally culminated into utilization or non-use of the TRs. It was to establish if the process was effective for the clientele, that is, the extent to which ISAS service accomplished its aims with TRs.

5.7.1 ISAS' s effectiveness in terms of whom it attracted

As presented in 5.5.2 above, ISAS Documentation Centre was still used for its primary function of providing development information for research purposes. Table 5.21 indicated that there was a close relationship between users of ISAS's TRs and those who then produced, in particular, the Project Reports. However research ranked third to other purposes. Other than academic users, there were few researchers from elsewhere that utilized TRs managed at ISAS. Consultancies ranked sixth on the list (Table 5.19) of eight reasons of using ISAS. Students patronized the centre more than staff, who together with researchers, planners, decision-makers and the executives, despite being the intended primary users, used ISAS a little. TRs management thus attracted users of a secondary purpose more, implying, seemingly, a shift of ISAS focus which becomes a matter of discussion later.

5.7.2 Information demands placed by ISAS researchers on other information centres

Despite the fact that ISAS Documentation Centre was still being used by researchers, at the same time they made as high demands on other NUL resources plus other non- NUL centres. This was evident from 5.6.6.1, and the long list of the optional or supplementary centres used by the academic community. Implicitly, ISAS did not fully meet the needs of its own clientele. This was albeit the fact that majority of most of the other NUL centres described their acquisition policy as mainly to support curriculum-based teaching and learning, and information needs for research were not their strong areas. At those centres, information demands placed by ISAS researchers on agriculture and gender ranged from average to high. Nevertheless, in this case only one (6.7%) information worker systematically kept statistics that should convincingly inform the study about needs. Out of 15, 14 (93.3%) did not. There were no responses on whether information workers anticipated demands on topical issues, while 73.3% actually confirmed that they conducted no needs assessment studies. There was thus an information gap in this regard. Views were as a result based on speculations. The picture indicated that demands were on a wide spectrum thematically. Topics covered by the report recently used, as in section 5.5.3, were of a partly multi-disciplinary nature. They emphasized the point of whom the centre attracted, which was likely to depend on what ISAS had to offer.

5.7.3 Failure to find the needed materials from ISAS

Performance of an information centre may be assessed by the way it achieves its aims as relating to the service to the clientele, and the level of satisfaction by that clientele. That was why the mere visits were described as not sufficient in determining the effectiveness. What was important was for visitors to the centre to have their needs met. If the a centre fails, it may be concluded that its performance is ineffective, and the condition that will bear negatively on the impact. As another way of measuring ISAS’s success or failure, a question was therefore put to the academic community about the level of failure to get items they required from ISAS. Data revealed that 14 (26.9%) experienced some failure, but a majority 22 (42.3%) did not. Only a few, 2 (3.8%) also succeeded to obtain items from friends as opposed to 18 (34.6%) who did not succeed. The question then arose if those who failed constituted the intended primary users as mentioned above, and if they were carrying out activities directly related to development research and decision making, according to ISAS mandate. Using the Pearson correlation method to calculate if there was any relationship between the ‘designation’ and ‘failure’ variables, the results were found as they are in Table 5.22.

Table 5.22 ‘Failure’ and ‘Designation’ of the academic community

Designation of respondent	Designation		Failure to get information	
	Pearson Correlation	1.000	Pearson Correlation	.146
	Sig. (2-tailed)	.	Sig. (2-tailed)	.301
Failure to get information	N	52	N	52
	Pearson Correlation	.146	Pearson Correlation	1.000
	Sig. (2-tailed)	.301	Sig. (2-tailed)	.
	N	52	N	52

**** Correlation is significant at the 0.01 level (2-tailed).**

The small p-value of .301 accepts the null hypothesis, thereby indicating that the relationship is very low between the designation of user and user’s failure to get information required. This means that there is not much relationship between failure to get information and the designation. One could fail to get information being a junior student or a professor. This was understandable where, for instance, all users were served mainly by an inexperienced assistant. That was coupled with a problem of limited catalogue browsing.

5.7.4 Assessment of ISAS mechanisms from the academic users' perspective

In the sections 5.8.6 and 5.8.7 the academic community in general described the methods employed in ISAS. In this case, as users, members from the academic community gave their opinion on those methods and mechanisms. In order to assess if the internal mechanisms were enhancing the effectiveness of TRs management, users from the academic community were asked specifically to describe the process of information retrieval in the centre. The process was described as easy and very easy by five (9.6%) and two (3.8%) respondents respectively. Three (5.8%) users that said the process was "somewhat difficult", followed by six (11.5%) who found it "not easy" and two (3.8%) who described it as 'very difficult'. Non-respondents were 34 (65.4%). Seven (13.4%) accounts for the positive while a high score of 13 (25.6 %) gave a negative description of ISAS's retrieval processes. A majority of respondents who positively commended the accuracy of desk assistants went on to say that ISAS often supplied exactly what they needed. A few said the desk assistant rarely got what they required.

On the issue of how timely the current awareness services (CAS) tools were, a positive response was given by eight (15.4%), while half the number described the tools as "Not up-to-date". Sixteen (30.8%) were undecided, which was indicative of uncertainty possibly about the primary sources being referred to. And if so, TRs that were announced would be very difficult to access. There were 24 (46.1%) out of 52 who did not respond, which could signal unawareness of CAS.

Asked if academic members ever went back to ISAS to trace an item that was not found in the first instance, 21 (40.4%) agreed', but 15 (28.8%) disagreed . Upon the second trial, however, a majority of 18 (34.6 %) as opposed to two (3.8%) were successful, implying either that what had been a difficult search to the desk assistant was later referred to the documentalist who was a professional therefore successfully located it in the centre or traced it from the source or elsewhere. One finding was that demand stimulated search and availability and enhanced the performance of TRs. Another finding was that professionalism in the TRs' internal management was more effective than unskilled service.

Under the general comments, ISAS was said to be marketing itself more externally than locally. The quoted example was its visiting research fellows who were attached for sabbatical while

local researchers were less attended to, hence the readership plus production of TRs for the latter was inclined to be poor.

5.7.5 Assessment of ISAS mechanisms by aid agencies, government officials and NGOs

Aid agencies were questioned on their views about the effectiveness of ISAS mechanisms. The agencies were unable to assess ISAS at the level of effectiveness with TRs management. The majority of respondents said they had not interacted with the Institute at that level. The same question was put to the NGOs and government officials. They had no corporate knowledge in this respect. But as individual respondents, a few recalled publications of ISAS, but none was able to assess the effectiveness of TRs, nor its service per se within NUL and the country. This knowledge vacuum is ascribed to a number of factors discussed in Chapter 6.

5.8 Cost-benefits from TRS pertaining to Lesotho

The final objective of the study was then to determine performance of TRs at the cost-benefit level of assessment. It has been debated in the problem statement presented in Chapter 1 that in several cases the costs of TRs' may be high and not be commensurate with the benefits. In the case of ISAS and TRs services as a whole, views were gathered from ISAS records and from aid agencies in Lesotho. Bearing on the definitions of costs and benefits in the introductory chapter, which primarily denoted the value derived or accrued, as well as a consequence of inputting resources in some process, value and quality were identified as criteria in assessing cost-benefit.

Data on costs and benefits of production and use of TRs pertaining to Lesotho were collected firstly from each of the survey groups, combined and separately depending on different or common questions put to them.

The researcher also interrogated the environment that included the indirect observation of the general public. In this way triangulation was further achieved. The cost-benefits that may be attributed to all the five groups pertained to both the value that they may derive from the quality of reports. There were limited official records from which to determine value and/or quality of most of the reports generated in Lesotho.

Official records were unavailable from which to determine value and/or quality of all the reports generated in Lesotho. It was, however, a peculiar occasion observed by the researcher on the 9th and 10th of May 2001, following the budget speech that had been presented a few days before, a member of Parliament from the Lower House, namely Dr. Ketso who was formerly a Minister of Finance and formerly lecturer in Economics, expressed his concerns about the quality and validity of the budget just presented. He doubted its quality, hence its value on the grounds that it was almost baseless. His observations were that estimates had not been supported by an Auditor's Report. In other words, there was no reporting on how the previous budget had performed. He raised grave concerns about the poor and inadequate report production, mainly by government officials whom he accused of hoarding information sometimes, or providing outdated misleading statistics. That led to situations where "motho o sheba li-record tsa khale feela o se a nka qeto" 'due to unavailability of timely and factual information, one only refers to the nearest records even if they are out dated, and one simply makes decisions'. He rejected the statistics on poverty and employment in the Budget. He did not exclude the academic members of community in lagging behind with timely factual data in their reports. He was focal on the consequence of poor quality in the production of a budget that consequently caused the intended people few or no benefits. Due their direct relation to the thesis, the concerns on quality, timeliness, and value were worthy of reference for discussion and recommendations in the upcoming chapters.

5.8.1 Views of the academic community on cost-benefits

The academic community was used as source of data regarding cost-benefits of ISAS and TR services. Indicators of costs-benefits could occur at any of the functions, namely, the production, distribution, report management or use. At this juncture, determining cost-benefits was made at the level of 'use' by the academic community. A specific question was how they would assess a recently-used report at ISAS, in terms of value and quality. The meaning of these terms was incorporated in the question as in Appendix 2, Question 43. The terms were respectively defined as the benefit accrued in relation to costs, and the expertise, reliable or factual informativeness of the content. Frequencies of ratings that respondents made are, for comparative purposes conveniently put under one Table 5.23.

Table 5.23 Value and Quality of information in the recently-used report

N= 52		
VALUE	Frequency	Percent
Of great value	16	30.8
Of little value	3	5.8
Of no benefit nor value	1	1.9
Not applicable	7	13.5
No response	25	48.1
Total	52	100.0
QUALITY	Frequency	Percent
Very good quality	7	13.5
Good quality	6	11.5
Average quality	8	15.4
Very poor quality	1	1.9
Not applicable	6	11.5
No response	24	46.2
Total	52	100.0

The table shows that value and quality corresponded in terms of frequency. The scores made an exponential growth with a low level of one (1.9 %) describing the information contained in the recently used report as of either very poor or no value or quality. Scores rose to 8 (15.4%) and 3 (5.8%) for average and little value and quality respectively. The highest score for those who responded on the issue of value was 16 (30.8%). Non-response is explained in the next chapter of discussion. The finding was that value and good quality information were associated and supported. Once again, as a way of determining if the two features of TRs were related or not the Pearson correlation method was used as shown in Table 5.24.

Table 5.24 The relationship between quality and value of a TR used

Test Statistics

	Value of the report in terms of information needed	Quality of information in the report
Chi-Square	38.385	35.923
df	4	5
Asymp. Sig.	.000	.000

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 10.4.

b 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 8.7.

It was found that the relationship between the two variables 'value' and 'quality' was too low, thus affirming that quality of a report does not necessarily imply that it will result in value to

a user. No matter how well-managed, poor quality information even if conveyed by TRs was not likely to result in any value or benefit to users.

5.8.2 Cost benefits of technical reports from the aid agencies' perspective

With the aim of weighing the benefits against costs, aid agencies were asked firstly to compare the costs per unit of three types of channels they had used. Use in this case referred to sponsoring, producing, distributing even 'using' in its generic sense. The details appear in Table 5.25 below.

Table 5.25 Costs of technical reports versus other channels as seen by aid agencies

N= 12

VIEWS	TRs	BOOKS	PERIODICALS
No response	33.3	16.7	25.0
Somewhat costly	25.0	25	16.7
Very costly	25.0	--	8.3
Unable to estimate	16.7	33.3	33.3
Not applicable	8.3	16.7	--
Not costly	--	8.3	16.7
Total	100.0	100	100

Table 5.25 illustrates that, by combining the views of respondents that ranged from the category that said the channel was "somewhat costly" to that which saw the channel as being "very costly", all of them, at any rate meant costs. Technical reports were thereby rated by 50% as the highest of the three channels. Books and Periodical scored 25% each. It may be estimated that from the foregoing that the estimated costs of technical reports according to aid agencies were double those of other channels.

5.8.2.1 Cost benefits in terms of conference sponsorship and attendance

In assessing the costs of TRs pertaining to Lesotho the study continued to use Conference Reports as a benchmark for determining the benefits or impact. Aid agencies were therefore questioned about the groups that they sponsored to the selected global conferences, and the benefits accruing therefrom. For the *International Women's Conference* held in Denmark in 1980, most respondents did not know if their agencies sponsored any of the three groups. Of twelve, two (16.7%) sponsorships went to government officials, 83.3% to the NGOs and none to the academic community that attended the Nairobi women's conference. Sponsorship for the

Beijing conference went to all the three groups, with government officials receiving the highest portion. Sponsorship dropped for the Beijing+5 in New York as only government officials were sponsored. In the survey, none from the academic community was sponsored to attend the *Population Summit*. Likewise NGOs were not represented at the *Food Summit*. But the three groups were sponsored to attend all others including the two *Social Summits* in Geneva and Copenhagen. In terms of all these costs, a question was put to the agencies about what the benefits were.

In general, aid agencies were asked if all the resources and expenditure items such as funds, time and staff used to sponsor the production of TRs were cost-beneficial. The majority of nine (75.0%) out of 12 agreed that certainly there were some benefits. One (8.3%) did not agree that there were any. Two (16.7%) did not respond. Views of aid agencies were further sought in terms of how they assessed the benefits of sponsoring the three producer groups, namely, the academic community, government officials and NGOs.

5.8.2.1.1 Benefits of sponsoring academics, NGOs and civil servants, as seen by aid agencies

The responses from seven (63.6%) of eleven aid agencies were combined and analyzed so that salient issues were highlighted. The points were not necessarily raised by more than one respondent. It so happened, however, that one emphasized the same type of benefit or consequence to the three beneficiary groups. The positive and clearly expressed benefits are put on top of the list.

- ▶ benefits accrued to government, and were in line with government plans,
- ▶ benefits to the general populace: the Beijing conference especially for the NGOs was effective in generating interest in gender inequality, in raising awareness and enhancing collaboration with those organizations that had a direct link with gender equality,
 - women's conferences had paved a way toward a holistic method of elevating the status of women in society, hence a concerted effort by all to achieve that,
 - the Human Rights conference in Vienna gave an impetus to several human rights projects in Lesotho which, for instance, continued to document violations and the necessary remedial or the follow-up actions,
 - by attending, the Lesotho participants interacted with the people of diverse cultures that they were exposed to, and consequently gained knowledgeable and became

empowered. The examples were the church and youth clubs where the participants were serving as mentors

- ▶ benefits to aid agencies: their profiles were boosted, they acquired experience and information in their fields of interests,
- ▶ benefits to individual beneficiaries: they appreciated the assistance was presented to them and the experience they were exposed to,
- ▶ the academic community made little if any impact due to the ensuing brain drain, and their often aloof stance toward the grassroots communities,
- ▶ aid agencies' experience and impact were temporary since agencies have a memory loss because of their nomadic character, and their foci tended to waver, implying that recipients of aid then follow the constantly wavering focus.

5.8.3 Analysis of cost-benefits as viewed by government officials

It was noted in section 5.7.1 that sponsorship for government officials to attend conferences was the highest compared to the NGOs and academic community. In that respect, those officials were asked what benefits they got from the attendance.

The question was marked “not applicable” for those who did not attend. Nevertheless, one male official made the noteworthy point that, even though he had spent his efforts (hence the costs) by participating in the production of the country report before the Beijing Conference, neither he nor his department benefited from that gathering which he believed was solely addressing the interests of “women”. Data for this for a illustrated in Figure 5.3 confirmed that there were respondents who participated in report-writing but did not attend. Other responses fell mainly into two categories, namely, those who were aware of the benefits and those who were not. Three themes emerged from which to categorize views of the civil servants. The themes were :

- ▶ awareness creation,
- ▶ ability to formulate plans,
- ▶ guide and funding for implementing the plans

The content-analyzed responses, however, did not necessarily incorporate the three themes at once. The underlined words indicate that there were a maximum of two in each.

- ▶ Subsequent to attending and reporting at the Food Summit, the Lesotho Government drew an Action Plan that paved the way for long more than short term development benefits that were being reaped by the Ministry of Agriculture.
- ▶ Specifically, the *Food Summit* focused on one of the basic human needs, that is 'food'. The theme was relevant to many countries like Lesotho. The policy of Food Security was adopted, and self sufficiency was targeted especially with regard to food crops. Finally, grants for agricultural schemes were under scrutiny aiming towards selecting and accepting only those which embodied local relevance, popular support, ownership, sustenance and poverty eradication.
- ▶ Initiatives taken by the Ministry of Justice, for instance, to incorporate 'Human Rights' into its official name, and as one way of implementing the Vienna Declaration of Human Rights
- ▶ Beijing created great awareness not only in attendees, and its message was well received by both females and males at the individual and institutional levels.
- ▶ As a follow up to the two *Social Summits* where country reports were prepared, there were further proposals for funding programmes on poverty alleviation and social justice
- ▶ The *Population Summit* enabled governments to set their development projections accordingly.

Other notable remarks pertained to awareness of costs incurred in terms of external funding and government's supplementary sponsorship to conferences, yet benefits were not apparent or commensurate. The rest of the responses included those who stated that there were no benefits, or they doubted that there were any. It was therefore gathered that reporting at the conference stimulated more reporting that led to some idea how to improve on problematic situation.

5.8.3.1 Government officials' cost-benefits from any conference attended

In order to extend the question even to those who did not attend nor participate in report-writing, officials were probed about whether they had attended any other conference which they regarded important. That enquiry was broken into three parts. Firstly, it was to ascertain whether or not there was any conference. Secondly the details of that conference, and thirdly the benefits. Responding to the first question, 15 (65.2%) agreed that there was a conference

that they regarded as important. Seven (30.9%) said there was none, and one (4.3%) did not respond.

Details of the conferences and the description of their importance and benefits were tabulated below. The International Standardization Organization country codes have been used to show where each conference was held. The dates are indicated where they were specified. Some acronyms are recorded in the way the respective conferences were known and referred to by respondents. The events are listed chronologically and then alphabetically by title.

Table 5.26 The importance and benefits of conferences attended

<u>Details of the conference</u>	<u>Importance and benefits of the conference to the participant</u>
LS: ACP/EEC 1981 Maseru	Unable to tell (respondent was taking long to recall)
TZ: 1988, ESAMI Human Resource Management	Participant's interest in the topic was aroused
Vienna: 1993, Human Rights, UN/NGOs/Governments	Start and support human rights initiatives
Benin: 1998, ACP/EU Agreement	Benefits not yet reaped, but hoping for long term benefits due to favourable conditions for LDCs: eg the STABEX and profitable means of privatization
Zimbabwe: 1998: SAKMEC/WB: for statisticians	Statistical capacity in Educational planning
Malay: 1999-PIARC/World Bank:	Learning aspects of road construction globally International Construction Industry, and Classification of local constructors set a pace for standardization
MW: 1999: SADCOSAI	Rotate auditors, for accountability, exposure and capacity building
RSA: 1999, Education for all:	Jomtiem Declaration Strategies for implementing Free Primary Education
BE: 2000, World Customs Symposium Belgian Government	Common strategies and a training pool
LS: 2000, Lesotho Vision 2020, Lesotho Government	Gathering views from all stakeholders in the Lesotho development for the next 20 years
NL: 2000, Global Water Forum - World Bank/Government	Regulations on water, a resource which Lesotho sells
US: 2000, International Year of Volunteers - the role of Youth	Youth policy, programmes that nurture, while promoting peace and involving youth fully
ZA :2000" AIDS/WHO + governments	Strategies now in place against AIDS
ZA: 2000, Economic Forum	Difficult as yet to indicate the benefits to the country
Three meetings: by FAO, IFAD and SADC-FANR.; and several by FAOs	For some fora, it is difficult to state the benefits, for others, programmes on poverty elimination and food security were set up

Key:

ACP -	Africa, Caribbean and the Pacific	MW-	Malawi
BE -	Belgium	NL -	Netherlands
EEC-	European Economic Community	PIARC-	World Road Congress
ESAMI-	Eastern and Southern African Management Institute	RSA -	Republic of South Africa
FANR-	Food, Agriculture and Natural Resources	SADC-	Southern African Development Community
FAO -	Food and Agriculture Organization	US -	United States of America
IFAD -	International Fund for Agricultural Development	ZA -	South Africa
LS -	Lesotho		

Conferences were regarded as important by many. The most recent conferences were recalled more than the earliest. Benefits accrue apparently at individual, governmental and national levels. Themes illustrated the universal approaches that local, regional and international bodies followed in the development processes. However, there was no explicit mention of the role that reports play in conveying information that was implicitly gained from these gatherings. This will be addressed in the next chapter.

5.8.3.2 Description of the most useful report as assessed by government officials

Over and above the description of the usefulness of the conference and its effects, the final question to government officials required them to describe the report that they found important, in what way it was important and to whom. The aim was to determine if there would be any distinction between the event and its consequence in a form of a report, as well as to round up the question of benefits accrued from the report production, management and use. The following responses from government officials are listed in the order of those that related only to Lesotho, the next affected Lesotho and South Africa, and the last one that involved Lesotho and SADC and other bodies beyond the region.

- ▶ Government's follow-up reports on the *Jomtiem Declaration* that provided a guide on the implementation of Free Primary Education
- ▶ Ministry of Health statistical reports on trends and projections by sectors, in particular, a holistic approach to HIV/AIDS control
- ▶ Government Annual Reports as tools for control mechanisms and progress monitoring
- ▶ The Langa Commission Report that assessed the contested 1998 general elections was useful to all who became politically aware of intricacies of political development as well as the processes of voting that affect the whole nation
- ▶ A focus-setting report: revisiting the SACU protocols thus far adhered to, and the revision of a more acceptable revenue-sharing formula among the five member countries whereby Lesotho was negotiating to host the headquarters
- ▶ Inter-ministerial Official/Special Committee report of the Lesotho and South African border control mechanisms, especially over security for farmers and their stock

- ▶ A Conference Report that dealt with labour-based works. It provided guidelines on related SADC standards that needed to be adhered to
- ▶ Lesotho-Sino Cultural cooperation and *Policy framework report* whose recommendations include funding for the erection of a complex for archives, museum and related offices
- ▶ The IMF-funded evaluation on the country's strengths and weaknesses on customs and excise and recommendations
- ▶ The Ministry of Education and the World Bank consultancy report serving both as a manual and policy guideline for school administration in the country

5.8.4 The NGOs' views on cost-benefits of conferences and reports

The other group that was surveyed about the same issue of cost-benefits pertaining to the conferences was the NGOs. They were surveyed about the benefits of contributing reports to international conferences. Similar to government officials, NGOs were asked about any other conference they attended, and finally about the general beneficiaries and their general comments. The collected data were sorted into two categories, namely, for whether there were benefits for attending and for contributing or using conference reports there, and whether there were not benefits. Table 5.27 incorporates both sets of responses.

Table 5.27 The benefits of contributing a report information to a given conference

EVENT	N= 11					
	No		Benefits		N/A and/or	
	<u>response</u>		<u>exist</u>		<u>Do not</u>	
	No.	%	No.	%	<u>know</u>	%
Women's, Copenhagen 1980	6	54.5	3	27.3	2	8.2
Human Rights, Vienna, 1993	6	54.5	4	36.4	1	9.1
Social Summit, Geneva, 2000	7	26.2	1	4.2	3	27.3
Women's, Beijing, 1995	5	45.5	5	45.5	1	9.1
Population Summit, Cairo, 1994	1	9.1	3	27.3	6	54.8
Women's New York, 2000	4	36.4	3	27.3	4	36.4
Food Summit, Rome, 1996	2	18.2	-	-	9	81.2

The Beijing Conference scored highest in terms of the benefits that accrued after contributing a report information. Non response was very high, for several reasons to be discussed in Chapter 6.

5.8.4.1 Types of benefits experienced by the NGOs from the international fora

It was observed that conferences were regarded as one among many development strategies that Lesotho NGOs were very active in. Respondents were therefore asked to describe both any other conference they attended on behalf of the NGOs, which they found important. Table 5.28 summarizes their responses.

Table 5.28 Any conference that was regarded important by the NGOs

DETAILS A CONFERENCE	EFFECTS OF THE CONFERENCE
<ul style="list-style-type: none"> LS: 1996 Review of the RIO Conference 	Environment awareness that has a positive bearing on the business of dairy products for our NGO and the beneficiaries
<ul style="list-style-type: none"> Many conferences regarded as very important, like the Beijing one 	Stimulated greater gender awareness and advocacy
<ul style="list-style-type: none"> The country's review of the <i>Earth Summit</i> held in Rio in 1996 	National benefit was the general environmental awareness that has a bearing on the business of dairy products and beneficiaries At the regional level, north eastern Lesotho and the Free State Qwaqwa part of South Africa met for their similar ecology. A formal agreement for the joint protection and development reached
<ul style="list-style-type: none"> Italy: International Trade fairs 	Idea of flea market conceived
<ul style="list-style-type: none"> Beijing : International Women's conference 	Legal clinic opened for providing therapy to female victims of violence
<ul style="list-style-type: none"> <i>Social Summit</i> Geneva 	It gave an impetus to the emergence of a number of well-sponsored poverty eradication schemes in Lesotho
<ul style="list-style-type: none"> The Role of agricultural banks forum 	Micro-finance for farmers was sought and enhanced agricultural productivity.

5.8.5 Views on cost benefits of development projects and or their technical reports

The benefits or importance of gatherings from the government side were also recorded as aired by the Lesotho government secretariat Mohlabi Tsekoa in 2001. Commenting on *Radio Lesotho* prior to the hosting of the then planned *Lesotho Vision 2020* conference, he made a link between the issuing of the report and utilization of its information.

In order to determine if there were either gains or losses after participating in report production the three producer groups were asked three concluding questions. The first was directed only to the NGOs. Though it came early in their questionnaire, it was analyzed at the end. It enquired what the focus of an NGO was, thus relating their efforts to the beneficiaries. The two questions were for the academic community and government officials on whether, firstly, they knew of development projects that duplicated each other, and secondly, of any development project in Lesotho that did not or was not succeeding as planned. They were asked to state the factors or reasons for the failure. Aid agencies were only asked about the development projects that may have been a duplicate of each other. In the first instance, the aim was to determine if there were benefits or not. One among other reasons for asking the questions was to determine if information management would be mentioned as one of the factors. Responses will be interpreted in the next chapter. However, thematically, the findings fell in the categories of responses shown below.

5.8.5.1 Awareness of duplication or unsuccessful development project by the academic community, government officials and aid agencies

Whereas successes of development schemes may be a consequence of several factors other than information channeled by technical reports, information, too, is believed to have had an impact on development, and repeated efforts should be made to ascertain the link. A choice was made with development projects, as Project Reports seemed to be produced considerably by all the producer groups.

In response to whether they were aware of any development projects that were failing or did not succeed as planned out of 11 respondents of the NGOs, 16 (30.8%) were aware. So were 11 (100 %) of NGOs and 18 (78.3%) of the responding civil servants. Aid agencies, academic community and government officials gave some unwieldy responses as examples of those projects. Views of the NGOs were comparatively more comprehensive, and are tabulated separately. Perceptions from the academic community and government officials are combined as summarized in the next section.

Conferences were held anywhere in the world, the recent ones were recalled. They were in different sectors of development. As it was the case with the most important report, even in this case the intertwined development of Lesotho and South Africa was evident.

5.8.5.2 Description of unsuccessful projects as seen by aid agencies

Owing to their role in sponsoring development projects, aid agencies were supposed to have a more pivotal role in informing which projects duplicated, succeeded or failed. For they also sponsor evaluation projects at completion. Despite this, five (41.7%) out of 12 affirmed that they were aware. Worse still, only three mentioned the examples of those negatively duplicating, plus the two that failed. The two that failed fell within the finance sector and the public administration. Their details by titles and ownership were 1) funding for micro enterprises, by the Lesotho Highlands Development Authority through the Community Development Fund, and 2) public service reform programme that was being duplicated onto the previous training by Lesotho Institute of Public Administration and US Bronx Company. Aid agencies were unexpectedly uninformative on the failing schemes in Lesotho.

5.8.5.3 Perceptions on failures of development projects and reports by all the groups

Subsequent to describing the development schemes that were a failure, respondents from the government service and the academic community were asked to explain what they thought the failures could be attributed to. Six respondents stated that the main cause of failures was ignorance. Five responses ascribed the failures to poor governance, lack of or weak leadership. One solid reason was donor dependency syndrome, lack of continuity by external agencies and a poverty trap on the side of aid recipients. Within the domain of inappropriate policies, plans, strategies to development such as the top-down approaches. Specifically, the following factors and agents or players were captioned:

- ▶ Donor politics that embarked on schemes with limited knowledge and or full ignorance, coupled with limited follow-up due the nomadic nature of aid agencies
- ▶ Dilemma of LDCs that were dominated by foreign ill-informed donors, as well as naive reliance of aid recipients with no receptability and capacity especially if aid is huge, sophisticated and not locally initiated
- ▶ Financial, political and other types of mismanagement that led to lack of sustainability.
- ▶ No skilled supervision and monitoring
- ▶ Bad political motives whereby often corrupt politicians' intentions do not correspond to the developmental interest of communities that just require good leadership

- ▶ No popular participation, lack of, or unclear feasibility studies to all who should take part
- ▶ Over-ambitious top-down approach of the experimenting donors plus unprepared , non-questioning local recipients, caught up in a poverty trap
- ▶ Inappropriately substituting staple food crop for commercial ones with no fall-back position, like the soya beans, asparagus that competed with maize production
- ▶ Frequent change of governments, plus donors who tend to be nomadic, gave rise to lack of ownership of projects, no follow-up by the next authority, or lack of understanding, especially if the reporting was poor during the transfer of power from one government to another. Schemes were thus simply like adventures that were imposed and or politically motivated
- ▶ Top-down and technical fix approach with no popular participation
- ▶ Managerial: risk capital of transition from rural development to commercial productivity
- ▶ Financial mismanagement and corruption
- ▶ Lack of and or inadequate information as well as its mismanagement at all levels

Out of 13 examples given, eight (61.5%) belong to the agricultural sector. There is one that pertains to agriculture and rural development. Some examples were recalled from over forty years ago.

Pessimistic views about conferences and their reports were, however, expressed by Puso on the *MoAfrika Radio* the same week. He doubted that the forum on *Lesotho Vision 2020* would make any difference. Six months later, during the Senate debates of the Upper House, Chief Seeiso Seeiso showed keen interest the proceedings of same conference. He enquired as to when the Report of that gathering entitled *Lesotho Vision 2020* would be out, and if the conference achieved its objective. More discussions are however in the next chapter.

Table 5.29 Academic community and government officials' perceptions of unsuccessful projects

These are listed by alphabetic order of sectors in which the TR fell.

<u>The sector</u>	<u>Description of project by title, ownership or any form</u>
Agriculture	Basic Agricultural Support Project (BASP) by the Lesotho Government and USAID
Agriculture	Matelile rural development project
Agriculture	Thaba Bosiu Rural Project that aimed at a high level of agricultural productivity, and through the financial assistance of the USAID injected millions of rands as capital. Personnel were provided with agricultural training in the US, and by the time most of them returned the scheme had collapsed
Agriculture	Thaba-Bosiu rural development project that carried massive resources in terms of local and expatriate personnel, agricultural machinery and funds, which did not benefit the intended farming community at all
Agriculture	Thaba Bosiu Rural development project by the Lesotho Government and the USAID
Agriculture	Khomokhoana, Leshoele and Seaka Irrigation initiatives which were started well by various donors in Leribe and Quthing but later failed; plus the Thaba Bosiu Rural development Project.
Community Development	The government-managed Lesotho Fund for Community Development (LFCD) that engages the unemployed on rotational short-term basis for community work, agricultural and rural development
Trade and agricultural Markerting	The Masianokeng Asparagus Project that was started by the Lesotho National Development Corporation, grew and became a parastatal that exported asparagus, even preserved other products like beans and peaches. It came to a complete downfall
Community Development	The government-managed Lesotho Fund for Community Development (LFCD) that engages the unemployed on rotational short-term basis for community work.
Culture and Information	UNESCO supported Thaba Bosiu historic monument and the National Archives services and Information systems that never had any direction.
Inter-sectoral	Construction of multi-purpose dams among the communities by governments from the late 1960s, continued through the 1970s to the reporting period.
Rural Development	Rural Development Range management project that spanned about 10 years initially under the authority of government with the USAID, but in later years mismanaged due to the involvement of several local stakeholders
Transport	Air public transport facility that served the highlands in the 1990s but was withdrawn due to mismanagement

Government officials were further probed about the issue of cost-benefits in more concrete terms by asking them to give examples of the duplication of projects and TRs. The following were the summarized statements that were given, with similar or related ones listed together.

- Subsequent to attending the Social Summits where reports were also presented, government in conjunction with donor agencies embarked on poverty reduction programmes. These involved production of reports in the form of feasibility

assessments and or Project Reports. But most of these were a duplication of strategies that were previously called income-generation schemes, especially for women.

- ▶ As far back as the 1980s the World Bank advised and produced a report bearing some recommendations that government could ill afford to maintain its residential houses for government officials who paid heavily subsidized rentals. Failure to implement that recommendation has caused the Ministry of Works to continue to make losses on maintenance. In the late 1990s, concern has again been expressed which forced the officials to commission another review of the problem, yet information was already available in a Technical Report form on how to sell or rehabilitate government quarters.
- ▶ Government projects on wool and mohair marketing and liberalisation have been evoked and documented time and again by government ministries such as Agriculture, Trade and Marketing, farmers and donors.
- ▶ The majority of past agricultural schemes assisted by the World Bank, Dfid, Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ), FAO, IFAD, ADB duplicated, replicated and or contradicted
- ▶ Duplication existed where the names of ministries had changed or adjusted their foci had been adjusted or restructured as donor's switched their interest from one sector or a fashionable term to another. The typical one was the women and gender.
- ▶ The ongoing efforts to restructure the Department of Youth Affairs that has hardly ever adjusted since it was repeatedly attached to different ministries and departments like Rural and Community Development, Women and Youth Affairs, Gender, Environment and Social Welfare.
- ▶ The Sechaba Consultants together with the Irish study at almost the same time with the Government's and the UNDP's studies on poverty assessment, with some giving contradicting positions in certain areas
- ▶ The UNDP, Governments' versus the World Bank's poverty eradication programmes
- ▶ At the time of research there was the World Bank sponsored project for restructuring called the Public Service Reform, albeit the former Public Service Management one
- ▶ Lesotho was over-studied or over-researched on poverty assessment and reduction by various groups locally and from abroad
- ▶ There were also three responses that specifically mentioned that certain sectors or the country a whole had been over-researched and ever-reported about, regardless of whether erroneously or factually. Such an example was the re-structuring of tourism vis

a vis its management, whether through a board, and or by government, and or as a privately-run business. But trial by error reporting was common.

In all the above-mentioned twelve concrete examples, there was an explicit or implicit role of technical reporting. There was a cyclic and repetitive TR production with an intense involvement of the international donor community or aid agencies. The process covered almost all the sectors of development.

5.9 Summary

► The population

The section has presented the description of the population as comprising the NUL academic community and information workers, senior government officials, NGOs, and aid agencies in Lesotho. Population distribution revealed a ratio of 2:1 for females and male. Females generally held more and higher academic qualifications than males. Of government officials and academics, the majority lived near their places of work. Males were the longest serving civil servants, and had a slight edge or seniority over female civil servants. Unexpectedly, female civil servants also featured as heads of 'hard' sectors of development like Agriculture, Finance and Public Works. There were seven types of TRs, namely, Project, Conferences, Official, Academic, Survey/Situation, Enquiry/Incident, and Special Committee Reports. The establishment of NGOs increased in numbers in the decade 1988 and 1998, while aid agencies in gender and agricultural related work had locals as respondents.

► Production of TRs

Out of 98 respondents from the four producer groups, it was revealed that productivity was high for Projects, Conferences and Official/Internal Reports. It was average for Survey/Situation and Special Committee Reports. There was low productivity for Enquiry/Incident and unexpectedly Academic Reports. Aid agencies and the NGOs were the most involved in the production of most except for Special Committee against which they were not surveyed for specified reasons. It was only in the production of Academic Reports that the academics ranked at the top. The study confirmed that producers have information needs which they wish to satisfy by production of TRs. Thus they produce for themselves, for that information they require. Types of TRs used illustrate areas of development in which the producers are engaged in, for instance, Project Report for development schemes, or

Enquiry/Incident for authorities that should expose and communicate by a relevant TR what the incident being investigated involves.

Regarding classification and temporal aspects, it was found that both government and agencies tend to modify reports. Often, agencies more than government provide guidelines to be followed by consultants and experts who author their TRs. Classified, restricted, limited and secret commence at the production stages. Though they were hazy on ramifications of classifications, government officials' perceptions on restricted materials in government departments was estimated at only about 30% of the entire productivity. Aid agencies also made the same estimations. Contradictions emerged for government officials who on the one hand were unwilling to distribute reports yet it was supposedly 70% belonging to the public domain. Though both government and agencies indicated that they strived to issue reports timeously government often failed to achieve the target of annual reports, for example. Government reports were delayed and infrequent. Few respondents from both groups found syntheses necessary. Quality, accuracy and appropriateness of information channeled by TRs were regarded essential by the academic community. Purposes for producing TRs depended on need of producers and types of TRs. On the whole, government and agencies indicated that production was mainly for in-house managerial purposes, monitoring and evaluation.

According to the sample collected, TRs pertaining to Lesotho covered a wide spectrum by age, producer group, sector and type. Types of the sample revealed areas of development which were being reported about in the development related actions like anti-poverty strategies.

► **Distribution of TRs**

The four producer groups generate the types of TRs in the survey at varying levels. Project Reports were highly produced by the NGOs. Academics were the top-ranking producers of Academic Reports. The Situation/Survey type was produced at an average level but Enquiry/Incident was generated at a low level by most producers. NGOs and government ministries attended conferences the most and thus were highly involved in reports emanating from conferences. The classification and modification of TRs were common in the civil service and with donors. The study found that government's issuing of TRs was often delayed and infrequent. The purposes for which TRs were produced by government were said to be in-house managerial reasons as well as for evaluation and monitoring. For those purposes, government

and agencies commissioned experts and consultants to author TRs or co-author them with civil servants. Such TRs are rarely prepared by the civil servants alone.

There are formal and informal means of distribution of technical reports. All producers were in one way or other also distributing to libraries, experts and partners. Lack of information services in government ministries made it difficult for officials to retrieve their own TRs, thus making distribution and availability a problem. It was observed that attempts were made to announce government documents on the government's web page. Libraries at NUL were acquiring through equally formal and informal ways. ISAS as another unit of analysis was specifically assessed in this regard. It had in place such methods as reaching out to producers, negotiating for strategies like free deposits, and advertising itself. In some cases the Centre was effective, in others it did not succeed. The rates at which TRs were circulated, distributed and became available also depended on the rate of production. The higher the productivity of a type of TR the more the likelihood of its availability. Conferences were used as one major activity for assessing performance of TRs in channeling information in the Lesotho development. It was revealed that participation by attending and presenting papers stimulated production as well as distribution. Global conferences were the examples.

Aid agencies and the academic community scored high as sources of TRs. Taking agriculture and gender as examples of prevalences of topics at NUL, it was established that availability of materials in different sectors reflected the foci of NUL information centres. Judging from the sample TRs obtained from government, it was seen that TRs of recent releases were more likely to be obtained than old (more than five years and over) ones. Types of TRs also performed differently. Enquiry/Incident were not commonly found. TRs were produced by various groups. A few, nevertheless, applied the recommended standards of report numbering, summaries, date and availability statements.

► **ISAS mandate**

Regarding ISAS mandate to manage TRs as a channel for development information, the finding is that the mandate was adequate in the 1970s when the Institute was established, but appeared outdated and needed revisiting in 2000. The importance of the specialized management of information channeled by TRs was, however, still highly regarded. At the same time, views still embraced the indispensable role of specialized management of development information like

that channeled by TRs. Some respondents did not make the distinction between the adequacy of the mandate and ISAS's poor or effective performance.

► **ISAS mechanisms and the general TRs management at NUL and in Lesotho**

Whereas some mechanisms failed and others succeeded, it was found that the Centre has devised strategies of handling problem channels like reports by, *inter alia*, reaching out to producers directly, negotiating for automatic depositing of TRs into the centre, attracting funds and aid for that relatively costly channel, CAS and advertising methods. On the other hand, ISAS, like other NUL information centres, was still lagging behind in technological advancement such as Internet usage that would enhance performance of TRs. The coverage of the recently used report did not necessarily reflect the supposedly multi-disciplinary coverage of the Institute.

► **Use of ISAS and TRs in general**

Performance of ISAS was also done at the level of use or non-use of the Centre. In determining such levels all the groups in the survey provided data. It was found that NUL students visited the centre more than staff. The latter used ISAS, but supplemented it with many other private centers than students did. A majority of government officials did not use the Centre for several reasons such as its distant location and no motivation for doing so. It was thus established that readership among government officials was significantly low. At the level of the academic community, the finding was that there was a strong positive relationship between use and production of reports.

Yet, from the observation of other knowledgeable members of the public, under-utilization, erroneous application of outdated information channeled by TRs was not yielding developmental results. Featuring among a wide variety of purposes for which ISAS was used by the academic users were reading for student projects, staff research, doing consultancies and preparing conference papers. Unlike with government officials, the academics saw the benefits of using TRs. There existed other private or information centres that the academics took the initiative of utilizing as alternative or supplementary to ISAS.

► **Effectiveness of ISAS**

In certain areas, the centre has been effective and in others it has not been successful with its mechanisms. Interaction with local donors seem to have declined. Internal mechanism were

also criticized in parts. But with assertiveness of users' demands, the centre has continued to meet some information needs.

► **Cost benefits**

The chapter concluded by presenting findings on the question of costs and benefits on TRs and their management in Lesotho. Evidence firstly came from aid agencies which produced for themselves, and also sponsored three groups in projects and conferences that culminated in TRs. Evidence was that TRs were costlier than other channels like books and periodicals. It was established that various groups made inputs into the productivity of TRs, ranging from attendances of conference to investigations and surveys, for example. ISAS's management of TRs involved costs of staff, infrastructure and handling. That facility benefitted the academic community more than others. The academics were making their own efforts to get and use TR information, hence benefited academically. The issue of benefits depended on quality of information and value derived. Global conferences that were used as a scale for measuring costs against benefits illustrated that benefits were diffuse. Attendance of global conferences was gender biased in certain cases. For instance, the International Women's fora were not attended by the males. The Social Summits and the Food Summits were attended mainly by the males. However, from all the participation, whether at attendance level only or at the paper presentation as well, there were indicators that benefits were accrued at the individual, institutional and community and national levels. Concrete examples were given in this regard.

► **Duplication of efforts and failure of development schemes**

As a way of finding if instead of benefits there were losses to costs input into schemes that involved the productivity of TRs, data were collected on development projects that failed or were duplicated. All the groups were aware that development endeavours were often repetitive. The mentioned schemes were mostly those that were operated jointly by government and donors. Agricultural projects that failed were invariably common as observed by all the groups. Yet it was at the government levels that the benefits of TRs were not evident, even among the senior ranks of government officials. Nevertheless, the production of reports was very high at these levels. In a number of cases, costs were so high that they could not be justified. There were views even from members of the public that lamented the under-utilization, misreporting and belated issuing of TRs. There was equally a challenge to cost-justification or adequacy of types like Enquiry/Incident Reports.

► **Factors attributable to failures**

Most respondents were unable to tell what could be the causes of failures. It was found from a few that the main reasons were knowledge vacuum among all the surveyed groups. Ignorance on what was going on in development- related activities gave rise to repetitive, duplicating efforts, or trial-by-error methods. A strong donor dependence. It was said to inhibit challenging the advantages of aid given by the nomadic foreign agencies that do not always stay in a country to follow up on progress. Donor dependency syndrome was also as a factor in a poverty trap even in the attitude toward information rich and information poor situations. Poor governance plus weakness or lack of leadership at several administrative strata affected success. Weakness or lack of information management at several institutions such as government was evidently another reason. There was no incentive, reward for those adequately use information for adequate planning and decision-making.

CHAPTER 6

INTERPRETATION AND DISCUSSION OF THE FINDINGS

6.1 Introduction

In this chapter, the findings of the study are interpreted and discussed. Interpretations are made, firstly on the characteristics of the survey population as they affect performance of TRs. Findings are interpreted and discussed on production and distribution of TRs in Lesotho, which vary enormously according to producer groups and by different types of reports. The discussion dwells on views about the adequacy of the ISAS mandate and its implications on TRs services. The debate proceeds to findings on use and non-use of TRs managed by ISAS as well as what the study revealed concerning levels of effectiveness and ineffectiveness of TRs management. The chapter concludes with the discussion and interpretations of the general views and observations about cost-benefits from use and non-use of TRs pertaining to Lesotho.

6.2 The population and demographic details that affect performance of TRs

The aim of the study was to assess the performance of technical reports as a channel of information for development in Lesotho, in terms of productivity and distribution. Concurrently, it was to assess ISAS's effectiveness in the management, use and cost-benefits of TRs. For that purpose, five groups of people that are related to the mentioned functions served as sources of data. It was found that the different demographic characteristics of these groups affected the performance of TRs in Lesotho in various ways. One producer group of senior civil servants reflected a slant in favour of males at the ratio of 13 females to eight males as opposed to their ratio of 2:1 in the survey population (see section 5.1.2.1), where the number of males is not more than half that of the females. The fact that the females tended to have more academic qualifications than their male colleagues implied that there was pressure on some of the male officials to participate in tasks for which they would be less qualified. This factor was likely to cause a negative impact on TRs.

The physical location of ISAS on the Roma campus was not ideal for continuous use by all the intended clientele, constituting the academic community, government officials and aid agencies.

In specific terms, the civil servants indicated that they did not visit ISAS because it was too far. This was supported by the fact that the majority, 21 (91.3%) out of 23, lived near their places of work. Only 4.3% of government officials lived outside Maseru which is the centre of governance. The academics used ISAS when they were in Roma. They did not travel to Roma for the sole reason of using ISAS. Visits to and use of ISAS were closely associated to TRs' production. This finding was that location therefore adversely affected production of technical reports.

In addition to the human population, seven types of technical reports as the object kind of population displayed different features and characteristics that also influenced variations in their performance in channeling information. These are discussed in detail below.

6.3 General productivity of technical reports in Lesotho

Regarding the first objective of determining technical reports' productivity, findings are discussed in relation to producer groups, types of reports, purposes, levels, methods of production and the related processes.

6.3.1 Interpreting levels of productivity of technical reports by type and producers

From the presented data, it was found that three types of reports, namely Project, Conference and Official/Internal were produced at high levels (Table 5.10). Survey/Situation and Special Committee Reports were produced at average levels, while Enquiry/Incident and, unexpectedly, Academic Reports were generated at low levels. The three types which were produced at the high level, involved all the producers. There is undoubtedly a wide range and a high level of productivity of technical reports in Lesotho. Four producer groups indicated that they produce all types of technical reports which they were questioned about, and as shown in Table 5.10. The exception is the NGO group which does not produce Academic Reports. This is ascribed to their being more action than theory oriented. The NGOs plus aid agencies were not questioned about the Special Committee Reports for valid reasons already advanced in sections 4.1.1 and 5.2. Other than that, variances and intensity of production differed with producers and type of technical reports.

The orientation, duty and capacity of a producer group determines activities that a group is involved with, and the type of channel to employ for a particular purpose. Though there was a purposive choice of NGOs that related to either agriculture or gender or both, there was no evidence that the responding NGOs recorded any spectacular productivity in these subjects. Instead, from the Sechaba consultants as shown in section 5.25 and Table 5.11, agriculture as a subject was the most reported on during the period July 1988 to September 1998, but in situations in which consultants were commissioned to prepare reports. The finding confirmed Dosa's (1997:158) view in section 3.3.1 that, generally, consultants have a role too to play in generating an accurate information. Another confirmation was made in the case where governments and aid agencies relied on experts or consultants to produce expert-led TRs, while the civil servants rarely authored the type on their own. The level of expertise in some technical reports generated in Lesotho was again affirmed by users of ISAS Documentation Centre who found the reports provided to be accurate and appropriate to their needs.

Further confirmation that the productivity of TRs by quantities and types is on a large scale is drawn from the fact that out of seven types of TRs included in the survey, four were represented in the sample donated or collected from the government departments and aid agencies. Notwithstanding the common problem of locating and retrieving the items by government officials, respondents were able to recollect and mention several reports that reflected their long experience over various types produced in a number of ministries.

With the exception of the academic community whose non-response rate for staff was high, all the other four groups, namely, the information workers, government officials, aid agencies, and NGOs, each responded at a more than 50% rate which resulted in a satisfactory representation of the groups targeted. In certain instances, possibly the survey failed to discover as comprehensively as it would have from experiences of a larger cross-section of academics in terms of TRs productivity specifically, or, information and development in general terms. The degree of productivity concerning the academic type of reports by the academic community is nevertheless still large, an indication that at the production function, performance assessment of technical reports was not necessarily affected by the high rate of non-response from this group. That is again an indicator that levels of production of types of technical reports depend on a particular producer group.

Academics were generally some of the highest producers of reports (Saracevic 1981; Ambrose 1984). In the Lesotho context, the academic community was the largest generator of the Academic Reports, and comparatively the lowest-ranking producer of the other six types. This finding makes it clear that performance of TRs at any stage is in accordance with varied types as well as characteristics of population groups dealing with each type. A survey of some selected South African universities indicates that the productivity of the academics is high (Jacobs 1998). A parallel could not be drawn since in terms of TRs, we refer to the often semi- or un-published and less conventional literature that may remain classified while the academic works may soon be published or later be transformed into publications like journal articles.

Nweke (1994:52) argues that government publications outnumber publications of any publisher in a country. Prozesky (1999) interrogated the researcher by asking the question, what constituted government publications. Nweke's (1994) point may be true when all types of technical reports are taken together. But considering each type separately, Academic Reports are produced by academics the most. Hence, government may not surpass academics on the productivity of that type.

What matters is the interpreting of the performance of different types of technical reports, for they attract different users, convey different messages for diverse motives, at varied speed and so their impact on development is dissimilar. Taking that argument further, evidently it is often the government that commissions Enquiry/Incident Reports. These relate to a post-event type of reporting. They are rarely authored by civil servants alone, but rather with the assistance of experts drawn mostly from the academic group, the non-governmental organizations or consulting firms in general. Pertaining often to urgent emergencies or crises, Enquiry/Incident Reports tend to be issued timeously. They are, however, not common, and hence the least available as seen from Table 5.15.

Productivity concerning Conference Reports was common among all the groups. They were authored quickly by participants attending conferences whose themes are determined usually by the organizers, and may be of indirect, general or no specific application to Lesotho. The themes of global conferences and their priority (own emphasis) or relevance to the country is not determinable. With most of the groups, especially government officials who may not even

write reports before the event (see Figure 5.3), the topicality of a report emanating thereof is shortlived, making acquisition difficult. But the cost of attending is understandably high and often difficult to justify (5.8.2.1.1). In the case of the academics, unless the proceedings are published, presented papers may be transformed into published items in journal articles or chapters in books because it is in the interest of the academics to get material formally published. In contrast, Special Committee Reports involve a certain few producer groups in Lesotho. From the data gathered, they are evidently the most complex to comprehend as a homogenous group. They emanate from individuals and institutions that are members of particular bodies, committees or networks existing at the institutional, national, regional and international levels.

As indicated in the study, technical reports report on development related matters. Aid agencies mostly provide the sponsorship to carry out development schemes plus the related pre-, ongoing and post- project reporting. Governments are usually the overall authorities over development schemes. One interpretation discernible from Table 5.15 reveals that Project, Conference, Situation/Survey and Official/Internal Reports were commonly generated and were thus easily available from aid agencies and government ministries.

On the contrary, Enquiry/Incident Reports give information about crises or embarrassing events, and information may be suppressed or be distorted as it suits the producer (CTA 1998:42). That was also why this type of TR was not obtainable at all from the two groups, government officials and aid agencies that donated the sample copies.

6.3.2 Purpose and levels of production

Government officials and respondents from aid agencies were asked about the purpose for which TRs were produced by the government and aid agencies. By and large, government officials and aid agencies share common reasons for producing technical reports in that they produce for themselves most of the time as suggested by Holloway (1967). While a primary objective is producing for themselves, there was a secondary purpose which was to generate for other users. Producing for themselves related mainly to monitoring and evaluation regarding institutional internal management.

As advanced in 3.3.1, the purposes for which reports were generated were expected to comprise giving information, guiding decisions, monitoring, controlling, and evaluating operations, helping implement policy and procedures, complying with rules and regulations, recording facts or work performed, and analyzing problems and suggesting solutions. Firstly, the two reasons for evaluating and monitoring fell too far behind the expected seven elaborate reasons as stipulated by Conradie, Konig, Koti, Pillay and Valkhoff (1999:265). The fact that respondents did not raise the other reasons for production signals a failure to apply the listed functions in their duties pertaining to technical reports, and it requires further investigation. One indication is that officials and representatives of donors in Lesotho were continuously producing without questioning sufficiently “for what purpose” they were doing so. This is supported by Mchombu’s (1987:49) view that such agencies do not even have a catalogue indicating what they have generated, “...they are mainly interested in the production of new publications rather than finding out how useful their former ones were, and what their effect on the intended target was”.

In the second instance, the only two reasons for TR production that were mentioned, namely, monitoring and evaluation, were verified against the types of TRs emanating from government and Lesotho based aid agencies, as listed in Table 5.12. In Chapter 3, it was suggested that development in the general sense addresses issues of poverty (whether human, income, overall, relative, extreme or absolute poverty). Hence an indication that technical reports on and about Lesotho are channeling information that is for development suggests that they should address anti-poverty programmes. In Table 5.12 the UNDP report was titled poverty assessment and the MS Lesotho’s (2000) *Social Summit* report in the same table compiled articles including one on the ill-treatment of female workers in the textile industries in Maseru and written by Thai’s for the *Social Summit*. Both reports could be seen as development-related in the sense given above.

6.3.2.1 The NGOs participation in the production of technical reports in Lesotho

The NGOs, which together with aid agencies rank highest in the production of Project and Enquiry/Incident Reports, deserve attention first. The literature review illustrated the significance of the NGOs as the most people-centred of all the producer groups. NGOs operate through volunteerism (Motebang 1999) and they tend to be part of the communities that

experience the problem at hand. In that way they were at an advantage in detecting directly at the grassroots the problems that invite Project Reports and subsequent action toward a solution. As such, they are able to articulate the needs that are conveyed through TRs, and to such an extent that they convincingly attract funds at a high rate (83.3%), especially for the Project Reports (see Table 5.10 and section 5.8.2.1). It is this popular participation that according to the UNDP (1991) should bring about a credible change where it is needed, and a desirable recipe for a pro-human kind of development (see section 5.8.5.1). On the one hand it is seen as an advantage that aid agencies assist people directly, on the other arrangement then perpetuates the reliance and poverty of the “people” who are targeted by the aided NGOs. As was well argued by Osner (2000:78), it is one factor that maintains the status quo in the less developed countries of the South. The finding is that the phenomenon manifests itself even in the production of TRs. NGOs continuously rely on donors to produce TRs. On the other hand, the NGOs become a bridge through which aid agencies access in a direct or indirect way Lesotho-related information channeled by TRs which they fund, and information that they therefore own more than the NGOs, or the people it was sourced from.

Another aspect of production that Martin (1964) warned against is the problem of an uneconomic duplication of research results. In the study, there is evidence (see 5.8) that duplication of TR production in or on Lesotho occurs, and often, not necessarily in a positive way for emphasis or update, but negatively due to ignorance of the previous productivity or non-implementation. Not only is the costly duplication a problem, but also the proliferation and overload of TRs which require intermediaries to locate and find from a labyrinth of sources in Lesotho, and yet the duplicating reports convey no innovations but repetition after all.

6.3.2.2 Aspects of TRs’ productivity relating to Aid agencies

Reasons for which aid agencies are involved in the TRs production are manifold. The mere presence of these agencies in Lesotho demonstrates and justifies the universality of interests in the subjects covered by the TRs funded. Thapisa (2000) relates external funding to ICTs, by having aid agencies funding the locally based NGOs, agencies get influence, control and authority. Aid agencies represent the globalizing world where the foci of development projects and themes of conferences become uniform at local, regional and global arena. In that way,

Lesotho is brought into the fold of the world system (Rist 1999, Bond 2000) which tries to put all the development processes within one pool. This is presumed to maximize productivity, and often for the benefit of the centre against the periphery. The fact that aid agencies rank this high in the production of Project, Survey and such reports also suggests that they determine the direction of development paths which TRs' productivity should follow in Lesotho. Charlton (1994), as argued in 3.2.7.2 and supported by Kabeer (1994) states that foreign aid reflects the interest of a donating agency, not necessarily where help is required by the recipient. Often, those who pay the piper, dictate the tone or the tune. This apparently capricious changing from one seeming 'panacea' to another without proper consultation of the targeted beneficiaries is seemingly borne out in the analysis of the sample materials. Judging from the titles of the sample copies collected (Table 5.12), in the 1970s and 1980s, for instance, the aid agencies attention was on what was called income generating projects" that often perpetuated the low status of women through some unsustainable miniature businesses (Braidotti, Charkiewicz, Hausler and Weiringa 1994) in the villages of developing countries like Lesotho. In the 1990s what seems almost the same kind of attention was then labeled Small and Medium Enterprises (SMEs).

Changing the agenda of development if a previous one was unsuccessful should be a recommendation. But changing and giving a new name to the very same strategy that failed, and without ascertaining from the reports why and how it failed, is regarded by the author as counter-productive. The Project Report prepared by Baffoe Consultants in 1992 (Table 5.12) is an example. The finding that a large proportion of TRs' productivity in Lesotho is externally funded underlines what the implications of the foreign aid and its shifting attention have on development. It is the funding bodies that decide what and when to sponsor, and what label to give that particular attention. Continuity becomes difficult, more so in Lesotho where aid agencies have been very nomadic. The finding also justifies the concerns raised at the CTA's (1999:77) workshop by participants from Southern African countries, including Lesotho, that some agricultural approaches of eradicating poverty do not differ from previous ones - presumably most of which failed. The difference is that the recent approaches are given new names. Poverty may not be eradicated through inadequate approaches. Information about the inadequacies of previous projects are in the first place contained in the TRs that assessed progress of those projects. It only requires officials to refer to the TRs and get informed on

how to adopt or reject a strategy that has failed in the past. Government officials face a dilemma when their informed suggestion is not embraced by a funding agency. Wright (1999:86) recorded that with the externally funded housing projects in Lesotho, aid agencies' preferences prevail over the government's views as to which needy people should qualify for loans. It is in such cases that evidence from factual information channeled in TRs may support the officials' adamant stance to reject aid if need be.

The majority (75%) of the responding aid agencies in Lesotho provided the data through the local employees. This indicates that, similar to the behaviour of TNCs as seen in Chapter 3, aid agencies stand to benefit by producing and acquiring information, a resource they need, by relying on the local expertise. At the face-value, the reason for external funding toward the production of TRs for local development projects can be interpreted as simply giving aid and assistance. Yet, aid has sometimes not borne fruitful results. Taking a close look at aid and aid agencies in Lesotho, one observes that it entails the transaction that enables the funding agency to produce for itself. It finally owns the information that empowers it, whilst worse still, the practice perpetuates the already debated dependency syndrome whereby the local communities are not self-reliant in technically reporting for themselves. The disadvantages and indignity of having one reporting on behalf of another in development (Cowen and Shenton 1996) need not be overemphasized. To a great extent, Lesotho is also suffering this kind of indignity, to the detriment of its self reliance and development.

6.3.2.3 TRs' production by the academic community

The involvement of the academic community in Academic Report production has been discussed, and is understood to be mainly a scholarly exercise. The academic community ranks fourth as a producer of TRs and for reasons shown in Chapter 5. Academics are mainly involved as experts, and on behalf of government, NGOs and aid agencies groups. It is through that kind of participation in the production of Project, Incident/Enquiry and Situation/Survey that academics become consultants or 'experts'. This expertise needs some interrogation. The benefit of blend of theory and practice as background to these studies is indisputable as affirmed by many (Dosa 1997; CTA 1998). Consequently, as authors, the academics should when necessary supplement the enquiry done by people on the ground, whose knowledge and wisdom relates much better, as the perception of agencies in Lesotho indicated. But, as found

in the study, the frequency with which the academics are called upon by governments and aid agencies to generate people-centred information when they are not closely interacting with the people, makes the adequacy of reporting questionable. As one respondent of an aid agency put it, a number of academics disqualify themselves as the producers of Project and Enquiry/Incident Reports because of their tendency to be aloof from the grass-roots. That explicitly means a blend of scholar and practitioner is more desirable since the process of involving the same team in implementation and monitoring is intelligible and relevant. In fact, at NUL, levels of assessment for staff evaluation comprise, not only publications, teaching activities, research and administrative duties, but also participation in community services. This recognition of the desirability of praxis emphasizes the need for the relevance of academic exercise plus practice and the general populace. That is why, through ISAS, NUL advocates a combination of action and development-oriented research.

The finding (see 5.8.2.1) that aid agencies would rather fund government and the NGOs more than the academics underscores the indispensable need for production of TRs from that kind of action-oriented research. TRs that emanated from the academics instead, are mostly of a publishable type that enter scholarly journals and enhance the prestige of an academic, according to Jacobs (1998). It is noteworthy too, that other than the academics who found value and quality in the academic reports that they specified (Table 5.23), all other groups did not mention any academic report among those which were regarded as the most useful, or recently used (see 5.8.3.2). That implies that academic reports are generally not associated with value nor development beyond the ranks of academic.

The second highest rank was for the Project Reports. It was observed by ISNAR (1989, and the Sechaba list of publications on Table 5.12) that in Lesotho, most of the research on agriculture, for instance, was externally funded, both at the academic and government levels. This high level of activism in project-oriented productivity corresponded with the submission made in Chapter 1 for the justification of agriculture as a central field in the lives of the Basotho. Project activities, inclusive of the related report production, were, however, not an independently and locally supported area, thereby putting/trusting productivity solely to donors. In addition, inadequacies of being reported on which were evidenced by a high failure of agricultural projects, let alone the negative effect on food security and welfare, are noted.

Third in rank were the Special Committee and Official Reports. The latter pertained to the internal reporting by which the academics were bound at stipulated periods to account for their progress at work. Special Reports related to the local, regional and international groupings that the academics belonged to. The last rank comprised the productivity of Conferences and Surveys/Situation which were generated at an average level. Conference attendance by the academics is supported at NUL. The Research and Conference Committee (RCC) allows a certain amount of money that an academic may spend over a two year period for conference attendance. The funding is, often insufficient for one who may need to travel abroad more than once in those two years. This, nevertheless is a gesture which in a way encourages both the attendance and the writing of conference papers. Yet even where one is externally funded, frequency of attendance is, monitored so that it is well balanced with other duties like teaching which should not be disadvantaged. Unlike with government officials whom it has been recorded may frequently attend conferences without necessarily presenting papers, the academics rarely do. Instead, they could even send conference papers without necessarily attending. Moreover, as it was the case with NUL, sponsorship to attend was guaranteed, amongst other requirements, if an academic was presenting a paper, and contributing knowledge especially of relevance to Lesotho (Research and Conference Guidelines 1996). At the level of teaching assistant, during the first two years of employment, one is allowed to attend without presenting a paper in order to get initial exposure. Yet conference papers on their own, unless published, score low in the promotions criteria at NUL. The low productivity that was found in the non-academic reports was due therefore to that problem, coupled with limited financial support from both the university and funding agencies. Agencies' preference for funding conferences was often for groups that seemed to relate closely with the grassroots as was intimated by one aid agency responding to the study questions. As mentioned, the fact that academics compared to government officials scored low in Conference Reports was mainly due to the low response rate from the high ranking academics, and the fact that government officials were responding on behalf of their departments not as individuals. That notwithstanding, academics and government officials were heterogenous, and likely to yield incomparable results. To find if it is true by some scholarly standards that NUL academics produce less, would require a separate study whereby they are compared with academics of the same nature to NUL's.

6.3.2.4 Production of technical reports by the government

Government officials rank second and third in both the Project and Conference Reports, because they finally represent the overall authority that should be seen to play a role nationally. The recent shift by aid agencies from solely assisting governments to funding the community-based NGOs as well, in most cases, as already discussed, is understood to be one way of getting directly closer to the people. Also, as interpreted by Nyerere (1999) and Kabeer (2000), it is another way of avoiding corrupt or undemocratic governments. However, this was not substantiated in the case of Lesotho. Irrespective of whether governments are externally funded or not, it is incumbent on them to lead, to govern and attend to issues of concern to national development. As a result, within those parameters they should continue to issue TRs. Taking the two titles of the collected sample TRs produced by government, for example, one sees that they underpin the fact of where, how and why TRs are said to be performing, and why governments are bound (own emphasis) to produce technical reports. There are some national problems that may not be delegated to the NGOs, or be at the mercy of donors. One example is the *Ministry of Agriculture situation analysis report 1989/90 - 1996/97* 2000 edition. It is a serial title that informs government on progress or obstacles in the agricultural sector. Trends highlighted therein are meant for planners who should forecast agricultural priorities adequately. The report has been compiled by local staff that were drawn from the Ministries of Agriculture, and of Planning, from the Statistics Department. It does not show any external aid. This is an indicator as well that the government can and should be self-reliant in TR production.

The second title (Table 5.12) is *Situation report by Ministry of Works on fire damage to government buildings during the 1998 political crisis*. In response to that problem, which was of developmental concern, the authorities ordered the technical staff of the Ministry of Works to assess the level of injury caused, to appraise and advise as appropriate. Technical staff visited the affected sites, spent time taking pictures of torched premises, costing item by item what needed to be repaired or be replaced. The collected data was professionally compiled as a factual record (assuming that it was not deliberately altered, doctored or content modified). It was primary information that was processed within a short period of time. It was fed into a technical report as needed by the authorities. That technical know-how and wisdom of local engineers, architects, surveyors, was not reported verbally nor by letters or a book to

authorities. It was purposely communicated through a technical report format. Its service started, and was in action, performing the work of conveying a technically generated piece of information to the decision makers, either as Ministers of Finance, of Works or the entire Cabinet. The reporting was adequately informing and advising how and what action to take to reconstruct or repair the affected government property. Performance of TR, commences with the inception of the idea, as a reaction to a problem (Hartas 1967; Holloway 1976; Balachandran 1991). TRs are kept in action up to when the information contained in them is unpacked into knowledge that becomes of value to the receiver who needs and uses it to a benefit (Kaniki 1989; Kann and Veenendaal 1987; Thorngate 1995). In this respect, so concurs Safilios-Rothschild (1985), technical report service is in the name of development. As a consequence in the Lesotho case, the buildings were restored, which is a positive step in development. In that case, too, there is no indication of foreign aid intervention, a proof that government can independently generate its technical reports. The examples show the purpose for which the Lesotho government also had authorized the production function of TRs which, in turn, presumably performed the service of channeling information well. For that particular incident, the work of the title ends, but the extra copies may be kept for reference for other users requiring related information.

6.3.3 Productivity of TRs by gender and academic qualifications' variances

It was found that across all the producer groups females participate more than males in the production, which is indicative of females' higher level of contribution to development activities that relate to those projects. That of course is understandable in a country where the female gender dominates the male by at about two to one. Not only that, but females are more educated as was the case in the survey, and in the *1999 Population Census*, but a feature which is unusual in Africa and most of the developing countries (Kabeer 1994; Kiondo 1999). Moreover, as argued in Chapter 3 (Women and Law in Southern Africa 1997) in Lesotho, women were more responsive to development than men. As found in the study, the ability of respondents to produce technical reports depended on their higher academic qualifications. For instance, 52.1% of the holders of the second degree prepared papers and attended the Beijing Conference in a higher proportion than those who had lower certificates (see 5.3.2.1 and Chart 5.3). By inference, males will tend to produce less, or be academically less capable to generate TRs profusely in the government service. That should be interpreted as a disadvantage because

the males stay in the civil service longer than the female civil servants who therefore leave a gap in the productivity function, presuming that they retire into non-literate occupations. The phenomenon that males stay in the service longer than females is difficult to comprehend since by the Public Service regulations, the retirement age is the same. Possibly the males manage to negotiate temporary contracts beyond the retirement age. Ironically, though they leave the civil service earlier, females have a higher mortality rate than the males (*1996 Population Census*:67). The situation is likely to have compounded adverse effects on development because, assuming that they go out of the job and still fulfil their 70 years mortality rate, the females then increase the numbers of the dependency ratio of persons below 15 and over 65 years of age (*1996 Population Census*: 43). The implication is that performance of TRs is subjected to unfair gender differentials which do not favour the economically active age groups, nor individual capabilities that may stimulate more and good quality report production which in turn impact positively on development. The finding may partly respond to the startling questions as raised by analysts like Phororo (1999), as to why the high literacy of Lesotho, and especially the females' seems not to have a positive effect on development as it should. In a way the study suggests that a good number of those who are supposed to apply their literacy skills and academic aptitude to unravel the development problems are restrained somehow by the gender biases.

Whereas discussion on gender inequities by sector will be elaborated in the next section of productivity by subject, it suffices here to link the above with the corresponding views (Lund 1998; Sen 2000; Wichterich 2000) that there is generally a tendency to include males in some positions of power and economic activities, but invariably to exclude the females. That is also why the DSE/World Bank (2000) male-dominated participation at the Villa Borsig workshop on *Inclusion, justice and poverty reduction* as highlighted in Chapter 3, was found ironic because females dominate among the poor and the excluded in the world. They are the ones who are more suited to deliberate on how to be included. The foregoing affirms that global trend. As Table 5.6 indicated, male senior officials were gaining an upper hand over females represented in this particular level of seniority.

6.3.4 Production of TRs by ISAS

Findings also show that ISAS budget encapsulates funding for the production of ISAS's own technical reports, the bulk of which announces and communicates research results that fall within the Project and Survey/Situation types of reports in this thesis. As a single institutional producer, and compared to the three producers groups, ISAS generates TRs extensively. As evidence of its high production, *ISAS Publication Catalogue 1999 - 2000* lists over 25 research reports dating from 1981. It reflects titles that are in stock at the reporting time. This characteristic of ISAS also conforms to the description of the indispensable, yet advantageous dual role of managing reports from elsewhere, as well as manufacturing and dispensing technical reports obtaining in the specialized research institutes of the North and in particular fields like agriculture (Bonitz and Schmidt 1978; Klempner 1981; Smith 1981; ISNAR 1992:8; Pinelli, Khan, Barclay and Kennedy 1993). The advantages of this arrangement are elaborated later.

6.3.5 A sectoral production of TRs

It was found that the tendency has been for males to write TRs and attend gatherings that pertained to agricultural development, the FAO *Food Summit* being the example. But food is a matter of concern to all. The Lesotho situation is beset with several contradictions. What might appear like a contradiction here should be explained. It has been argued that as a subject, agriculture is heavily reported on, accounting for 45% of the total of 13 subjects listed in the Catalogue of the Sechaba consultants in the decade 1988 to 1999 (see 5.2.5). There is also a high frequency of failures and duplication of development projects on agriculture. Related to that high reporting is that the agricultural fora, taking the *Food Summits* as example, are dominated by males. It would imply that the latter produce and distribute more in the subject. That is not the case as in the civil service a male can attend without presenting papers (see Figure 5.2). As well, Project Report preparation is not necessarily by government officials alone, but in conjunction with consultants. A high output from agriculture also comes from institutional producers as seen with the example of the consulting firm the Sechaba Consultants in Table 5.11, and Figure 5.4 which illustrate availability of agricultural and gender materials in the libraries, especially in the Academic, Situation and Projection Reports. As males dominate agriculture, so too do females monopolize attendance report-writing for the gender-related matters, as if gender problems were no concern of males. Such gender

inequalities in the production of the selected sectors are interpreted as some of the contributory factors that negatively affect the balanced and holistic delivery of information by an indispensable technical report format.

The description of the collected sample of TRs shows that there is a paucity of TRs in the science and technology subjects. This illustrates that the country is inactive in this field. The deficiency is in turn reflected in the shortage of scientific literature in many developing countries (Saracevic 1981). The situation becomes a vicious circle whereby there is no literature to stimulate scientists to write more about scientific matters. A call for a more concerted effort in technical information and its management is made by Sturges (1997), as he observed its importance in the case of Africa as a whole, specifically in Kenya and Malawi. If technical knowhow is that poor, one cannot imagine, for instance, who can adequately assess and report on the currently controversial genetically-engineered hybrid seeds that has entered the farmers' markets in Lesotho (Mokuku 2001). For reference work prior to the field work, intermediaries will not be in a position to provide relevant background information since their centres are lacking in these areas, and they are caught up in the information-poverty trap too.

The sample TRs collected as listed in Table 5.5 covered topics and activities that pertain to the improvement of human lives such as job creation, human and women's rights, gender, rural development, poverty assessment, training of business people and road construction. These are some of the well-meant activities indicative of the level at which Lesotho is in development as listed in Chapter 3.

6.3.6 Modification as an aspect of the production of technical reports

There exists a number of methods in the production of technical reports . Some are timely, while others involve a relatively time-consuming processes prior to the issuing. As a way of describing the complexities of these methods, only the significant strategies that emerged in the findings are discussed below.

6.3.6.1 Ways of modifying technical reports

One common, yet intricate matter that relates to the production of reports by the four groups is the inclusion of the modification methods. The study found that producers were involved

in issuing TRs in limited quantities, with restricted distribution, and classified as secret. Though these were done in varying degrees, in unspecified stages and for different purposes, they provided one important factor in the production of TRs in Lesotho and elsewhere. As indicated in the last two chapters “modification” for this study encompasses all that has to do with the syntheses, editing or revision for whatever motive. It is revealing that almost all the major producer groups do not adopt a report before it is ‘cleansed’ of possible controversies for various potential audiences. Or, before a report is then fine-tuned in such a manner that it does not give any negative implications to the commissioning bodies. TRs have to meet the set guidelines, and foremost, implicitly to safeguard the interests of the commissioning bodies. It is in this regard too that discoveries were made to dispute statements that, in order for them to achieve “timeliness”, TRs avoid editorial control, avoid interference by many and then compromise quality (Manfred and Schmidt 1978:8-12, Balachandran 1991). In the case of Lesotho the study revealed that, in fact, TRs were modified in a substantial proportions, as affirmed by 66.6% of officials plus aid agencies, and 69.5% of government officials alone (5.2.2.1). But in such cases where ISAS’s managed TRs, were of value, as was indicated it meant that the rigorous editing done had not necessarily reduced the quality which underpins the to value of TRs. Subsequently from the survey, TRs may still have good or poor quality like other channels that take even longer to be released. It cannot be generalized that their being heavily edited delays the production process or compromises value.

6.3.6.1.1 Synthesis of technical reports in Lesotho

It was found that most of Project, Situation/Survey and Incident/Enquiry incorporate the executive summaries which are regarded as essential by producers. Similar to production which was enhanced by involving academics and practitioners, so too synthesis required practitioners and intermediaries. According to Dervin (1982), it is the practitioners who, at the first stages of production have to assist in the adequate predigests or summaries. Though respondents were not asked to comment on such modification strategies as summaries in terms of quality of reports, it is easy to deduce that syntheses facilitate adequate processing by intermediaries, and simplify use by all, most importantly busy executives. Where they may be translated into local language like Sesotho, summaries and abstracts can serve as disseminating methods too (Mophethe 2001), as can the whole range of repackaging strategies as advocated

by Rosenberg (1987) and Stilwell (2000). Whereas synthesis may enhance the usefulness of TRs this much, only five (41.7%) would be willing to apply synthesis on technical reports.

6.3.6.2 Classification of technical reports into limited, restricted and secret

On the issue of secrecy and restricted reports, there was a clear admission by government officials and aid agencies that only about 30% of their reports were secret, restricted, classified or for limited access. It may be argued according to findings however that 30% constituted rough estimates. Usually, reports carried with them an aura of secrecy and confidentiality. Even those which were not so classified, rarely ever go public (Merrett 1994; Ojiambo 1994). This is the kind of confidentiality that was justified by Jermy (1966) when describing reports as belonging to the “rivalry” domain, especially if containing information that would benefit the producer who paid for the production, or if they announce patentable innovations. In general, whatever the motive, that aura was evinced by the sensitive attitude of government officials when discussing TRs, as mentioned. The enactment of *Oath of Secrecy*, which could not be explained in detail, however, by the civil servants in Lesotho, was a deterrent to releasing information even if not classified ‘secret’. The situation confirmed Ojiambo’s (1994) observation from the African context that government officials tend to think all government publications and information were limited to their use only. Indeed, as some respondents showed by donating some reports to the researcher, not all the publications are limited, restricted or secret. Access to these reports might have been limited had they not been sought after by the researcher. According to the same estimations, about 70% is available for public consumption, hence TRs suffer this unprecedented custodianship as was to confirmed by Ketso (2000), and this operates as a constraint upon the performance of TRs in Lesotho.

6.3.6.3 Application of standard report numbering

Report numbering using some in-house mechanisms was done by few (21.4%) producers. While it is recommended by the International Standard Report Numbering Agency, Lesotho has not yet a national clearing house to assist in this regard as recommended for practice in report management both nationally and globally. Book and serial numbering have been in place for some time, indicating the recognition that is attached to the two other channels in Lesotho, but there was little or unsystematic attention paid to reports produced in the country. This affected TRs adversely.

6.4 Distribution of TRs in Lesotho

The next objective of the study was to establish how well or poorly the distribution of TRs was in Lesotho. In that way, the aim was to assess how the obtaining climate would hinder or assist in the related TRs functions like availability, use and benefits.

6.4.1 The role of National Research Council (NRC)

At the national level a favourable climate is being created toward the establishment of a research council. Unlike the National Research Foundation (NRF) of South Africa, for instance, whose board is dominated by academics whilst its corporate structure is made up mainly of industrialists (National Research Foundation 2001), the Lesotho Council is poised to have a structure, resembling the Swaziland one, represented almost equally by the academics, government officials and the industry sector. This combination is intended to cross fertilize the operations of such a body corporate. Of significance is its intended role in supporting, registering and, monitoring research, all of which culminate in reports that should in turn be stored, disseminated and used in all aspects of information management (Machai 2001).

6.4.2 Distribution of TRs by groups in the survey

Findings from the four producer groups and information workers have varied regarding distribution. As illustrated in 6.3.1.1 above, some mechanisms of distribution start even at the production stage by incorporating availability statements or instead avoiding restrictive labels. In that way, clearly distribution is closely interconnected to production. To start with, high levels of productivity were in most cases proportional to easy and high distribution. Hence the variances of production of TRs, as shown in Table 5.9, give rise to an uneven distribution of TRs to and from, as well as among, groups and users as a whole.

6.4.2.1 The role of intermediaries in the dissemination of TRs in Lesotho

Of importance in the distribution function in the TRs' performance is the role of information workers who should act as intermediaries between the producers and users, and intra-information centres. The function of distribution falls within a realm of information management that entails acquiring, processing, announcing, making available and

disseminating for use. In order that these tasks are carried out effectively and efficiently, three impressions made by the findings deserve interpretation.

Contrary to the expectation supported by the literature review that intermediaries were generally indifferent to TRs, it turned out to be not entirely the case. Firstly, the mentioned positive response rate on their part showed enthusiasm about the topic. Secondly, it is positive response by most of them about the mandate of ISAS. The overall interpretation is that if TRs were problematic, this was not solely of the intermediaries' making. Indisputably, intermediaries were not doing enough to ease the problem but they could justifiably apportion the blame to what this thesis regards as a cause for national concern. That is

- ▶ neglect of the channel in the hands of government ministries, for instance, where there is no information management
- ▶ the calibre of intermediaries in the field proved that they were genuinely not conversant with the channel, despite their enthusiasm in responding to the questionnaire which could indicate an interest the research topic. The type of training they had generally acquired from various institutions seemed not to have prepared them for the management, let alone the distribution aspects of non-book channels. Only two (13%) out of 15 responded, and positively so, that they applied CAS and SDI methods of announcing TR materials (5.3.3.4)
- ▶ the institutional capacity of information centres, producer groups and a number of parties involved in the performance of TRs was too weak to support fully effective distribution mechanisms. One of the declining support services for ISAS had insufficient ICT facilities. In other centres, 60% of respondents did not apply synthesis mechanisms, for example, only 13% engaged in full indexing services, and thus demonstrate the fundamental characteristics of specialized centres (ISNAR 1992:8).

Taking the example of sources of materials that enter the NUL libraries, and the quantities of TRs in the collections as tabulated in 5.13 and 5.14 respectively, it was found that intermediaries acquire TRs at low levels and only from relatively easy sources. The often used distribution channels included bookshops which readily supply catalogues for an easy order and delivery system. NUL bodies and international bodies also ranked high because they made automatic deposits. But other difficult sources like government ranked very low. Therefore,

the intermediaries' role in facilitating the distribution of TRs is interpreted as not very satisfactory. This unsatisfactory performance tallies with that of the amounts of TRs acquired by type.

Out of the six types that intermediaries were questioned about, Academic Reports comprised the largest proportion of acquisitions. A factor was that the responding information workers were from academic centres, and they did not need to make great efforts to acquire TRs from elsewhere. This observation concurred with global views (Mark 1970; Sturges and Neill 1990; Conkling 1991) that, generally, libraries marginalized report literature; and that the performance of TRs in the hands of academic librarians is not any better. In the academic information centres at NUL, which are described in the context of the study in Chapter 2 as some of the leading in Lesotho, TRs management in 2000 is, therefore, not praiseworthy.

Nevertheless, agriculture and gender related reports in these centres is significantly prevalent. Types which have a high concentration in the collections correspond to those that are highly produced, namely Academic, Conference and Project Reports. On the one hand, the difficult distribution of some types relates to those that are more prone to secrecy like the Incident/Enquiry reports. That is also why none of these was acquired in the sample collected. Moreover, it needs repeating here that upon studying the sample, it became evident that in some cases a line of demarcation between the Incident/Enquiry and Situation/Survey became diffuse. Finally, it was found that few information workers in the survey carried out fully the processing mechanisms that stimulated distribution. Where CAS, SDI, Internet, and such utilities are not employed to the optimum to source, inform about, and promote use, it may be deduced that TRs performance is bound to slacken. That is also on the assumption that, where applied, such CAS, SDI mechanisms were also used.

6.4.2.2 The NGOs' participation in the distribution of technical reports

Findings from Table 5.16 demonstrate that the NGOs received about 60.06% of types of TRs which they were questioned about. Almost 30% did not reach them, seemingly due to confidentiality and some distribution shortcomings, while about 9% did not respond. This percentage excludes the types that the groups were not questioned about, as well as the types that NGOs themselves may not be interested in, and not try to acquire. On the whole, there is

rather a high proportion of TRs that is not distributed nor disseminated. The non-distributed portion may be described as unaccounted for. They may fall within the public informal sphere, or they may actually get lost or destroyed.

6.4.2.3 TRs' distribution at the government level

Technical reports pertaining to Lesotho are produced at high levels by government departments. On the contrary, it was found that these departments participate poorly in the distribution of the channel. During data collection the Ministry of Information was in the process of constructing the Lesotho Government website which the researcher was informed would, *inter-alia*, distribute government reports. By August 2001, less than a year after its construction over 90 titles that are available in full text have been posted (Lesotho Government 2000:7). This does not imply the rate of production, however, since the posting is retrospective. According to the consultant managing the site, reports are posted after the approval of the Principal Secretaries, then the editor of the site, being the Principal Secretary of Communications. This implies that there are some government reports which are not approved for postings to the Internet, possibly as they are confidential, or less important. The government is in this manner enhancing the distribution of TRs across the physical space, but only the TRs that the Principal Secretaries want the public to read will be distributed this way.

It may be controversial as to what proportion of the technologically-haves as opposed to the technologically-have nots may benefit from this technological facility. Having seen how weak the country is in terms of information technology as described in Chapter 2, it follows that only a few will benefit. The impact of technology on the performance of TRs as with other channels, is promising, but is taking time in Lesotho and the continent to be felt (Chisenga 2000; Hafkin 2000; Thapisa 2000). The scope of the study does not permit an elaborate discussion on that wide field, however. Yet there are implications for information workers as Stilwell (2000:190) cites Kaniki (2000) who suggests that in the future, intermediaries could be involved more in updating the websites. The construction of the Lesotho government website was the work of private consultants outside the library and the documentation profession.

6.4.2.4 Distribution of technical reports by the academic community

To a certain extent, the academic community does participate in the distribution of reports. While a few 11 (21.2%) members agreed that they made free deposits into libraries, a high of 22 (42.3%) did not, and an average of 19 (36.5%) did not even respond to the question which could mean not understanding what it was all about. There were academics who acquired reports through informal sources like colleagues and friends, a practice that assists in the distribution. The study therefore brought home the issue that was well debated by Pinelli, Khan, Barclay and Kennedy (1993:323-25) and Stevens (1997:153). The former observed that reports may bypass the intermediaries, and flow directly from producers to users. The latter advocated the kind of directionability of information to and from all sources. Hence though it is not the duty of staff nor students, but of intermediaries to disseminate TRs, the former can stimulate the informal circulation and movements of the materials. In the end, the intermediaries do not have any monopoly in the distribution, something they must be aware of, since it may relegate their duty to redundancy. Worse still, with the advent of Internet, individuals may even become more independent on actual libraries and access TRs from web sites like that of the Lesotho government. In spite of these informal dissemination and distribution methods which are unavoidable, of tremendous importance for intermediaries is not only to get feedback, but to ascertain from the clients that the former's formal professional mechanisms "make a difference" (Stone and Menou 1994; McConnell 1995; Stevens 1997) especially with the problematic channels of information like TRs.

6.4.2.5 The involvement of aid agencies in the distribution of TRs in Lesotho

Data revealed that agencies that are making free deposits of reports in Lesotho libraries are equal in number to those which do not. It is difficult to assess the overall picture in that regard. In terms of availability, however, the majority of agencies indicate that their information may be available to the public. The underlying query however, is what constitutes confidential material. Whereas it is about 30%, a figure that appears small, as already argued, it may contain the bulk of materials that potentially effect development. The surveyed agencies have not per se been a cause for suspicion. But the ability of some sponsors, especially in the Project and Incident/Enquiry Reports, for instance, to apply confidentiality and conceal information that may damage their credibility or image, may be to the disadvantage of Lesotho

and development, as it is a well documented fact in Chapter 3 (Mphaka: lesnet 2000; Pottinger 2001; Bond 2001:235-37) and confirmed by this thesis.

The political and economic factors also come into play in that information, and in particular, that which is channeled by TRs, is a vital resource that tends to fall within the 'rivalry' domain like other resources in the world. It is therefore likely to be exported from Lesotho to other destinations. Altogether, findings on distribution illustrate that in Lesotho, information channeled by TRs is also communicated to, from, among, by, and around several groups. In Chapter 5 it was mentioned that the flow makes a two-way and cyclic communication pattern that still, however, places the intermediaries at the centre. Intermediaries are not only central, they are more effective than all other sources. This was indicated, firstly, by a majority of users of ISAS who often failed to get reports from individuals even though a few did. It was again proved by government officials who found it difficult to retrieve their own reports where there was not assistance of an intermediary.

6.5 Adequacy of ISAS's mandate regarding TRs management

The study has established through the opinion of the academic community and information workers, from the official records as well as from the observations, that the ISAS mandate needed to be updated. From the information workers' point of view, however, the ISAS mandate was also described as "a little adequate". Their viewpoint highlighted the importance that they rightly attach to the role played by specialized centres in managing development information literature, and more so technical reports. It is evident that this is a greater concern to the intermediaries than to any other group. To the library profession, despite its weaknesses in certain areas to deliver as expected, ISAS still fulfils to an indispensable service, consequently the professionals hesitate to criticize the mandate in toto. Though the majority of the academic community in a way failed to assess ISAS's mandate separately from the adequacy or inadequacy of performance of ISAS (see section 5.4.2), it was found that 78% of information workers assessed the mandate as inadequate. A smaller proportion of 26.6% described the mandate as adequate. What was construed from their remarks suggested a comprehensive revisit of the mission of the Documentation Centre concurrently with that of its parent body and the Institute and NUL as a whole. To a certain extent the opinion of the academic community nearly matched that of the ongoing NUL Council Transformation

process. The desire to reflect upon the mandate clearly fits theories of management that go hand in hand with the evaluation process.

For those who described the ISAS mandate as inadequate the explanation is that the original aims and objectives of ISAS and its Documentation Centre since 1979 had not been clear to them in the first place. According to Weiss (1972), it is the clarity of the objectives from the beginning that make the mandate of any programme easy to put to practice and easy to evaluate. According to Chailla (2001), too, a mandate is a formal and official policy statement being articulated by the authority that is committing itself to achieve some benefit. One of the attributes of a policy is that it should be written and be known to all the stakeholders. As such, it may not be altered by any individual, or be ignored by the system. It is upheld and supported as it stands until when it is again officially modified by authorities, if needs be. ISAS's mandate was never recorded as such, especially as it affected the Documentation Centre *vis a vis* the NUL main library. As was observed in Chapter 2, the statement only mentioned that there shall be ISAS. The Documentation Centre's duties were presumed through some 'gentlemen's agreement' of authorities at that time. That is why the past assessments as decreed in Chapter 2 (Teriba 1989) were not only criticized, but had actually done injustice to the documentation and information arm of ISAS when evaluating it. The absence of firm written objectives implied there were no terms of reference for any evaluation. An unwritten mandate contributed to the Centre's faltering focus at times. Lack of a mandate or its inadequacy was tantamount to lack of formal policy for TRs. As suggested by the NUL transformation process and strategic plan the scope of ISAS and NUL has to refocus so as to fit not only the socio-political needs of Southern African that have drastically changed. It also has to adapt to the technological and globalizing dictates of the millennium, in terms of research and information for development. It implies that some flaws exist in the mandate presently. If a wholesale evaluation is done and it is negative about ISAS it may lead to yet another absorption of its specialized service, similar to those of the former SSRU in Swaziland, ZIDS in Zimbabwe and NIR in Botswana. It is questionable, however, if the centres were established with a clear aim of extending the services of the main university libraries. What causes the authorities to alter their decisions, and revert a specialized unit to the generalized one? This is worth pursuing beyond this study. However, the situation at NUL is still fluid as affecting the specialized technical reports management per se.

6.6 Effectiveness of ISAS's mechanisms of managing TRs

There exist both strengths and weaknesses in the mechanisms employed by ISAS in the management of TRs. As spelt out in the findings, the connectedness of the functions determined poor or good performance of TRs. Where the production and distribution was low, it caused stress on ISAS's mechanisms which still ended up with low acquisitions. In cases where demands were assertive, they stimulated ISAS to apply more effective mechanisms of retrieving a needed TR.

6.6.1 ISAS's outreach mechanisms as assessed by government officials

The finding that ISAS was physically located too far from the responding government officials is interpreted, firstly, as a criticism. Ever since it was established, the centre never physically expanded its services to all its intended clientele. It is secondly, an indirect call for help in this regard. As stated, the reduction of facilities like the collecting trips to the producers who were mainly in Maseru meant that somehow the staff, the authorities at the time have become oblivious, not only to the purpose of ISAS beyond NUL, to the importance even of the problematic TRs, but also to the demanding and aggressive mechanisms to be applied in order to access the channel from the sources. Neither the respondents from the users' nor intermediaries' side hinted at the virtual library concept that could improvise or replicate ISAS services in other campuses of NUL or other locations in the country. The inertia is not befitting of the expected effective performance of ISAS and TRs for the channeling of information for and within Lesotho as a whole.

6.6.2 Depository information centres

It was found that in the list of information centres that benefited from free deposits, ISAS was mentioned, but by a few respondents only. The list itself was longer than was anticipated prior to data collection. The implication is, therefore, that many centres have been established in the country and to a level that escaped the notice of the researcher. Again, this means ISAS has come to face competition from various centres that are also managing technical reports pertaining to Lesotho. It means the centre cannot claim much of the unique specialization that it used to have. Another interpretation is that other centres can fill the gaps that ISAS's services left open. In fact, even if these rival centres are not specialized, there is need for coordination of information management within the institutions like NUL, even more widely

among information centres in Lesotho. As stated in 3.2.4.6, Serpell (1981) advocated coordination between the academic and national information services. In the same context, Karnitiz (1993) stressed that any channel performs within one continuum of information flow with other channels, and not in isolation. Besides RCC which is depositing its reports with ISAS there is no other producer that is bound to deposit its TRs with the centre, except for voluntary and perhaps irregular gifts. Notably, the Legal Depository Law has not been enacted yet and a number of national establishments like the National Library Lesotho Collection and the National Archives may be justified in to becoming depositories if the performance of ISAS management of TRs as a whole is not found to have disqualified ISAS for this task. The main concern, however, would be that a capable and suitable centre should be found.

6.6.3 ISAS's own costs and inputs toward TRs' management

ISAS's own inputs into the management of TRs and related activities were reported as satisfactory by some agencies. The fact that the ISAS Documentation Centre also purchased books for its collection suggests that the Centre has moved away from its original focus as specializing in less conventional materials like TRs, and it duplicates to some extent the work of the Thomas Mofolo main library. ISAS's ability to acquire information channels other than TRs on the one hand indicates its financial capacity. Nevertheless, in terms of the foreign aid that the Institute formerly attracted and expended specifically on TRs, ISAS's record in recent years was negative. This was evident, seen from low income of the 1990s compared to external funding that the Institute attracted for its major activities. In particular, major decline in external funding commenced after 1993 with the movement of donors, a number of whom, being nomadic as stated, (section 5.8.2.1.1) relocated their offices to a more central site in the then democratizing South Africa. Above all, the political crisis in Lesotho has made the country unattractive to several aid agencies and investors (Central Bank of Lesotho 2000). A positive aspect, however, is that the non-availability of foreign aid to manage TRs has created a new self-reliance, that could be taken advantage of to explore fully options within globalization and the world systems (Rist 1999; Coetzee, Graff, Hendricks and Wood 2000), and as Burton, Stilwell, and Leach (2001:9) suggest:

to achieve an external critique of 'development'... imagine other forms of existence or of struggling against the domination of the outworn economic paradigm...to gain some distance from the belief in development [and to] prepare for the post-development which is not anti-development...

the approach suggested here implies [a] degree of **knowing**, being **informed for post development**.

The Lesotho, the NUL and ISAS's costs relating to TRs management would be well spent on the discovery of such post-development approaches.

6.6.4 Interpreting views of the academic community and the intermediaries on ISAS's mechanisms

The academic community and the intermediaries assessed some ISAS mechanisms for TRs' management negatively, others positively. They pointed to examples that were unsatisfactory, in particular, user services within the documentation centre and in area of circulation. The intermediaries, on the contrary, rated ISAS's mechanisms high. They included behind the scenes activities like indexing, abstracting and annotations. These contradictions can be interpreted in two ways:

- ▶ information workers get absorbed with their routine and conventional way of doing things so that they rarely ever weigh the need to doing things the way they do, against the benefits (Sturges and Neill 1990).
- ▶ seemingly, information workers from centres other than ISAS hardly ever use its services to experience the latter's performance, and to assess it adequately
- ▶ occasionally some intermediaries use ISAS's documentation centre but still find no fault with its mechanisms as it seems, chief among many explanations is the one that intermediaries find it easy to defend the mechanisms that they themselves employ, even if they should be criticized
- ▶ the academic community could benefit from the CAS, SDI and related facilities if such facilities are brought closer to their reach (Sturges and Neill 1990:109)

ISAS's annual reporting referred to only the most glaring of the shortcomings in the mechanisms such as the backlog of TRs not yet entered in the automated data bases (*ISAS Annual Report 1994/5 -1996/7*), a point made by users too (see section 5.7.4). But the annual report is silent on remedial efforts being made to hasten indexing. Shortage of support staff and of computer terminals for Online Public Access Catalogue (OPAC) together with the absence of manual catalogues, all summed up the negative aspects contributing to the poor performance of ISAS mechanisms in handling TRs.

The positive remarks were as expected, noting the efficiency of staff on several occasions in retrieving items being sought, and the appropriateness of information channeled. That ISAS operates a closed-access system for its collection has the disadvantage of limiting direct browsing, but the advantages outweigh these limitations. Once collected and stored, a report has a remote chance of getting lost through browsing and lending. That is why the “hit rate” is high for the known item being sought.

Other facilities may not be as attractive as the respondents have intimated, but rather the consequence of comparison with other poorly operating NUL information centres as a whole. Compared to specialized centres of its stature outside NUL or beyond Lesotho, as discussed in Chapter 3, ISAS in some cases was not well equipped to manage the demands of TRs effectively and efficiently, .

6.7 Effectiveness of ISAS’s management of technical reports

As measuring effectiveness was raised in order to compare ISAS’s output in terms of usage (Lancaster 1977; Blagden 1983; Stone 1993) questions were asked that included ISAS’s focus, demands placed by users, accuracy, appropriateness, quality and value of TRs, plus success and failure rates of items required, of TRs collected by ISAS.

6.7.1 ISAS’s focus thematically and in terms of whom it attracts

The study confirmed the overriding view (Lancaster 1978; Blagden 1983; Weiss 1984) that from time to time systems, programmes and establishments such as library services should be assessed, evaluated and monitored in order to verify that they are still carrying out the functions and performing as they are intended to do. On the one hand, the findings suggest that in a number of areas ISAS was losing its focus. One example is that of ISAS’s ability to attract students more than or instead of its own researchers. On the other hand, the interpretation may imply the failure of other centres that were supposed to provide for NUL students to do so fully, with the shortcomings being compensated for by ISAS. This finding suggests that ISAS’s effectiveness should be reassessed within the wider NUL context, for, indeed there is no centre that can claim full self-sufficiency. ISAS’s own researchers themselves were patronizing other information centres.

The thematic spread of reports recently used in ISAS was wide, but it did not reflect the comprehensiveness in terms of the sectors that the Institute is supposed to cover, being multidisciplinary. None of the used reports was in the field of science and technology, indicating a link between the subjects that was not represented in the titles of collected samples. In that sample, there was under-representation of the pure sciences, which nevertheless cut across the agricultural and gender sectors as well. The reason for this was limited productivity in this area as already discussed in 6.3.5 above. Reports covering in the sciences were not available and were not used because they had not been acquired, and they were not acquired because they were not produced.

6.7.2 ISAS's failure to meet information needs of ISAS's researchers

It was ascertained from ISAS researchers and from intermediaries from other centres that the former also use other centres heavily. That practice is interpreted as affirming the issue raised in Chapter 1 on the interdependence of information centres. Where a particular centre fails to meet the demands of its clientele, regardless of the size and specialized foci of that centre, it should rely on the cooperation of others (Serpell 1981), especially through organized cooperation and formal networks before users can make efforts for themselves with informal sources. That means the level of dependence on other centres and informal sources should be monitored, as advocated by intermediaries (Poll and te Boekhorst 1996). Compared to informal sources, ISAS as an informal source succeeded better in collecting materials (Table 5.13) and in satisfying information demands made (see section 5.7.4), confirming once again that information centres were more effective as McClure (Pinnelli, Khan, Barclay and Kennedy 1993) observed. This was another justification for the conviction that formal information centres may actually be relied upon for a professional and better performance, and thus their *raison d'être*.

6.7.3 Accuracy, appropriateness, quality and value of items found from ISAS

The survey found that documents provided by the ISAS Documentation Centre were accurate, appropriate, of satisfactory quality and of value to respondents. In this regard, credit goes, firstly, to ISAS that collected them in anticipation of demand. The findings also reveal ISAS's effectiveness in being able to match demands made with the items that are available. Secondly, credit goes to the producers who channeled well-written, precise, exact, adequate information,

as the respondents suggested. There is a level of interrelatedness between and among the functions of TRs from production stage, through information handling, up to use and the consequence which is to be discussed next.

6.8 Use of ISAS Documentation Centre and use of TRs managed by ISAS

The last but one objective of the study was to determine use of TRs managed by ISAS. Two units of analysis are addressed in this section. First is the use of the Centre in terms of the visits to the Centre and readership of its collection. On the second level, assessment is of the findings of 'use' of the reports in a broader sense.

6.8.1 Usage of ISAS Documentation Centre

The study found that frequent visits by users of TRs are made to the Centre by many, in order of students, staff and others coming from outside Roma. It is misleading to equate use with the number of "visitors", for, apart from having 'visits' as one possible indicator of 'use', TRs managed by ISAS are available for use elsewhere. Such reports comprise ISAS's own research results in the formal Project Reports, plus others that were found to be processed, posted to the Internet, or distributed to bookshops, to outlets like information centres, individuals, exchange partners or relevant funding agencies. Although the Centre has not physically established branches or service points elsewhere outside Roma, use of the Centre has gone beyond its physical location and reached distant enquirers. The latter have also tracked down ISAS managed TRs that have already been disseminated, highlighting the 'usability' function of the intermediaries in the information brokering between producers and users. The academic community is engaged in various activities which need reemphasizing: administrative duties, preparing for conferences and seminars, consultancies and projects for staff research assignments, staff teaching purposes, student assignments and projects. ISAS provides reading room facilities, among many others. Regardless of the magnitude of each, even the location of an enquirer, ISAS serves all that an academic and specialized information centre is there for. The case of a researcher from the *World Vision* (5.6.2) is one example. The distant civil servant that used ISAS publications was another (Section 5.6.6) and Table 5.18 further illustrates the purpose for which ISAS was used.

A number of government ministries and aid agencies commission the academics through remunerated consultancies. When obtaining sample TRs, it was observed that not all the commissioning authorities have specialized information services like ISAS. The fact that, amongst the reasons for which the academics use the Centre, consultancies are mentioned, and aid agencies and officials confirmed that academics do consultancies for them, indicates that ISAS and its TRs are exploited for the benefit of government and agencies that do not provide experts with information facilities in Maseru.

The link between the production of Project Reports and use of ISAS Documentation Centre among the academics tells us that those who do not have at their disposal a specialized information service are unable to produce adequately researched Project Reports, or alternatively, that the ability to produce depends on use. That was why it was imperative for the consultants for several government departments to resort to ISAS, but when asked if they or their departments used the Centre, the officials mostly said no.

6.8.2 Use of TRs managed by ISAS

Findings indicated that from the collected sample of TRs, and from TRs pertaining to global conferences, there was use irrespective of the age of a report. That disputes views that TRs are generally ephemeral and of a transient purpose as Balachandran (1991) opines. Though the topicality of each may reach a peak at a particular time, their use, it would appear, may go on indefinitely. It was established, however, that high levels of use depend upon the topicality of subjects at any given time. For instance, with the International Women's conferences, Beijing represented the high peak of attendance, TRs' production levels, distribution, acquisitions, and use, as illustrated in Table 5.29. Thereafter, all the functions around that theme declined or stabilized from the next *Beijing+5* Conference held in New York. The implication on development as well is that intermediaries will find themselves moved from one direction to another in terms of which areas of TRs to manage, when and to what extent.

Having established that there is a positive relationship between use of reports and production of Academic Reports (Table 5.22), it may be inferred that use of these reports is cyclic and thus having a multiplier effect through experts, consultants, academics who later also have the capability to generate related TRs. A finding that attendance and production declined in the

Beijing+5 Conference held in New York in 2000, confirms once again that in Lesotho as elsewhere, development themes and strategies change, which makes it difficult to trace achievements, progress or the opposite. TRs performance is also affected by these changes.

6.8.3 Relatedness of usage of ISAS Documentation Centre and TR production

Through Pearson's test, it was established that there was a positive link between use of the Centre and the production of the Academic and Projects Reports managed by ISAS. The association was even more significant with use of the Centre and production of Project Reports, meaning that those who prepare that type tend to refer to the previously produced reports prior to writing new ones (see Table 5.22). Bearing in mind that ISAS is used as a case, one is again in a position to extrapolate that what is going on there may be applicable to other similar information centres. The strong correlation that was found between usage of an information centre and the production of technical reports also implies that use was stimulated by the managed TRs which involved tracking down or acquiring, indexing and abstracting, announcing, storing and making available. To the contrary, where the organization or management of technical reports is non-existent, use is inhibited and so is the productivity of TRs. Non-existence and non-use of information centres curtails the ability by potential users to produce TRs. In the same vein, less or no productivity of technical reports means no information to be managed by information brokers. It is a reciprocal relationship.

6.8.4 Use of ISAS and ISAS's managed technical reports by various groups

The rate and intensity of use of ISAS and ISAS's managed TRs were found to depend on the type of users or user groups. That finding in Lesotho supports theories advanced by Poole (1985) that information sought and used is a function of certain factors like task to be performed, experience of user, need and availability. The indication is that use is high from the academic community because their duty, or "task", is, mainly scholarly. That is also why, unfortunately, use was low from government officials, due to a number of factors. One was the unavailability of information management and facilities in many government departments. Another was unfortunately the general misperceptions that there was no need, although officials were involved in decision-making, planning and monitoring. In those tasks, development information as a knowledge and decision-making tool (CTA 1996:107) would assist them. Still another was that, yes, there was no need since there were almost no

incentives rewarding evidence of use in the civil service. Promotions that are due to academics are calculated on their publication output. As seen with Academic and Project Reports (Table 5.21), it was more likely for one to prepare publications after use of one or more of such organized reports. Knowledge acquisition and knowledge creation through technical reports were more rewarding to individuals in the academic world than in the civil service as will also be ascertained from reasons for non-use by officials (see section 5.6.7).

Apart from ‘use’ through producing, ‘use’ in terms of the retrieval of the produced TRs from libraries, borrowing and reading, were not assessed per se for aid agencies. By using the premise that under favourable circumstances, the level of ‘use’ of TRs is almost proportionate to the level of ‘productivity’, aid agencies use TRs at an average level since their activism in Lesotho is focused on areas that they choose to fund.

From the angle of sponsorship, one interpretation is that there is an indirect use of ISAS by government, aid agencies and NGOs whose consultants emanate from NUL, except where a few of the commissioning bodies have their own information centres as some aid agencies do (see Table 2.1). But where they do not, experts utilize NUL information services to carry out consultancies. Even where commissioning bodies have such facilities, they may be supplemented by ISAS as it is also being supplemented by others as seen in Chapter 5.

6.8.5 Overall use of TRs pertaining to, and within Lesotho

The study indicates that performance of TRs makes a continuum of related and interdependent functions that underpins use as the crucial variable throughout this chain of functions from production and distribution. Technically speaking, it would not even be logical to talk about ‘use’ on its own, separate from other functions. For clarity, the usual application of the term is made to discuss its consequences in the performance of TRs in ISAS, in development and in Lesotho.

It has been found that ‘use’ has many forms and levels. Firstly, at the direct level, for instance, ‘production’ on its own denotes the kind of ‘use’ employed by the commissioning authority, for example, who wishes to be directly informed about the incidences of poverty among women, who need to be assisted to eradicate poverty. The intention to be informed illustrates

the intention to know. At an indirect level, 'distribution' of reports on the Lesotho government website, for example, is another form of 'use' through the Internet, to enhance the dissemination of information which government wants other people to know. This may be said to be indirect use of the informed, or indirect 'use' of influencing the next party with information channeled by TRs. The latter are instrumental as a mouthpiece of the producers/distributors wanting to be heard.

There is, secondly, another form, or perspective of "use" that deserves discussion. That is, "use" at the consumption level of the receiver. At this stage, TRs are "used" if they are accessed, read, discussed, and their recommendations, for instance, are understood.

Findings indicated that whereas productivity is high (Table 5.10), use at the level of being creative (Thorngate 1995), at or constructing knowledge (Dervin 1983), and understanding (Saracevic 1981) ranges from 'average' by a few (Table 5.21), to 'a little' by many, ending the range with 'none' by even many more; especially from the government service some of whom were unable to tell in what way a conference was 'useful' (Table 5.26). Some of government officials' reasons for not reading TRs were that reports were difficult to comprehend, off-putting and the officials were busy. Bearing in mind, firstly, that as planners they needed information to guide their decisions, their excuses were flimsy.

At the same time, respondents from the government and academic arenas who replied positively that they 'used' TRs may not necessarily mean that they consumed information at a level of becoming fully knowledgeable with what they read. This is verified by government officials who said TRs were not easy to understand, or that the channel was for the selective few and simply too technical. Another reason for describing reports as so unattractive, confirmed descriptions made earlier that the physical format was unattractive (Holloway 1967). That TRs were not attractive to some intended users is a problem with the inherent format of the channel which should not be overlooked by intermediaries and other stakeholders in the communication processes. That TRs demand the individual's understanding confirm Dervin's (1983), argument that knowledge is a user's construct. It is not sufficient to produce and manage TRs. What is final is that each user makes sense out of the information channeled through TRs. This is what in Lesotho seems to be the problem, that is high, productivity but little impact. Large quantities of TRs are produced, then 'read' by a few, hence not optimally

‘used’ or made knowledge-enriching for development. Thorngate (1995) concurred by stressing that it is proper to measure knowledge and its effects rather than information and this is the view of this study. TRs in Lesotho are produced, the information they channel may be managed (organized) and announced, even be accessed for use, but what follows rarely ever trickles down to knowledge that is applicable to developmental decisions and actions. Use of TRs in that sense is supposed to be the last function in the performance that finally leads to knowledge whose application breeds creativity or concrete change for the better, or, development. ‘Use’ of TRs in Lesotho is instead full of malfunctions of information which is for development. It is underutilized and hoarded at government departments (Ketso 2001), underfunded in the academic institutions, subjected to constant and rigorous modifications by external agencies, thus likely misrepresenting the majority, the needy who are not involved in the TRs communication process.

6.8.6 Discussing use of TRs in terms of the messages they convey

The finding that TRs convey messages pertaining to Lesotho is worthy of further discussion. Relevant are those messages to the country, but above all, they expose poverty levels, stages of development, strategies being made to improve the lives of the people, and progress or failures in all these. Titles of sample TRs collected in Table 5.11 again bear reference.

Classified reports are another essential issue deserving discussion in the function of use. Cognizant of the fact that about 30% of the aid agencies and government output was not likely to go public due to it being classified, and being aware that very few government departments have information centres, while some aid agencies do not have permanence in foci nor physically the country, a crucial question may be asked. If reports are generally off-putting, would not the classified ones be more unattractive and difficult to avail and use? When aid agencies change foci or relocate, what happens to their classified items? As noted in Chapter 1, the USAID donated most of its gender related materials to ISAS. None of them were classified. Would the answer be that the classified ones were destroyed? Non-availability of these items affects use and its impact on development.

On the other hand, Mphaka (2000) criticized the notoriety of producing commissioned reports in Lesotho which were unfortunately not ‘used’ to avert crises. The findings, as affirmed by

Mphaka (2000), bring closer to home the issue already extensively raised (Hartas1967; Leondar 1968; Lamberton 1990), that TRs are purposive materials that should record facts that are immediately applied to solve the impending problem. Where messages are inadequate, then either the experts are to blame, or the modification done in conjunction with the commissioners becomes inefficient.

From the observations, it was important for the study to get evidence from other authorities about the need for timely issuing so that TRs reveal steps to be taken toward a solution. Chief Seeiso's (2001) quest for a timely release of the conference type of report from the *Lesotho Vision 2020*, is just one example. The 1998 political crisis caused by delayed and heavily edited reporting, as analyzed by Mphaka (2000), is another example. The general interpretation of these anxious attitudes of the producers and users who are on both sides of the TRs' performance is that the channel has a powerful capacity to be used as a tool to reveal or to conceal. Mphaka (2000) in particular says the *Langa Commission's Report*, as was the case with all others before it, was not discussed, hence not used, with dire consequences. Factual professional writing of TRs, and above all, their expeditious release enhances their performance. The reverse leads to failure in adequate channeling, and frequently undesirable consequences for development.

The two examples mentioned above fall within the Enquiry/Incident and Conference types of reports respectively. One covers the media-prone area of Governance and Politics, the other is interdisciplinary. Their performance illustrates by inference what goes on with several types of TRs, and in all the sectors of development, including Agriculture and Gender which are the focus of this study. Evidence was found from a number of responses that technical reports were prepared prior to the implementation of the projects and even during the life of the projects, most of which in the agricultural development schemes then failed. It therefore shows that TRs' poor performance did not contribute to the success of the projects, and suggests the opposite. The next section looks at those consequences being drawn from the results of the analysis of sample technical reports.

6.9 Users' cost-benefits of TRs pertaining to Lesotho

The final research objective was to establish cost benefit of TRs pertaining to Lesotho. This means to assess how much it costs the actual and potential users, individuals or institutions, *vis-a-vis* the value they derive, if any, from the services that produce, distribute and manage reports. According to Feeney and Grieves (1994:36), ideally, it is desirable to minimize costs but to maximize the benefits. Findings on this question were drawn from the groups in the survey, observations and the documented records. The following discusses both the level of costs by each group, and the perceived benefits, in cases where they were experienced.

6.9.1 Academic community's cost-benefits of and on TRs' usage

Drawing on responses and observations, by comparison, individual members of the academic community have direct access to technical reports whereby specialized information services are at their disposal, for no charge. Yet they benefit academically by writing as consultants, and as scholars by publishing. As individual students, they 'use' reports they are referred to by lecturers. By passing students' assignments, they indicate that they know and have understood what they were taught and that is an immediate benefit at individual level. There should be a long term benefit to the community which is, however, beyond the scope of this study. For all the information infrastructure that the academic community utilizes, financial costs are absorbed by the organization. Over and above the organizational costs, as an indication that members of the academic community recognize the value of information use for their tasks, where the organizational facilities do not provide information or items that are required, these members make their own efforts, thus paying additional costs to find alternative information centres. Some members become assertive and make repeated efforts to track down the type of information they demand, ISAS's cases being an example. The 'assertiveness', which may be interpreted as a high demand, also propels availability, which enhances the performance of intermediaries. For it is the further attempts to locate items that make them succeed to get the item that was unavailable in the first instance. This further supports the idea of how interrelated the functions are.

It is noteworthy that there are more female users from the academic community as elsewhere. On the part of the academic community, their costs in terms of time, travel and aggressiveness, are to be applauded, especially as exerted by the females. In Prasad's (1998a) view,

'knowledge' is acquired through one's own efforts. For these academic members to construct (Dervin 1983) knowledge toward reversing the currently gender subjugated knowledge (Braidotti, Charkiewicz, Hausler and Wieringa 1994:110-111; Kiondo 1999) in the world, it requires an concerted effort from all concerned. Kiondo (1999:227) gives the impression, however, that women are supposed to be provided with information only, whereas the foregoing, as found, asserts that females, too, regardless of whether rural or urban, literate or illiterate, have experiences with development, and also possess knowledge which they should channel. This knowledge, however, is not recognized, but "subjugated" hence making no entry into TRs, or wrongly recorded in such channels. Braidotti, Charkiewicz, Hausler and Wieringa (1994), arguing in support of gender equality, argue that knowledge does not necessarily emanate from an elite.

Those TRs that were the result of extended efforts to obtain them, upon use were found to be of good quality and value. Hence, it takes both users' and intermediaries' costs, efforts and determination to realize the benefits of TRs performance among members of this community. That confirmed Prasad's view that one has to exert own's endeavours to acquire knowledge. Findings on views of successful and or failing development projects in Lesotho are further interpreted below as a recapitulation of views from other groups discussed in this section.

At the institutional level, NUL financial and other costs are incurred in terms of human resources, infrastructure and the like, in the management of TR's pertaining to Lesotho. Costs and inputs that range from ISAS's own budget, personnel, facilities and time, were not negligible. Taken as a whole, ISAS funds that were outsourced from aid agencies since 1979 for research, conference attendance, consultancies and TRs management were significant. On the contrary, the benefits to the organization, in terms of achieving its aims, objectives and mission, were not apparent. Yet the study may affirm that there were benefits both on a short and on a long term basis, and at the individual academics' level who read, wrote reports, got published, improved their skills in teaching, research and consultancy work. In teaching, they become engaged in human development. The situation confirms that the effects and impact of information programs and services are indirect and may take a long time (Thorngate 1995:199), a proposition which the study affirms. On the negative side ISAS duplicates

services that are supposed to be carried out by the NUL main library. In such circumstances, the role of TRs is overshadowed and dissipated.

6.9.2 Aid agencies' cost-benefits of and on technical reports

Aid agencies indicated that of the three channels, namely books, periodicals and TRs, the third was the most costly to manage. However, since the response was not debated further in terms of the benefits from the three channels, it was only inferred that, despite that realization of the heavy costs, the fact that the agencies continued to spend on TRs implied they were reaping some benefits. In particular, agencies operating in Lesotho fully articulated and analyzed the benefits of sponsoring global conference for attendance of government officials, the academic community and the NGOs. Though the analysis was general in that benefits were derived by these groups and passed on to the communities they serve, they were convincing, for they pointed at the 'creativity' of those who used conference information, for instance, the multiplier effect regarding gender-awareness centres or clinics. Creativity' (Thorngate 1995:199) is what matters in finally assessing the consequence of 'use'. The benefits of TRs for aid agencies is in the way they gain direct access to information about Lesotho. A case of this access not being possible is found in the similar lamentable case of the indispensable *Lagos Plan of Action Report* which was printed and only obtainable in Switzerland while unavailable in Africa (Sturges and Neill 1990:57). As indicated, commissioning authorities produce for themselves in the first instance (see section 6.3.2) and possibly a Swiss company was able to fund the related meeting of African governments in Lagos, and consequently printed the resultant Conference Report for itself. Aid agencies also enhance their profiles (see section 5.8.2.1.) In such ways they also gain for their other foreign interests (Charlton 1984:199; Braidotti, Charkiewicz, Hausler and Wieringa 1994; Cowen and Shenton 1996; Coetzee, Graff, Hendricks and Wood 2000). It may be inferred that aid agencies conveniently report about Lesotho concurrently with reporting about South Africa, or in relation to South Africa and the sub-region. Of the 14 titles of sample technical reports, three referred to Lesotho within Southern Africa. One was a Conference co-organized with a South African body. This intertwined reporting confirms the concern raised in Chapter 2 on Lesotho development being difficult to divorce from that of its neighbour.

6.9.3 The NGOs views on cost benefits of technical reports

The NGOs responses were positive that there were benefits gained from their contributing report information to global conferences which they also attended. At these fora, Lesotho was reported about by the Lesotho based organizations. Those who benefited from the use of the proceedings of global conferences in the NUL information centres owed that benefit partly to the NGOs that participated because availability and acquisition depended on, among other things, participation or attendance (see Table 5.16 and 5.6.4) By inference, the benefits that went to the organizations, members and the catchment area of the NGOs, were relative to the costs of producing the reports and attending the conference.

6.9.4 Views from members of Parliament and of the public on cost-benefits of TRs

The interpretation that can be made from Chief Seeiso's (2001) remarks in the Lesotho Parliament is to register public concern at the cost-benefits concerning conferences if the TRs emanating therefrom do not finally convey information that should direct the course of action in development. The benefits or importance of gatherings from the government side are also recorded as aired by the Lesotho government secretariat in 2001. Commenting on Radio Lesotho prior to the hosting of the then planned *Lesotho Vision 2020* conference, Mohlabi Tsekoa said since independence government has been operating a Five Year Development Plan. It was later shortened to a Three Year Rolling Plan. The strategy was this time to have in addition, a longer vision of twenty years, a forecast that supercedes the previous ones. Of relevance to this study was that he went further and stated that the measurement of the success of that conference would be its documentation in form of proceedings, a report that would indicate the views of all, which would be made available widely. Pessimistic views about conferences and their reports were however expressed by Puso on the *MoAfrika Radio* the same week. He doubted that the *Lesotho Vision 2020* would make any difference.

Six months later, during the Senate debates of the Upper House, Chief Seeiso B. Seeiso showed keen his interest in the document. He enquired as to when the report of the workshop titled *Lesotho Vision 2020* would be out, and if the conference achieved its objective. The response was that:

- the report had already been produced by the printers, and was due for launching in June 2000,

- ▶ the report would be made available widely, especially to the stakeholders from whom cooperation was being sought for implementation
- ▶ the conference achieved its objective as it attracted participation from all the sectors of development, to whom it introduced the concept of 'Lesotho Vision 2020', and
- ▶ regarding elimination and food security the Task Force had been instituted in order to follow up on the implementation of the recommendations made at the conference

Criticisms made by Puso (2000) that reports are not 'used' after all concur with those of Mphaka (2000) and Ketso (2001) that in Lesotho, TRs have thus far been more of a cost than a benefit. There were limited official records from which to determine value and/or quality of all the reports generated in Lesotho. It was, however, a peculiar occasion observed by the researcher on the 9th and 10th of May 2001 as reported following on the budget speech that had been presented a few days before. A member of Parliament from the Lower House, namely Dr Ketso a former Minister of Finance, and a former lecturer in Economics, expressed his concerns about the quality and validity of the budget just presented. He doubted its quality, hence its value on the grounds that it was almost baseless. His observations were that estimates had not been supported by an auditor's report. In other words, there was no reporting on how the previous budget had performed. He raised grave concerns about the poor and inadequate report production, mainly by government officials whom he accused of hoarding information sometimes, or providing outdated, misleading statistics. That led to situations where "motho o sheba li-record tsa khale feela o se a nka qeto" meaning, due to unavailability of timely and factual information, one simply skims through the nearest records even if they are outdated, and one makes uninformed decisions. This was the most powerful statement pertaining to performance of technical reports that channel information for development that was ever heard from someone of the calibre of a Parliamentarian. It confirmed the observation of Saracevic as quoted by Sturges and Neill (1990:107) that information channeled by TRs may, however, be erroneous or out of date. Ketso (2001) also rejected the statistics on poverty which had been cited in the presented budget. In his criticisms, he included the academics for lagging behind with timely factual data in their reports. These were some of the "experts" that government and aid agencies also commission for the authoring as noted. He was vocal on the consequence of the poor quality of production of a budget that consequently caused the intended people to have fewer or no benefits. Due their direct relation to the thesis, the concerns relating to

quality, timeliness, and value made the observation worthy of reference for discussion and recommendations in the study. Ketso's (2001) perception was that TRs should guide decisions.

6.9.5 Government officials' views and analysis of cost-benefits of technical reports

Regarding the academic community and aid agencies, in Lesotho there is a high level of interconnectedness between the functions of TR performance. The functions start with the need to produce, they move on to the actual production, to distribution, management and use. Without disputing that contention, however, at government level the debate takes a two-way direction. The proliferation of development schemes, the high productivity of TRs therefrom and the duplication of projects and project reports, for instance, according to the argument, translate into more use and more benefits to either the civil service per se, to senior officials or the nation being served. That is not necessarily the case. At the individual level, unlike in the academic world where members may benefit as individuals, 'use' of TRs, to government officials is generally a benefit-costly exercise. The officials do not see benefits or incentive for 'use' as it is in the academic world. The majority indicated that they are not remunerated on the basis of more productivity of TRs, nor for producing adequate technical reports.

Lack of, or a poor information infrastructure is one negative factor that makes TR production too expensive in terms of time, and effort. As shown, only one out of 23 government officials demonstrated the existence of a specialized information centre attached to his department. In turn, he was able to donate a copy of the report he referred to with ease. Others could not. It would cost them time and efforts to seek more items, read, write, understand and absorb the information contained in technical reports.

In the absence of recognition of the long term benefits of access to TRs, reports are left to the less affected groups like the commercially-oriented consultants/experts, or aid agencies who may not be conversant with local issues, who have no binding duty to interact with the people for implementation, hence the unexpected consequences due to out-sourcing expertise. The duplication of development projects and production of TRs is, in a way, a subconscious admission of the failure of the previous schemes whose information would have been efficiently used, managed, understood and led to success. The failure and duplication is an indicator of the recurring or persisting problem that makes it imperative for the authorities to

commission report production again in an attempt toward a solution. It becomes a vicious circle. The general backlog in the basic documentation of public sources in Lesotho has been addressed to some extent by the construction of the government website. Within less than a year after its construction, over 90 titles of government reports had been posted, though it is an accumulative list. Prior to data collection the existence or emergence of the government website with a section of a cumulative list of Official Reports was not known nor expected. This is because, as shown in Chapter 2, throughout the study government basic library services are not yet developed. It was apparently a wrong assumption that a virtual library would have to be established before the website facility. Had the researcher been aware of that webpage earlier, it would have been important to seek government officials' opinion on its performance in terms of use and benefit. In passing, it is worth noting that there is a positive attitude by governments in Africa, Lesotho included, to adopt ICTs into information management. These technological advancements that affect Lesotho are well articulated and advocated by many (Adam 1998; Kaniki 1999; Stilwell 2000; Thapisa 2000). In particular, Chisenga (1999) sees ICT's relevance to ISAS's management of the report literature while Ochieng and Radloff (1999), Gender in Africa Information Network (GAIN 1999) advocate a vigorous application of ICT's in managing gender related information.

By comparison, a government, as an institution, is one group in the survey that expends widely on TRs' production. It attracts the biggest share of aid agencies sponsorship to global conferences. It tops up with additional funding for those international fora, plus the national and regional ones. The foci of its ministries and departments combined cover all the sectors of development (see section 4.2.13), projects are operated at any sectorial levels within the country and regionally. Unlike an NGO, for instance, which may volunteer not to exist or have a particular focus of interest, government ministries are operational all the time. Aid agencies may move to other countries and even alter their attention, but a government should and is always there. That permanence and national coverage make a government accountable for evidently continuous and massive costs in technical reports performance. The benefits are, however, minimal and not commensurate with the costs.

This consequence is not surprising, drawing from two factors. Firstly, on account of its authoritative stature and huge 'impersonal' system, it seemingly weakens the initiative of

individuals as mentioned. Hence the negative attitude of the majority of government officials to information 'use', especially on that which is channeled by TRs. Minimal benefits that are observed as they may be determined from the most useful report (Section 5.8.3.2) known to civil servants are at macro level (Bellany 2000:3) and none at the individual levels of officials. In addition, government is more vulnerable to the domination of the outside world than other groups (Nyerere 1999) in terms of whether or not they are practicing democracy and good governance. Notably, the NGOs may choose not to exist, or choose which development schemes to attend to. Governments are bound to look at development holistically. This is demonstrated by the aid agencies' slant to sponsor the latter, despite the implicit failure of a number of very costly development schemes under the auspices of government departments. The list of duplicating projects and report as observed by all respondents (see section 5.8) supports this assertion, and is elaborated below. The study confirms the widespread unsuccessfulness with information and its effects on development, as already alluded within the context of Africa, (Rosenberg 1986; Sturges and Neill 1990; Boon 1992; Mchombu 1995; Uhegbu 2000), and Lesotho as well. Peculiarities experienced in Lesotho with unsuccessful projects and technical reports need to be highlighted, especially with reference to the mentioned schemes in the field of agriculture and gender.

Apart from the academics who, through TR production profit individually by elevating their academic status, some groups experience particular positive consequences and benefits. Some groups do not while some others do not indicate their positions clearly. There is also no clear distinction between groups as to what kind of individuals are beneficiaries and which are not from technical reports performance. This blurred picture may be described as evidence that once factual and good quality technical reports have been generated, and then well managed, the benefits of 'use' may accrue to all at the mentioned macro level, regardless of their age, gender, status, groups, purpose. 'Use' is the ultimate variable, for it is the integral part of all other variables, namely production, distribution and management.

6.9.6 Awareness of duplication and failures of development projects and TRs

The majority of respondents from the three TRs' producer-user groups were aware of either or both the duplicating or unsuccessful development projects and TRs. According to Henderson (1981), unnecessary duplication of efforts in TRs management reduces their value.

From all these groups, the agricultural related projects were described as unnecessarily duplicating. Those that were experienced by the academic community and government officials (Table 5.30) accounted for 61.5% of the total specified. The high frequency of awareness of the unsuccessful projects did not vary with groups, age nor gender of respondents, indicating the accuracy of their response and throughout different years at which the schemes operated. The interpretation is that the field of agriculture is visible to many, and the implication is that inputs on agricultural development are not cost-beneficial to them. The importance and responsibility for providing for the basic human need of food is generally accepted. Agriculture, as stated, has been a way of livelihood for the Basotho. The inherent activism in agricultural development and its popularity with donors who sponsor it at a very high level, thus raise expectations. The small absorbing capacity of recipients, however, contributes to failures which become conspicuous.

Failures are not only conspicuous, they are repetitive, and in some cases with the involvement of the same donors as partners to the Lesotho government. Two frequently cited projects respectively entitled *Khomokhoana* and *Thaba Bosiu Rural Development* are example. The former was one of the earliest agricultural schemes that was generously sponsored by the World Bank, barely nine years after independence. In describing the challenges to agriculture and development as stated in Chapter 3, the World Bank officials then (Maane and van der Lugt 1974:41) appraised this project and mentioned, among other factors, “lack of knowledge of modern farming practices”. The sponsor further undertook to document *Knowledge for development* (1998) - and lessons to be drawn from worldwide experiences that knowledge and development, information and development were interrelated. But a record of duplication in the case of agricultural projects is confirmed by several and relates to report production as well.

Clearly, since the country attained independence in 1966, a sector which has predominantly been ‘over-researched’, quoting one respondent, and that has engaged many costly and failing development projects is agriculture. This interpretation is drawn from Table 5.8.8.1.2. Out of the 13 known unsuccessful projects in Lesotho, there were eight that pertained to agriculture. That confirmed the submission made by the ISNAR (1989) mission to Lesotho that most agricultural research in Lesotho was project-driven and foreign aided. Despite the repeated

issuing of TRs, the information being channeled has barely served as a knowledge tool as envisaged by producers and sponsors of the productivity. The continuing long list of unsuccessful agricultural projects is caused by four fundamental problems that are generally discussed in 6.10 below.

Related to the failure of agricultural development are the objectives of the international systems which operate in Lesotho, not necessarily for the benefit of the sector and the country, but for the aim of developing the centre of which Lesotho is the periphery. The World Bank's experience of Lesotho and development projects is presumably extensive. The Bank's recognition of information in development demonstrated in its publication *Knowledge for development* (1998). Yet the way this donor rushed to fund the Lesotho Highlands Development Project in an unfavourable political climate, is perturbing to many critics of the scheme (Maema and Turner 1993; Butler 1997; Coetzee, Graaf, Hendricks and Wood 2001:235-7; Pottinger 2001).

Related development could be criticized for not incorporating knowledge or information prior to embarking on that massive scheme. The LHDA feasibility study reports were issued long after the signing of the agreement of the project that was meant to be carried out in Lesotho but was mainly of benefit to South Africa. In this study, the same link is discernible in a number of TRs on and about the Lesotho development, which is reported in relation to South Africa (Tables 5.11, 5.30 and section 5.8.3.2) with which Lesotho is intertwined, as stated in the context in Chapter 2.

Gender is comparatively a new field. The Sechaba Consultants listed nothing on the topic, but only two titles on 'women' for the period between 1991 and 1994. The successes or failures of its projects and TRs in Lesotho have not been as glaring to the respondents as the agricultural, which, apart from being visible, has been part of the Basotho way of life for a long time as stated in the justification of the study. However, the examples of the most important conferences as seen by government officials are both multi-disciplinary and almost well balanced between the agricultural and gender related ones. What is a common denominator with the successful and unsuccessful projects and related TRs is that their benefits are experienced at the individual level (see Section 5.8.2.1). Secondly, they are

described in relation to the next immediate group before they are described in terms of their effects nationally or at the macro levels.

The importance of reports also date as far back as 1981, which indicates a relatively long lasting TR value, as opposed to high mortality and obsolence observed in other cases (Leondar 1968; Conkling 1991). On the aspect of time, both the benefits and failures have been described in terms of the short and long term. Producers will tend to value TRs for immediate use while secondary users demonstrate that TRs may have the lasting use. The finding disputes the generalization that grey literature is ephemeral.

As shown in Chapter 5 above, two (16.6%) respondents from aid agencies cited two examples of duplication of projects and reports. Nonetheless, the fact that most of them were locals meant that their awareness reflected their personal observation, and not necessarily an official awareness by the agencies they represented. Even if they were not recording an official stance, one common factor with all the projects that were either succeeding and failing was that they involved both the locals, especially the government, as well as the international donors or aid.

In most cases, however, there were more failures than the success stories in TRs performance. Where the production, distribution, management and use functions were effective, performance was good in that technical reports channeled information that benefited individuals, organizations and the nation as a whole. For instance, the academics who used reports were enabled to publish and enhance their careers (section 5.2.2). Table 5.2.6 also shows that where quality of production was achieved, users gleaned some value out of use. On the contrary, in cases where government officials had few information services and found the reports “off-putting” and did not use them, there were no benefits nor success stories to tell, neither at micro nor overall levels.

6.9.7 Factors contributing to the mediocre performance of TRs in Lesotho

Evidence of failures and an unnecessary duplication of development projects and the related technical reports mean poor performance of the channel. From findings of the study in general, five factors emerge as contributing to the failure of technical reports to channel information

that is for development in Lesotho. They also correspond to the summary of findings in section 5.8.4.

- ▶ lack of knowledge or general ignorance at the production stage,
- ▶ unfavourable political environment that includes dominance by donor agencies,
- ▶ inadequate production methods,
- ▶ indifference to the management or mismanagement of technical reports by intermediaries, authorities and intended users,
- ▶ non-use, abuse or mis-use of the channel technical reports

6.9.7.1 Discussing lack of knowledge

TRs convey data and information which should be used in order to bear developmental results. But use of that technical information depends on one's background knowledge (Thorngate 1995). As Wengert (2001:488) stresses, without background knowledge, data are just data, they are given to one but one had no idea what to do with them. It reflects a level of ignorance, or lack of 'understandability' (Saracevic 1981) on the part of government officials in Lesotho that they describe TRs as off-putting, possibly by form, content and applicability. Lack of morale, incentives and the remote benefits to individuals affect not only the internal institutional effectiveness (CTA 1998), but the entire would-be end-users of the public services. Gender imbalances that generally favour men lead to the unqualified being responsible for production of technical reports. There was an imbalance of eight to 13 for males to females at the surveyed hierarchy of civil service, as opposed to the 2:1 ratio of female to male in the survey. In spite of the fact that women were in the majority and they possessed higher academic qualifications, the tendency for the males to dominate both the hierarchy and the longer serving category of the civil service whilst they were in the minority and were less educated, deprived women of positions of commissioning and preparing reports that could have a positive impact.

6.9.7.2 Unfavourable political environment and dominance by aid agencies

For reports to function effectively as a channel of information for development, they need to perform in an environment that is conducive politically and administratively to development efforts. Poor leadership and insufficient skills at governance levels, are therefore other factors that contribute to poor performance of TRs. Development information available through this

channel would contribute to eradicating poverty in Lesotho. Nyerere (1999:16) states that political instability and corruption breed poverty, poor governance and no sustainability. Soon after a coup in Lesotho in 1986, the Water Highland project was agreed upon between the apartheid government in South Africa and the regime in Lesotho, and with the involvement of the World Bank, as stated before a feasibility study report could be prepared to guarantee the success (Coetzee, Graaf, Hendricks and Wood 2000). At the same time, the textile industries of transnational corporations were booming in the country (Thai 2000). Indications are that in Lesotho, some aid agencies and international systems had opportunistic involvements that were not necessarily in the interest of development. That is compounded by the fact that the nomadic character of aid agencies affects the continuity of projects and reporting that they initiate and or sponsor (see section 5.8.2.1). The dependence on donors of agricultural research and projects in Lesotho (ISNAR 1989) subjects the government, academic institutions, and the NGOs to random forces in a tightly-woven world system from which the weak find the setup difficult to divorce themselves from.

6.9.7.3 Inaccurate production methods

TRs' potential to perform well commences at the production stage. If inaccurate production mechanisms are applied, they negatively affect the other functions of the channel. That there is a high level of classification into secret, limited or restricted, as well as stringent moderation and editing of TRs in Lesotho (see section 5.2.2.3) which results in the unavailability and erroneous information, means users finally do not obtain factual and valuable data and information. It was noted in the relationship between use of the ISAS and production of Academic and Project Reports that those who prepare technical reports tend to refer to previous ones first. In that way, if they feed on erroneous contents, they also produce false data, as was confirmed by Ketso (2001) and already observed by Saracevic (1980).

6.9.7.4 Information mismanagement

On its own, though it was mentioned, this factor was not very conspicuous from the respondents. Yet evidence was there that it has a bearing on failures. Where a degree of adequate management existed in terms of libraries, documentation centres, funding to acquire, process with speed and disseminate, it made a difference in terms of benefits and successes. Academics were more successful in obtaining information from these formal intermediaries

than informal sources like colleagues and friends, as also affirmed by Pinelli (1993). Limited or lack of skills in information workers bore negative effects. Inability of some support at ISAS is exemplary. But processing such as CAS and SDI, as well as query handling from users, improved difficult technical report management. The problem of technical report handling has been and is still (Leondar 1968; Mark 1970; Sturges and Neill 1990; Adam 1998) such that it requires all support, financial, technological, legal, administrative and otherwise. There was no evidence that all are in place to result into an effective and efficient performance of technical reports in Lesotho. The legal framework for a national research council, for instance, is only being put in place. Technical infrastructure was poorly managed due to weak policies, faltering practices, over-stretched specialized centres like ISAS that catered for academics, students, civil servants, consultants from aid agencies and NGOs, for example, to an extent that their contribution to what was supposed to be the main task was thin.

6.9.7.5 Non-use, abuse and misuse of technical reports

In the first instance, the study found a level of use of technical reports through the productivity of all the groups (see Table 5.10) but these vary by group and individual. Besides, use requires not only for individuals to have technical reports placed before them, but for individuals to need, demand, make efforts to have, and efforts to comprehend in order to apply (Wengert 2001) in daily development related needs. In the second instance, there is a level of misuse, missing appropriate information that ought to be used and using erroneous information. This is common in cases where outdated and false information is applied, as verified by Mphaka (2000) and by academics who failed to find the required information from ISAS, friends, other centres. In the case of government, to have to rely on outdated information for its crucial technical reports such as a budget is almost worse than non-use and constitutes misuse. Bearing in mind that there should be a proportion of 30% classified information, it becomes difficult to imagine where that proportion is used or by whom it is read, and where or how it is kept for easy retrieval. Stating that some officials use erroneous and outdated data from reports and then simply make decisions, “*motho o se a etsa qeto*”, (see section 5.8), Ketso’s (2000) concurs with the finding of this study that, in fact, reports ought to be providing information that enables officials to make informed decisions and without information they make poor and wrong decisions.

6.10 Summary

This chapter has discussed and interpreted in detail findings that describe how well in some cases, and how poor in others, performance of technical reports in Lesotho is in channeling information for development. That performance has been traced from the production upon which most of other functions revolve. Use of a technical report takes place when a technical report has been produced. But a valuable beneficial use depends on a number of factors such as the adequacy of data that were assembled in a report at the production stage. This kind of interconnection exists therefore, from the production and distribution, up to management, use and the consequence, effects or impact. Findings that emanate from the four groups have been interpreted and discussed according to the logic of the thesis. Interpretation has dwelt on the roles of the academic community, the NGOs, aid agencies and government officials in the productivity, use and cost-benefit. Costs were high with some groups like government departments but benefits were very low both at micro and macro levels. Cost for information production, management, use and benefits were distinct at organizational and individual levels in the academic world. Information workers' role has been discussed mainly in terms of information management. Performance of technical reports has a bearing on the efficiency and effectiveness of intermediaries. Their role as individuals and as systems and services and as organizations was found to be central to the performance of reports at the national level.

The cost-benefits were determined and were accruing to some groups more than others of the five groups that were surveyed. But as a whole benefits pertained to costs, hence the value that was derivative from the quality production of reports, understandability, concerted efforts of individuals, their time, and quality service provided by intermediaries and the application of knowledge consequently acquired. This concludes discussions that lead to the next and last chapter on what conclusions and recommendations can be made from the foregoing.

CHAPTER 7

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

The chapter summarizes findings of the study, and draws conclusion from them. It makes recommendations for action, and for further research. The chapter restates the objectives of the study by overviewing its purpose and the methodologies used, all of which indicate how the findings were arrived at. The main emphasis of the chapter is upon findings that are presented both according to the sequence of, and in response to, research questions that guided the study, showing how the functions in the performance of Technical Reports (TRs) relate to each other. The same order is followed for recommendations that are then made.

7.1.1 Restatement of the problem and objectives

There is a paucity of information services in Lesotho, in the form of public, academic and special library services. This suggests that there is a gap in the development process. Specifically, a few specialized documentation centres that have been established with a well focused mandate of managing a particular body of development information also seem to fail in making the envisaged impact. Technical reports in particular, are assumed worldwide, and among various development activists, to be a channel of information which is for development. The study sought to establish whether the channel was produced in Lesotho, but not collected in some cases, or underutilized in others, hence failing to perform to its potential. This was an assumption that needed to be examined through a systematic study in order to make proper conclusions and recommendations.

The objective of the study was, on the one hand, to assess the performance of technical reports (TRs) as a channel of information for development. On the other, it was to assess, within the case study methodology, a selected specialized information service, the Institute of Southern African Studies (ISAS), in terms of its mandate to manage technical reports within the context of Lesotho. In addition, the objective was to make recommendations where appropriate. In order to achieve that objective, the following research questions were asked.

1. What is the nature of productivity and distribution of technical reports in Lesotho?
2. How effective is the distribution?
3. How adequate is the mandate and mission of ISAS?
4. What mechanisms does ISAS employ to manage TRs on and about Lesotho?
5. How effective are these mechanisms and the management?
6. Who are the actual and potential users of ISAS outputs pertaining to technical reports, as well as users of those technical reports?
7. What use do they make of technical reports?
8. What are the cost-benefits of consequences, effects, outcome, impact of use of technical reports pertaining to Lesotho?

7.1.2 Research design and methodology

Performance assessment of technical reports as a channel of information for development was carried out as an exploratory case study. It employed triangulated methods of sourcing data, mainly from five groups of the population, namely, the academic community and information workers at NUL, government officials, the NGOs and aid agencies in Lesotho. Respondents provided views on TRs' production, management, use and the effect.

7.2 Summary of findings of the study and conclusions drawn thereof

In this section, findings of characteristics of the population in the survey are first of all summarized and relevant conclusions drawn. Then salient findings are highlighted.

Whereas, all along discussions were compartmentalized according to the sequence of the functions of technical reports, at this stage, due to the interrelatedness of those functions, for coherence it becomes imperative in most cases to present findings in an interactive manner.

7.2.1 Characteristics of the population in the survey

Within the human population, five groups of producers and users constituted more females than males, at the ratio of about 2:1. That proportion prevails at NUL and national level, and among both the academics and the civil servants. Females possessed higher academic qualifications than males. Yet, in those two constituencies, seniority was achieved faster and to a greater extent by males than females while the former also had the advantage of staying

in the government service longer. At the higher echelons of civil service, the males also had a slight advantage. Nevertheless, unlike in most countries where female headship was still confined to soft sectors, in Lesotho, females featured in the hierarchy of 'hard' sectors such as Finance, Public Works and agriculture. On the whole, males dominated attendance at global conferences pertaining to Agriculture, for instance, while females dominated the gender related activities. Conclusions can be drawn from this scenario that participation in commissioning, authoring and using technical reports is biased mainly in favour of the males, except in the area of gender issues.

From this study, it is evident that, to a limited extent, technical reports in Lesotho perform well where circumstances are favorable. Generally, however, poor performance is discernible throughout all the functions, from the production and management to use and non-use.

7.2.2 Production and distribution of TRs in Lesotho

The study found that there are heterogenous patterns of production and distribution of TRs in Lesotho. Productivity depends on types of reports, types of producers, as well as factors like need for information by producers, funding for producing, and tasks of individuals involved in the development activities. The study further revealed that productivity of technical reports is determined by the diverse information needs of producer groups and individuals who altogether *yield a high level of production of TRs on and about the country and the region*. The higher the productivity in quantities and frequency, the faster and wider the distribution of technical reports. The wider the distribution, the higher the use of TRs. Nevertheless, it is concluded that most of technical reports produced are unaccounted for in that they are not organized and kept for use. This was detected from the majority of government officials who failed to retrieve technical reports that they claimed their departments had produced. Lists of publications and catalogues were not prepared, making TRs continuously fugitive. Unavailability was one root cause of non-use and for there being little or no effect on development. That reports covered subjects relating to Lesotho, South Africa and the region illustrated that there could also be *collaboration in the management of technical reports* relating to those wide-encompassing subjects, and that cut across the national boundaries.

Variations in productivity by groups are also determined by areas and strategies of development which the groups are engaged in. Particular groups tend to produce particular types of TRs. For instance the academics surpass all the other three groups in the production of Academic Reports which reflect not only their scholarly and theoretical orientation, but their approach to, or method of participation in development. They exclusively prepare Academic Reports by and for their use.

The NGOs and aid agencies are active in the production of Projects and Conference Reports are indicative of the development strategies and areas they are involved in. Government departments, NGOs and aid agencies instead involve academics as experts and consultants to prepare Projects, Enquiry/Incident and Situations/Survey Reports for the three groups. However, and rightly, ownership of reports emanating from those consultancies is for the commissioning authorities. By receiving a few complementary copies, experts and consultants indirectly become agents of distribution of the technical reports they author. Consultants thus play a tripartite role of authoring, distributing and using.

Of the seven types of technical reports, Project and Conference Reports are the top-ranking in productivity, while Enquiry/Incident is the least produced type. Whereas it could be concluded that fewer Enquiry Reports imply fewer crises, and more Projects and Conference TRs indicate high activism in positive areas of development it becomes difficult to conclude this since Enquiry Reports were also more prone to secrecy and generally unobtainable to be assessed regarding what areas they actually covered.

Evidence based on the data showed that it is expensive to produce, to manage and use technical reports as a channel of information for development. According to aid agencies whose experience in funding the production of all other groups of TRs is regarded as extensive, the cost of preparing and producing technical reports is the highest in comparison with the cost for such other channels of information like books and periodicals. Deducing from the problems faced by information workers too it is costlier and more demanding to trace, collect and announce TRs, especially when, unlike with the commercially published materials, producers do not ensure that they always market TRs to intermediaries for free. Most users,

too, do not have easy access to the centres specializing in reports. The value of technical reports should consequently be determined in accordance with a cost-benefit analysis.

In the study, productivity of technical reports by the NGOs was less than ten years old. The currency of the NGOs output of technical reports corresponded to the decade 1988 to 1998 when most of the NGOs in the survey were established, and as another global strategy of taking development to the people, or to attach a human factor to development processes. The finding supported the argument that development strategies change, as they may come and go, and thus affect the high and low tides of productivity of technical reports in different sectors.

Government departments and aid agencies produce almost all except their Official/Internal Reports through external consultants or experts who sometimes team up with the internal officials in authoring technical reports. Consultants come from private organizations and the academia. They are locals or expatriates who use intermediaries in the process of preparing TRs. Later, as with general research, the same consultants and experts as shown above, become 'users' of the reports they have authored for the preparation of subsequent reports when a related need of production arises. But where erroneous technical reports are released, donors who continue to sponsor them are part of their poor performance, as are consultants for preparing reports of inferior quality by content, time aspects and otherwise.

7.2.2.1 Major inadequacies of the production methods

There are a number of production methods that hamper performance of technical reports in Lesotho and that inhibit development as a result. These include:

7.2.2.1.1 Delayed government reports

The study supported views that government reports, especially in Africa, are infrequent and delayed. In Lesotho, government annual reports, for example, may be released even two years after completion of a project or specific task, more so because this was a type that was mostly authored solely by civil servants. The Audit Report, which is another crucial Internal/Official type, fails to serve its purpose as a yearly record that evaluates the past National Budget that justifies the next one. Whereas it is easy to blame officials who provide out-dated figures, the root cause of erroneous data is mainly the paucity of report management that betrays the same

government system which is disadvantaged by an inefficient method of managing the government's own report literature. Authors are expected to refer to background reports before preparing budgets, annual reports and other position papers. The study suggests that these officials have little knowledge of the correct, up-to-date data; and they do not know where to obtain this data either. External experts or consultants are better off as they are financially remunerated and are given complimentary copies. As they do not have other alternatives, government officials thus improvise by preparing TRs with outdated information. Delays are cyclic, they give rise to unsystematic acquisition and non-availability. By the time they are released, very few potential users may be interested in them. They are "off-putting", and a wastage of resources.

7.2.2.1.2 Lack of syntheses and standard features

It was found that most TRs on and about Lesotho are lacking from the production stage in essential features like syntheses, that is summaries, abstracts, translations that would enable repackaging, dissemination and a wider use. Technical reports were also void of standard numbering and availability statements.

7.2.2.1.3 Modification methods

There were rigorous modification methods by consulting authorities, especially the aid agencies. While on the one hand there was quality and value from modified technical reports that were used in ISAS, there was, on the other, a strong view that rigid modifications water down some content whereby reports have channeled faulty or misleading messages.

7.2.2.1.4 Engendered productivity

Demographic characteristics indicated that females produce more than males across all the groups, clearly so because production was a function of academic capability, and women hold higher academic qualifications than men in Lesotho. Having males proportionately more at the top of civil service, and having them serving longer in the service than females, had implications in terms of questions, about their expertise. These male respondents authored TRs for academically better qualified female counterparts, the majority of whom were also described as more responsive to development (Women and Law in Southern Africa:1997). Females were therefore not sufficiently active in reporting in TRs about themselves.

Nonetheless, TRs pertaining to gender are a topical area in which women have since the 1970s been active in, and reporting about. It is because since then, most of TRs produced coincided with the establishment of the NGOs in 1988 and 1998 Human Development Decade.

7.2.2.1.5 *A consistent production of classified reports*

The study supported the assertion that government publication inclusive of TRs were not only classified, but largely unobtainable. In that respect, the assessment showed that some types of reports were more prone to secrecy than others thus making them outstandingly susceptible to distribution difficulties. Enquiry/Incident Reports were typically prone to this treatment. Seemingly, the governments' secretive attitude is common and a problem that may not be changed. The obstacle that should be removed is lack of clarity on what is classified, and how to manage it even for those who are qualified for its access, as well as what is un-classified and to organize it so that it is obtainable. Though both civil servants and aid agencies based in Lesotho estimated that classified TRs were produced at the rate of 30% of the entire output, unavailable reports appeared to be more than 70%. Library and documentation services were generally poor even with conventional and unclassified material. Information management was, as a result worse with the reports that were restricted, classified or secret, especially for the officials in Lesotho who proved to be unclear as to what all these categories implied.

Unavailability of some restricted, limited and secret materials hindered smooth distribution and use. Whereas in the developed countries like USA where the classification of materials as restricted followed clear rules and regulations as discussed in Chapter 3, section 3.3.1.1, in Lesotho, most of senior government officials who took the *Oath of Secrecy* regarded it as a blanket rule that prohibited releasing information. It was unclear to the majority what, why and for how long reports were classified restricted, secret, top secret, limited and confidential. Efforts may be made to convince authorities that a democratic use of most the reports is to the benefit of the country, but, it is evident that governments are unlikely to change their attitudes as they are entitled to their privacy, often in the interest of the state security.

7.2.2.1.6 *Productivity in an unfavorable political climate and foreign influence*

This evaluative study indicated that production of technical reports, and more so the Projects, Enquiry/Incident, Situation/Survey types are generally prone to foreign dominance through aid

agencies that fund the production. Often, the process is found to be subjected to unfavorable political influences that negatively affect the channeling of information which is for development (Mphaka 2000; Coetzee, Graff, Hendricks and Wood 2001). In such cases, too, technical reports proved to be a knowledge tool which not only informs those who have the power to produce, but also to control and own.

7.2.2.2 Production concerning agriculture as a central sector in development

According to the study findings, agriculture ranked highest in its output of technical reports, especially in Projects Reports which are mainly foreign aid-led. That high turnover of reporting on and about this sector confirmed that production in a field demonstrated producers' activism in that sector of development. Agriculture engaged the government, NGOs, aid agencies, academic researchers as much as it involved most of the Basotho people.

7.2.2.2.1 Resilience of the agricultural sector

Sample titles of technical reports on agriculture showed that, unlike some developmental sectors, it was resilient in the face of changing labels. In Lesotho, the Ministry of Agriculture has had some sub-sectors appended to it and removed afterwards. But the key subject that is "agriculture" has remained the same. It was found that the resilience was nonetheless outweighed by the duplication and failure rate of agricultural development schemes and strategies. Duplication of schemes and reporting was indicative of high cost in terms of efforts and funds, and thus indicative of reduction of value. It meant that the reporting about the crucial sector of agriculture was repetitive instead of being diagnostic and therapeutic.

Nevertheless, all the reports across the disciplines of agriculture and gender reflect attempts at anti-poverty strategies and pro-development programmes. Aid agencies were highly involved in research, conferences and projects pertaining to some areas listed as indicators of development in sections 3.2.14 to 3.2.16.

7.3 Effectiveness of distribution of technical reports in Lesotho

Effectiveness of distribution of technical reports in Lesotho varies with agents of distribution, types of reports, assertiveness of intermediaries - which may also be driven by demands placed by enquirers.

7.3.1 Formal distribution more effective than the informal

The study found that there exist both informal and formal methods of distributing TRs. Formal distribution methods include the mechanisms of acquisitions by intermediaries that are backed up by financial support as well as the participation of all the producers that are in one way or other distributing technical reports. Informal distribution methods encompass non-binding practices of, firstly, giving complimentary copies to consultants, and secondly, exchanges and borrowing/lending of technical reports among friends and colleagues. It was revealed that formal distribution methods tended to be more reliable and effective than informal ones as users were more likely to find items from libraries than from sources like friends. Libraries and information centres were, as rule, at the service of all or a wider cross section of users.

Inappropriate methods and practices that hinder smooth distribution were identified in the assessment. Restrictive classification of technical reports was one, the tendency of some producers and civil servants to hoard reports was another negative factor, largely caused by lack of knowledge of the policy or regulations governing classification of items. Whereas incorporating production methods like synthesis, abstracts and summaries would stimulate demand and distribution, very few aid agencies and government officials were keen on such procedures which certainly add costs to an already expensive channel. Another reason was that these authorities have not tested what impact the effectiveness of rigorous technical information management could have on their operations.

As is the case with the standardization of book numbering, international standards recommend appending International Standard Report Numbering (ISRN) and a statement of availability to technical reports. In Lesotho there are barely any rules or procedures to be followed. The government printer only keeps a stock list. Moreover, some government works may be printed elsewhere than with its printer, thus allowing inconsistencies and flaws in the production systems that consequently inhibit an effective distribution and the channeling of information by technical reports. The study affirmed that lack of a legal national framework for the monitoring and harnessing of technical information resources, like Legal Deposit and National Research Council, negatively affected distribution of technical reports in Lesotho.

It was ascertained from the sample collected and from the collections at NUL that the formats of TRs were not only unattractive, but also not durable. Both print and digital forms at the production stage and in the library environment could enhance formats, durability and use.

7.4 The mandate of ISAS

It was found that the effective and efficient management of the problematic technical information is not only made effective through a specialized service like ISAS, but also in that which is anchored on some firm legal framework. ISAS's foundation, however, lacked that mandatory backing, hence it suffered from a lack of commitment from authorities and the likelihood of being swayed by changing times.

The mission of ISAS was studied on its own, and also in comparison with other NUL information centres. The study shows that with respect to TR management and in meeting the needs of users, TRs performed better where intermediaries existed. In general, nonetheless, the study indicated that the NUL information centres were poor in managing their entire stock, inclusive of specialized channels, specifically:

- ▶ technical reports were either not collected, or minimally acquired, compared to their high production rate in Lesotho
- ▶ the centres demonstrated ill-preparedness in terms of human resources skilled in current awareness mechanisms and Internet or automation services, for instance,
- ▶ authorities provided insufficient funding for collection, ICTs and other internal managerial arrangements.

Users of ISAS nevertheless gave testimony in this regard that, ISAS's specialized services made TR management better. For the rigorous and specialized demands pertaining to acquiring, distributing, announcing and delivering the services widely, ISAS had a slight advantage over other non-specialized centres. ISAS's strengths were, however, dissipating with time, with, for example, the decline of external funding due to the relocation of donors. The assessment demonstrated that this decline was attributable to a number of factors. Foremost, its mandate had not been well articulated nor written to start with. As such, the services lacked a firm mission or clear goals for guidance or a mandatory focus. It was no

wonder other NUL documentation centres emerged, duplicating, replicating, or competing with the already existing facility. That deficiency needed to be enquired into in more depth. In terms of the mission for which ISAS was established and within the context of NUL and Lesotho, there was a problem of cost containment and consolidation. Both the findings and the records converged on that issue.

Despite being unwritten, poorly articulated and weak, ISAS's mandate was strongly supported by the majority of intermediaries who upheld the ideals of the Centre's specialized information service. There was, however, a widespread perception from other groups that ISAS's mandate was outdated, in many respects. Other respondents, especially non-users, did not even know what ISAS's mandate was.

7.5 ISAS's mechanisms and effectiveness of managing technical reports

The study revealed that, in order to enhance the performance of technical reports, innovative mechanisms for acquisitions, processing, storage, dissemination and optimum use were required. However, ISAS succeeded with some and not others.

Regarding acquisition, special trips, requests from individuals and organizations were found to be a necessary alternative for ISAS. These methods were not yet effective as few individuals were aware that they could donate materials. Authorities have for some time not funded special collecting trips, thus making the mechanism a failure. Collecting trips that are ideal for tracing a difficult channel like TRs were said to be reducing in number because of insufficient funding. Poor funding is also attributable to the declining foreign aid that ISAS relied upon in its heyday. Reduction of local funds is again associated with the lack of a written and a binding mandate that would, for instance, compel the parent body to abide by its commitment, if so stated, to fund all the acquisition mechanisms in Lesotho. This finding, among many, indicated how closely interconnected the functions of performance of TRs were. The inadequacy of the mandate was seen to severely hamper the performance of the Centre.

As seen in 3.3.5.3.1., Gardner's (1981) argument is that while some producers hoard TRs, intermediaries should overcome barriers to availability and facilitate access. This view advocates even more assertive mechanisms of employing a higher level of specialized

information worker for classified reports. At present it may only be speculated and remains to be seen what estimate fraction of the classified and unclassified materials is actually managed and used by the information centres in Lesotho as listed in Table 2.4., or where exactly are the fugitive reports.

As advocated by Pinelli, Barclay and Khan (1983), at ISAS, the TR facility is paired with a publishing unit that dispenses research results, and both units are complementary in managing information channeled by reports. The study was not able to confirm the effectiveness of this mechanism as only one respondent stated that he used ISAS publications from afar. Notably, the NIR had the same arrangement, but none of the conventional university libraries that absorb the specialized centres sustain this facility.

A strategy of automatic deposits from producers of reports generated in Lesotho was helpful. Evidence was obtained from the deposited proceedings from global conferences, for example, which were almost guaranteed by participants from all constituencies. One such a source of automatic deposits was the NUL Research and Conference Committee. Other ongoing efforts relate to the National Research Council and the International Standard Report Numbering that ISAS advocates.

In line with a thematic approach of handling technical information for specialized clientele, ISAS issues the general and thematic SDI and CAS services. Within the Centre, the manual indexes were not fully utilized, the automated indexes were also not fully known nor exposed to high use. This was a shortcoming for which ISAS was criticized.

To curb loss of the acquired reports that was likely to occur through lending, the reading room has closed access to its collection. The mechanism was found to ensure some security advantages, but it had the disadvantage of inhibiting browsing that may, otherwise, stimulate use.

The study found that ISAS services of manning the enquiries by a para-professional did not match the specialized needs of users, nor the internal arrangements of TRs. Professional staff

were more effective in tracking down items that enquirers failed to get from the semi-professional assistants.

7.6 Use of technical reports

The study revealed that ISAS, as envisaged in its mission, had potential users such as some senior government officials who were unable to use TRs due to ISAS's distant location and, unlike academia, lack of incentives for the civil servants for innovative production or publication of TRs. Use of ISAS ranged from high usage by academics to non-use by others.

It was also found that the actual users comprised all the producer groups in the study. The academic community in all its strata made use of ISAS outputs, facilities and TRs. The mandate of ISAS focuses mainly on full time researchers, government officials as constituting development policy- or decision makers and planners. However, ISAS is heavily exploited by faculty staff and students as well. Conkling (1991), consequently recommends that intermediaries should devise appropriate strategies for serving all these categories as they made varied use of the channel. That proved to be the case in Lesotho. Students at NUL refer to TRs as they prepare and produce their own dissertations and scholarly project reports. Technical Reports were also utilized by lecturers for teaching, seminars, consultancies and conferences. For the same purposes, though to a less degree, the university administrators made references to TRs managed by the Centre. Academic and other experts consulting on behalf of government, NGOs and aid agencies tended to use ISAS as well. It was noted that these bodies nevertheless did not support specialized information management accordingly. ISAS was not commended for the service it provided. The study revealed that this was because the commissioning bodies were unaware of the benefit they derived from use by experts and consultants of technical reports managed by ISAS. Extraneous facilities available at ISAS such as study carrels, seminar rooms, refreshment shop and open air rest areas were commended as they promoted visits and use.

Evidence showed that ISAS's own researchers were not using ISAS at as high a level as was to be expected, but rather using other centres too. On the other hand, ISAS's unexpected ability to attract students suggested the failure of other centres that were supposed to provide for NUL students to do so fully. These centre's shortcomings were being absorbed and

compensated for by ISAS. This evidence of the reversed role of specialized and general information centres affirmed that the ISAS's mandate needed revisiting.

The difficult nature of the channel was confirmed by the study and, in general, use of ISAS and ISAS's managed technical reports by the academics illustrated that the availability of the information service enhanced the performance of TRs. In addition, frequently, consultants who carried out work for government, NGOs and aid agencies also utilized ISAS and its TRs.

Non-availability of specialized services promotes indifference, non-use and no benefits as was the case with the majority of civil servants who remain potential users for as long the centre is far from them. On the whole, officials do not readily have direct or virtual access to TRs' specialized information services. They are not remunerated individually for use or creativity resulting from use and knowledge acquisition. Evidence is not gathered on what causes indifference and non-creativity in the civil service.

Despite the fact that inherently technical reports have a selective audience, even among those exclusive, intended primary users of technical reports, readership was low. Non-use cuts across all the groups, ages and genders, but in different degrees. Non-use of ISAS and its technical report collection in the study accounted for 25% of the academics, 82% of government officials, and only 16% of aid agencies who were certain that they interacted with the Centre. The rest of the agencies either did not sponsor ISAS or did not know if previous representatives interacted with the Institute. The difficulty of accessing technical reports was due to limited, or non-existent specialized services. The situation therefore demanded enquirers' own efforts to locate a few available services as well as to track down the hard-to find technical reports, a cost that could not be afforded by many.

Another reason for non-use of the channel was that it was unattractive. Use of the channel to some, such as government officials, was not seen to be very necessary as use did carry individual rewards. The "off-putting" description was due to messages that were pitched at too technical a level. TRs' information was also described as 'hard' data that is very demanding of an ordinary user's comprehension. This was seemingly the obstacle that required producers

to pre-digest reports through synthesis, abstracts or translations, hence the importance of such processing.

ISAS was used as a case to determine if technical reports were well or poorly managed in Lesotho. Where the Institute failed to meet the specialized demands, it may be concluded that it served like any other general library. Hence it could be seen as failing to achieve its original mandate in the eyes of the authorities who established it. It could be speculated that the reason for the closures of the SSRU, NIR and others was on account of such a failures. ISAS could follow.

7.6.1 Abuse and mis-use of technical reports

There was evidence of a subtle abuse and misuse of technical reports in the civil service within the academic and donor communities. Such abuses and mis-use were through

- ▶ utilization of outdated technical information as elaborated by Ketso (2000) and as illustrated by the Ministry of Agriculture's *Situation analysis report* that was eleven years late, or the example of the Lesotho 1993 Auditor's Report that was released in 2001
- ▶ duplication of production, of which respondents from all the groups were fully aware
- ▶ hoarding of unclassified yet useful reports
- ▶ non-declassification of reports when information channeled was no longer restricted
- ▶ erroneous production of information or data issued, which has a snowball effect concerning development since the next users reproduce to faulty data.

7.7 The cost benefit of use of technical reports pertaining to Lesotho

The conviction that use of information that is channeled by TRs should give developmental results was confirmed in the study. TRs are a channel of information for development.

In this assessment, cost benefits and cost losses were experienced at micro and macro levels by individuals, institutions, groups and the nation. It was further established that it is 'use' which is finally instrumental to knowledge acquisition, innovation, creativity and practical application. As stated in Chapter 5, it was established that there were benefits from international conference attendance that included preparation of technical reports before and after.

The benefits related to three of the seven reasons for which technical reports are issued:

- ▶ awareness creation,
- ▶ ability to formulate plans,
- ▶ guidance for seeking funds toward the implementation of plans for development related activities.

At the same time, duplication of report production and development schemes like the agricultural projects, for instance, as affirmed by Martin (1964) and Henderson (1981), translated into valueless efforts and losses by those who prepared reports, funded projects and the communities upon which development projects were tried but failed.

7.8 Potential role of ICTs in TRs's management in Lesotho

The study found that unavailability of sufficient computers for ISAS databases hampered full exploitation of TRs already indexed. According to views of some practitioners and trainers, Chisenga (1999), Kaniki (1999), Radloff and Ochieng (2000) and Stilwell (2000), ICTs have a high potential for information management in Southern Africa including Lesotho. Yet nine (60%) out of 15 NUL information workers posted reports on the Internet, only a little (own emphasis). Three (20%) did not, and the other three (20%) did not respond, the indication being that they were unfamiliar with the subject in question.

It was observed from the reports posted to the newly constructed Lesotho government website that, in spite of its insufficient conventional library facilities, the government was positive concerning the adoption of ICTs which have the potential of distributing TRs for those who have access to that technology.

7.9 Recommendations

The last objective of the study was to advance recommendations bearing on the research findings, discussions, the literature and views of respondents. The aim is to make recommendations on how to improve performance where it is poor, and to indicate where and how to maintain good performance if there is any. Major recommendations are made, while

general considerations are highlighted. Of importance, too, are recommendations for further studies.

Compared to that of other channels such as books and periodicals, the production of technical reports is costly. The rate of their production, level and intensity in Lesotho is high and increasing. Moreover, the benefits and impact of that costly process on development are poor due to the generally inadequate production processes. Technical report production is an integral part of the development process, hence eliminating flaws that pertain to production can ensure the effective impact of technical reports at all the functions. Clear production steps as to who, produces which types, how, for whom and in what manner, is a matter that should therefore be guided by some national standard rules.

It is recommended that a *Manual for the production of technical reports in Lesotho* be compiled. This would allow an integrated approach to managing (defining classification, registering, numbering, monitoring, collecting, keeping and use of TRs) the channel by and at the levels of the academic institutions, government departments, aid agencies, NGOs, and private sectors. These are the levels at which TRs normally become products of public consumption. In that way, the manual will set appropriate guidelines. These may comprise: that TRs are prepared by the qualified persons who will be conversant with rules, be bound to refer to up-to-date information to avoid the release of the mislead reports, that authors should not exceed the specified duration of releasing a particular type of TR, failing which the consultancy fee is not paid in full. The manual should make it mandatory to incorporate in the reports local language translations (Mophethe 2001), especially of abstracts which are short and less costly, appropriate pre-digests which demand sufficient knowledge of a field that an “expert” is writing about and the type of TR that is being prepared, and availability statements that relate to classified or not classified that facilitate distribution and dissemination. The guide would compel authors to acknowledge an information centre or centres that provided references, so that centres are supported accordingly, and evidence that an effective information management makes the reporting easy, factual and augmentative instead of repetitive or duplicating. Use and impact of use may thus be unique and easy to follow up. Within the civil service for instance, incentive measures as advocated by CTA (1999:39) may

be instituted. That is, remunerating officials whose use of information translates to knowledge acquisition and creativity, practical application or problem-solving at work situation.

Holistic review of ISAS Documentation Centre within the transforming NUL

Findings on the performance of ISAS indicate are mixed. Whilst some mechanisms of tackling the problematic channel were commended, some were criticized. In most areas, it was clear that the Institute was to be looked at within a holistic re-positioning of NUL and Lesotho within the democratizing southern African region. Consequently, the on-going NUL transformation process was seen as an opportune strategy within which to urge the recognition of the conventional channels of development information like technical reports.

Involvement of proactive intermediaries at the production stage

Regarding duplication of production and wastage of resources, it is recommended that commissioning authorities and sponsors, in particular, firstly ensure what the impact of previous reports were before embarking on the projects and related production of technical reports. Being unaware how useful the previous productions were (Mchombu 1987:49) prior to producing subsequent ones is tantamount to underutilization of the former, which evidently is unused because it is unavailable. It is at this juncture that intermediaries should become proactive and sell their skills by verifying from their collections, if the envisaged production is duplication, a necessary refocussing, or an indispensable production. It is in that way too that the commissioners may see the need to employ and involve such skills.

The researcher echoes the sentiments of many (Ojiambo 1994; Ketso 2001) who observe from the intermediaries' and policy makers' point of view that delays in releasing up-to date data are at cross purposes with channeling and using information for development. It is stressed that prompt release followed by distribution, management and use would impact positively on the development of Lesotho. The researcher further recommends that within the proposed availability statement, the designated depositories, distributing authorities be specified.

Delays and non-availability are sometimes caused by types of TRs which are akin to restrictions and secrecy. More than anything else, the reason for delays is a common desire of governments to limit knowledge for the governed (Gardner 1981:94-95; Merrett 1994;

Nyerere 1999), who consequently become “easy” to govern. It is unlikely that such a widespread attitude of governments may be changed, more so in Africa. Without necessarily supporting that kind of undemocratic practice as such, information workers should be advised instead to adopt strategies that would suit both secretive governors and governed information-seekers. As shown in the literature review as well, that secrecy and confidentiality of government information is a world-wide problem. Intermediaries within Lesotho and the Southern African region are urged to rally behind the global efforts such as the IFLA’s Committee on Access to Information and Freedom of Expression (CAIFE) to promote availability of development information where it is needed.

TRs’ related duties of the envisaged NRC

The initiatives of the Ministry of Planning and the National University of Lesotho are endorsed, that a National Research Council be established that should have the powers to enforce rules and regulations of the recommended manual above. The arrangement would guarantee the central or clearing agency for TRs’ standard numbering for example. Through the assistance of academics, donor agencies and civil society, who are also producers and users of reports for development, the NRC should frequently mount courses for the groups, to instill an understanding of the reports, clarity on classification, the implication of good or poor production.

This position may be achieved by assigning the duty of handling classified reports solely to *documentalists, specialized information professionals and managers of classified information* who are accordingly trained, and they become extra specialists that are familiar with government policies as well as the needs of users in the respective sectors within and outside governments. Such calibre of information workers should thus be entrusted with that province of matching categories of classified items with demands, making judgements as to users that may be allowed to use, under what conditions they may have access, and to what level they may use, the classified information. These professionals should from time to time also revise their classified stock toward declassification at the right time.

Over and above that approach of classified materials, the duties of documentalists handling TR are huge. Findings indicated that TRs are not pliable to conventional library practices and

traditional mechanisms. Their productivity patterns evade procedures that are followed by an experienced acquisitions librarian. A documentalists' familiarity with sourcing Conference Reports, for instance, from the global summits does not necessarily imply that the documentalist is conversant with tracking the Projects Reports from the NGOs, aid agencies or government departments. Almost all the types behave differently with regard to retrieval, processing and providing. Hence, it is not befitting for documentalists in the specialized centres to apply a wait-and-see method of receiving this difficult channel. The processes of serving the enquiries regarding TRs may also not be left to the hands of unaided semi-skilled staff. In such centres, specialization therefore ceases to be. Documentalists are then regarded simply like any other library, and are relegated redundant in the information society.

General considerations on ICTs, sectorial approach, training and networking

Technology in the 21st century offers ample opportunities in information management. That TRs were unattractive to civil servants, for example, could be attributed to the format or to their hard content. The situation could not be verified in the study since there was generally a low readership even for conventional materials by government officials. That notwithstanding, a consideration to ease the difficult format should be made. For a problematic channel like technical reports, as Nisonger (1997) stresses, digital information may improve the format. Wide area networks may create virtual libraries and replicate ISAS in Maseru, for example. Internet may stimulate distribution of reports further afield. But it is finally the knowledge and familiarity of information workers which will enable informed decisions and judgements on what aspects of ICTs are advantageous or unfit in the Lesotho information services. In Lesotho situation, as shown in Chapter 2, non-availability of computer and Internet connectivity mean that there will be very few, as yet, who are able to access such facilities, let alone the actual government ministries when the majority are not yet connected even to their very own government website where technical reports are posted.

The researcher endorses comments made by some respondents that the issue of TRs is being attended to, and recommends, through the Lesotho Library Association, that, firstly, professionalism as a code of conduct be developed in the country so that, it guides on standards, secondly on specializations, and accreditation. In that way, TRs and other channels as well as the automation areas may not generally be subjected to unqualified personnel as

happens with most technical report management in Lesotho. From time to time, information workers should, through short courses and full time training, familiarize themselves with the changing development strategies that affect the functions of technical reports.

Training institutions too, are urged to *diversify their curricula* in such a way that specialization includes less-conventional and development literature like reports which should make the services of graduates more meaningful in the developing countries like Lesotho.

Agriculture and Gender were selected in order to assess TRs from a sectorial perspective. The study revealed that in Lesotho there were inadequacies in the production and handling of TRs in those two sectors. There are gender imbalances in the participation of TRs' preparation, in governance and in positions of power. Agriculture was heavily reported on, implying its high activity in development. It also recorded the highest failures of development schemes, thus calling for investigations and adequate reporting on the problem. The assessment of TRs by sector finally depicted, a very low productivity in science and technology, which suggests that there was a low involvement by government, NGOs and aid agencies in that field.

For genuine development self-reliance is more advantageous than dependence on foreign aid (Kabeer 1994; Rist 1999; Colman 2001). That is more so for activities like TR management which should be monitored constantly and sustained. Whilst aid agencies assisted the ISAS of the 1980s to thrive in information management, inclusive of the costly technical report handling, two decades later sustainability is an issue due to the nomadic aid agencies which have physically moved from Lesotho to elsewhere, or because donors have shifted their development foci away from that of ISAS's own focus and the related technical reports.

Special attention to TRs production, management, use and benefits on and about crucial sectors like agriculture, gender and science and technology in particular should be supported by all the TR producer and user groups. Whereas some sectors become topical at certain times and use in that sector thus rises, in general, use of relevant technical reports may go on indefinitely, hence making it mandatory for information workers to collect TRs widely and continuously regardless of their age. Making an impact on the sectors that affect all the categories of society can and should earn information workers more credibility. In this

performance assessment, it was evident that agricultural technical information is the most central in development in that it engaged the majority of development activists in Lesotho. Productivity of agricultural related technical reports was the highest.

Bridging the gender information divide in the technical reports' productivity

The evident gender information divide invites action, firstly by schools to inculcate in both genders skills of information acquisition, ICTs, reporting about self and aspiring for gender equity, and secondly to the NGOs to include gender awareness within the national programmes, the ongoing regional and national programmes on Gender and ICTs.

The findings demonstrate that there is a strong interrelatedness of the functions of technical reports. It was revealing that production of technical reports gives rise to distribution, and the latter facilitates use. High productivity which is not followed by acquisition or collection reduces the chances of use and benefits. High productivity plus efficient management, which also involves inputs, without optimum use, is an imprudent expenditure and of no cost-benefit to producers, as primary users, to authorities that fund information management, and to potential or secondary users for whom information services are established.

7.9.1 Recommendations regarding areas requiring further studies

Performance assessment of technical reports as a channel of information for development is the first such enquiry and study of this magnitude in Lesotho. It has, as a result, brought to the fore several issues that are still a challenge and require in depth understanding, so that technical reports impact effectively on development.

The researcher recommends the following:

- ▶ a study of the causes and effects of the closures of information services that managed TRs in southern Africa,
- ▶ longitudinal studies on the impact of non-use of technical reports in major sectors of development like agriculture,
- ▶ comparative studies on the impact of specialized centres in the developed and developing countries,

- a regional comparative study that may be supported by bodies like the Standing Conference of Eastern, Central and Southern African Librarians (SCECSAL), Standing Conference of National and University Libraries (SCONUL), the International Federation of Library Associations and Institutions (IFLA), within the realm of government information and publications, on how technical reports are performing in development across disciplines.

7.10 In conclusion

The study achieved its purpose of providing a performance assessment of TR as a channel of information for development in Lesotho. Recommendations based on the study's finding have been made both for action within Lesotho and for further research. Technical reports management remain a neglected yet a wide encompassing problem that not only affects Lesotho but developed and developing countries as well. Attention to the problem requires attention by intermediaries at the institutional levels in the national, regional and international arena, so that strong systems of mitigating against its obstacles are put in place. The findings of this study may go a long way as a challenge towards such concerted efforts.

REFERENCES

- Abbott, M. A. 1989. Towards an understanding of the meaning of the word "use" in the phrase "use of the literature". MLS thesis. Pietermaritzburg:University of Natal.
- Adam, L. 1998. African information society initiative for the development of people. In: *Global communications Africa 1998*. London: Hanson Cooke. pp.56-64.
- Adedigba, Y.A. and S.M. Lawani.1995. The development of agricultural information in Nigeria. In: *Agricultural information in Africa*. Edited by Aina, L.O, A.M. Kaniki and J.O. Ojiambo. Ibadan: Third World Information Services. pp.169-184.
- African Development Bank. 1998. *African development report 1998*. Oxford: Oxford University Press.
- Aina, L.O. 1994. Prospects for reducing the high mortality rate of African library science journals. In: *Survival under adverse conditions: proceedings of the African library science journals workshop*. Edited by Wise, M. The Hague: IFLA. IFLA professional reports, No. 38. pp. 37- 48.
- Aina, L.O. 1994. The problems of organising and disseminating grey literature in Africa. In: *GL'93 First international conference on grey literature -Weinberg report. Conference proceedings. Dec 13-15, 1993*. Compiled by D. Farace. Amsterdam: TransAtlantic. pp.169-174.
- Aina, L.O. and Y.A. Adedigba. 1995. The development of agricultural information in Nigeria. In: *Agricultural information in Africa*. Edited by Aina, L.O, A.M. Kaniki and J.O. Ojiambo. Ibadan: Third World Information Services. pp. 83-107.
- Aina, L.O., A.M. Kaniki and J.B. Ojiambo (eds). 1995. *Agricultural information in Africa*. Ibadan: Third World Information Services.
- Aina, L.O. 1995. Information and agriculture in Africa. In: *Agricultural information in Africa*. Edited by Aina, L.O., A.M. Kaniki and J.B. Ojiambo. Ibadan: Third World Information Services. pp.1- 11.
- Allan, F.C. 1993. Benchmarking: practical aspects for information professional. *Special libraries* 8(3):123-130.
- Allemna, A.A. 1995. Agricultural information services in West Africa. *Agricultural information in Africa*. In: Edited by Aina, L.O., A.M. Kaniki and J.B. Ojiambo. Ibadan: Third World Information Services. pp.67-103.
- Allwood, C. M. 1999. Usability of user manuals. In: *Encyclopaedia of library and information science* V.65. Edited by Allen Kent. New York: Marcel Dekker. pp.315-325.

- Altbach, P. 1996. *The challenge of the market: privatization and publishing in Africa*. Oxford: Bellagio. Bellagio studies in publishing, 7.
- Ambrose, D.P. 1984. The collection and bibliographic control of grey literature of Lesotho. *African research and documentation*. No 36:11-17.
- Amoako, K.Y. 1996. Foreword. In: *African Information Society Initiative, (AISI) - an action framework to build Africa's information and communication infrastructure*. Addis Ababa: Economic Commission for Africa. pp.vii-ix.
- Amonoo, P. 1994. The ECA library. (Discussions between P. Amonoo, Chief librarian of the ECA library, and the author, at the University of Zimbabwe, Harare: December 1994).
- Assessing the impact of information and communication management on institutional performance - proceedings of a CTA workshop, Wageningen, The Netherlands, 27- 29 January 1998. Edited. by Batjes-Sinclair, K. The Hague: Technical Centre for Agricultural and Rural Cooperation.
- Auger, C. P. (ed.). 1975. *Use of reports literature*. London: Butterworths.
- Badenoch, D., C. Reid, P. Burton, F. Gibb and C. Oppenheim. 1994. The value of information. In: *The value and impact of information*. Edited by Feeney M. and M. Grieves. London: Bowker & Saur, British Library Research Information Policy Issues. pp.9-77.
- Bailey, K.D. 1982. *Methods of social research*. 2nd ed. London: Macmillan.
- Balachandran-Sarojini. 1991. Government publications in academic science and technology. *Reference librarian*, 32: 193-202.
- Ballantyne, P. 1991. *Managing the flow of Scientific and information for agricultural research in small countries: an issues paper*. The Hague: ISNAR Small-countries study paper No. 2.
- Bellamy, M. 2000. *Approaches to impact evaluation (assessment) in agricultural information management - selective review of the issues, the relevant literature and some illustrative case studies*. The Netherlands: Technical Centre for Agricultural and Rural Cooperation.
CTA Working Document Number 8021.
- Benchmarking - *Organizational Change: An Annotated Bibliography*. Available: <<http://www.nara.gov/alic/trainvid/bpr2.html>> [11 Nov. 2000].
- Bgoya, W., M. Billany, M. Lujanen, R. Noonan, T. Paajanen, E. Syrjanen. 1997. *The economics of publishing educational materials in Africa*. London: Association for the development of education in Africa (ADEA), Working group on book development.

- Bickman, L. (ed.). 1987. *Using program theory in evaluation - new directions for program evaluation*. Place: American Evaluation Association, No. 33 Spring.
- Black, S.H. and D.A. Marchand. 1982. Assessing the value of information in organisations: a challenge for the 1980's. *Information sociology* 1(3):191-225. In: *Theoretical problems of information science*. Moscow: FID, FID 609. pp.30-31.
- Blagden, J. (ed.). 1983. *Do we really need libraries? Proceedings of the first joint Library Association conference on performance assessment*. Bedford: Cranfield Press, Cranfield Institute of Technology.
- Bless, C and C. Higson-Smith. 1995. *Fundamentals of social research methods: an African perspective*. 2nd ed. Kenwyn: Juta.
- Blanche, M. T. and K. Durrheim. (eds). 1999. *Research in practice - applied methods for the social sciences*. Cape Town: University of Cape Town Press.
- Boadi, B. 1987. Information and development: an overview. In: *Establishment and management of a national and information service in Botswana; papers of the workshop held in Gaborone, 23-27 February 1987*. Edited by Huttemann, L. Bonn/Gaborone: DSE and Botswana National Library Services. pp.1-11.
- Boaz, M. (ed.). 1981. *Strategies for meeting the information needs of society in the Year 2000*: Littleton, Colorado: Libraries Unlimited.
- Bond, P. 2000. The IMF and World Bank reconsidered. Third World debt and global financial turbulence: contemporary Southern African debates. In: *Development: theory, policy and practice*. Edited by Coetzee, J.K., J. Graff, F. Hendricks and G. Wood. Oxford: Oxford University Press. pp. 231-249.
- Bonitz, M. and P. Schmidt. 1978. The growing importance of research and development reports as shown by nuclear science reports. *International forum on information and documentation* 3(1):8-12.
- Boon, J.A. 1992. Information and development - towards an understanding of the relationship. *South African library and information science journal* 60(2):63-74.
- Borg, W. R. and M. D. Gall. 1983. *Educational research - an introduction*, 4th ed. New York: Longman.
- Bottle, R.T. 1973. Scientists, information transfer and literature characteristics. *Journal of documentation* 29(3):281-294.
- Braidotti, R., E. Charkiewicz, S. Hausler, and S. Wieringa. 1994. *Women, the environment and sustainable development - towards a theoretical synthesis*. London: Zed Books, in association with United Nations International Research and Training Institute for the Advancement of Women (INSTRAW).

- Braig, M. 2000. Women's interests in development theory and policy from "Women in development" to "Mainstreaming gender". *Development and cooperation* 3:13-16.
- Bryson, E. R. 1970. A theory of librarianship. PhD thesis, Lexington, University of Kentucky.
- Bruce, H. 1984. *The concept of "development literature" and the establishment of criteria for creation of a development data base*. PhD thesis. Urbana-Champaign, University of Illinois. Michigan: University Microfilm International.
- Bryman, A. and D. Cramer. 1990. *Quantitative data analysis for social scientists*. London: Routledge.
- Budd, J. M. 1998. *The academic library: its context, its purpose and its operation*. Littleton, Colorado: Libraries Unlimited.
- Bureau of Statistics and the United Nations Population Fund. 1999. *1996 Population census - gender statistics*. Maseru: Bureau of Statistics.
- Burton, S., C. Stilwell and A. Leach. 2001. Development: themes and issues from the book *Knowledge, information and development: an African perspective*. A paper prepared for the LIASA Conference "African renaissance through libraries. Johannesburg, South Africa, September, 24th -28th 2001.
- Butler, S. 1997. The development and impact of the Lesotho Highlands water project. B.A. Hons. dissertation. Pietermaritzburg: Historical Studies, University of Natal, Pietermaritzburg.
- Calhoun, E. 1991. Technical reports de-mystified. *Reference librarian* 32:163-175.
- Caponio, J.F. 1984. Use and non-use of report literature. In: *Proceedings of the 42nd FID Congress*. The Hague: FID. pp. 83-98.
- ✧ Castells, M.. 2000. Possibilities for development in the information age - information technology, globalization, and social development. Paper prepared for the United Nations Research for Social Development, Geneva, 22 - 24 March 1998. Centre for Higher Education Transformation (CHET) <<http://www.chet.org.za/castells/devinfo.html>> [16 May].
- Caubergs, L. 1992. The management of technical information centres. [Wageningen]: CTA/ATOL.
- Central Bank of Lesotho. 2000. *Central Bank of Lesotho quarterly bulletin* X1X (4).
- Centre Technique de Cooperation Agricole et rurale (CTA). 1995. *The role of information for rural development in ACP countries: review and perspectives, proceedings of an international seminar, Montpellier, France, 12 -16 June 1995*. Wageningen: CTA.

- Centre Technique de Cooperation Agricole et rurale (CTA). 1996. *Priority information themes for ACP agriculture - proceedings of a CTA seminar, Wageningen, The Netherlands, 30 September - 4 October, 1996*. Wageningen: CTA.
- Centre Technique de Cooperation Agricole et rurale (CTA). 1998. *Assessing the impact of information and communication management on institutional performance - proceedings of a CTA workshop Wageningen, The Netherlands, 27-29 January, 1998*. Edited by Batjes-Sinclair, K. Wageningen: CTA.
- Centre Technique de Cooperation Agricole et rurale (CTA). 1999. *Reducing poverty through agricultural sector strategies in eastern and southern Africa, Summary report of a workshop: Wageningen, the Netherlands, 23-25 November 1998*. Prepared by Mundy, P. Brussels: European Commission; Wageningen:CTA.
- Cermakova, J. 1975. The report literature - production and distribution in the U.S.A. *Annals of library science and documentation* 22 (1):12-20.
- Chadzingwa, M.M, N.M. Mohapi, S.M. Mohai, and E.M. Nthunya (eds). 1989. *The Lesotho Library Association 10th anniversary conference report*. Roma: Lesotho Library Association.
- Chailla, A. 2001. Implementation of policies and strategies for agricultural information access and use in Tanzania. Discussions on the ongoing study toward a PhD. University of Natal, Pietermaritzburg.
- Chaka-Makhooane, L., P. Letuka, N. Majara, M. Mamashela, M. Motebang, B.L. Morolong, and K. Marite-Matashane 1997. *Beyond inequalities: women in Lesotho*. Maseru: Women and Law in southern Africa (WLSA) and Southern African Research and Documentation Centre (SARDC).
- Charlton, S. E. M. 1984. *Women in the third world development*. Boulder and London: Westview Press.
- Chambers, A. and N. Boissiere. 1995. Impact of information in policy formulation in the Caribbean. *Making a difference - measuring the impact of information on development: proceedings of a workshop held in Ottawa, Canada: 10-12 July 1995*. Edited by McConnell, P. Ottawa: IDRC. pp.103-21.
- Chen, Huey-Tsyh. 1990. *Theory-driven evaluations*. Newbury Park: Sage.
- Ching Chen Cheh. 1987. Scientific and technical sources, 2nd ed. In: Balachandran, S. 1991. Government publications in academic science and technology. *Reference librarian* 32:194.
- Ching-chih Chen and P. Hernon. 1982. *Information seeking - assessing and anticipating user needs*. Application in information management and technology series. New York: Neal- Schuman Publishers.

- Chillag, P. 1973. Don't be afraid of reports. *British Library lending review* 1(2) October: 39-51.
- Chisenga, J. 1999. Global information infrastructure and the question of African context. In: *The 65th IFLA Council and Conference papers and proceedings, Bangkok, Thailand, August 20 -28, 1999*. The Hague: Silver Platter for IFLA. [CD-ROM].
- Chisenga, J. 2000. Global information and libraries in sub-Saharan Africa. *Library management* 21(4): pp. 178 -187.
- Choucri, N. 1998. Knowledge networking for Technology "leapfrogging" *Cooperation south* 2:40-52.
- Cobbe, J. 1981. Priority economic research areas for development in Lesotho. In: *Southern Africa - research for development, selected papers presented to a workshop on research priorities in Southern Africa held at the Institute of Southern African Studies, NUL Lesotho 23-27 November 1981*. Edited by Sefali, M. Roma: ISAS, 1982. pp.111-124.
- Coetzee, J.K. , J. Graff, F. Hendricks and G. Wood (eds). 2001. *Development: theory, policy and practice*. Oxford: Oxford University Press.
- Coetzee, P.C. 1977. Suggestions towards a conceptual framework of a theory of readers and reading. In: *Lees en lesers - lesings oor die leserkunde gelewer as deeltydse professor in die Department Biblioteekkunde aas die Randse Afrikaanse Universiteit*. Pretoria: State Library No.21:ix-xxi.
- Cohen, L. and L. Manion (eds). 1994. *Research methods in education*. 4th ed. London: Routledge.
- Collier, M. 1993. The impact of information on the management of a large academic institution In: *The value and impact of information*. Edited by Feeney M. and M. Grieves. London: Bowker and Saur, The British Library Research Information Policy Issues. pp.213-227.
- Colman, R. 2000. Measuring genuine progress - In: *Made to measure synthesis papers*. Maritime Centre of excellence for women's health. Halifax, Canada. Available: <http://www.medicine.dal.ca/mcewh/oct-synthesis/colman.htm> [26 January]
- Comor, E. A. (ed.). 1994. *The global political economy of communication*. Basingstoke: Macmillan.
- Commission on Global Governance. 1995. *Our global neighbourhood: the report of the commission on global governance*. Oxford, Oxon: Oxford University Press.
- Conkling, T. W. 1991. Providing technical report services in the academic library. *Reference librarian* (32):155-162.

Conradie, C., T. Konig, S. Koti, C. Pillay and J. Valkhoff. 1999. *Management communication*.

Sandton: Heinemann.

Cordray, D. S. and Mark W. Lipsey (eds). 1986. *Evaluation studies* 11. Newsbury Park: Sage.

Cotta-Schonberg, M. and M. Line. 1994. Evaluation of academic libraries; with special reference to the Copenhagen business school library. *Journal of librarianship and information science* 26(2):54-68.

Cowen, M.P. and R.W. Shenton. 1996. *Doctrines of development*. London: Routledge.

Cronin, B. 1982. Performance assessment and information management. *ASLIB proceedings* 34 (5): 227-236.

Cronin, B. 1982. Taking the measure of service. *ASLIB proceedings* 34 (6-7):273-294.

Daniel, J. 1981. Problems of research in Swaziland: the approach of SSRU. In: *Southern Africa development research*. Edited by Sefali, M. Roma: ISAS. pp. 281-290.

Datus, J. S. Jnr. 1998. The Economics of book publishing. In: *Publishing and development - a book of readings*. Edited by Altbach, P.G. and D. Teferra. Oxford: Bellagio Publishing Network Research Information Centre in Association/Boston College/Obor/The International Book Institute. Bellagio Studies in Publishing 9. pp.31- 46.

Davies, J. and A.B. Gwilliam. 1975. Technical reports in education. In: C. P. Auger. *Use of reports literature - information sources for research and development*. London: Butterworths. pp.135-167.

Dervin, B. 1983. Information as a user construct: the relevance of perceived information needs to synthesis and interpretation. In: *Knowledge structure and use*. Edited by Ward, S. and L. J. Reed. Philadelphia: Temple University Press. pp.154-179.

Dervin, B. 1995. The participatory communication for development narrative: an examination of meta-theoretical assumptions and their impacts. In: 1: Jacobson, J.T. and J. Servaes, *Theoretical approaches to participatory communication*. Cresskill, NJ: Hampton Press. International Association for Mass Communication book series, - in preparation.

DEVISIS the preliminary design of an international information system for the development sciences - prepared by the DEVISIS Study Team, which worked in Geneva, March - September 1975, on behalf of its co-sponsors: International Development Research Centre (IDRC), International Labour Office, Organisation for Economic Cooperation and Development. United Nations Department of Economic and Social Affairs, United Nations Development Programme and United Nations Educational and Scientific and Cultural Organization. IDRC - 065e. Ottawa: IDRC.

de Witte, B.1995. Grey material, a Scandinavian view. In: GL'95 *Second international*

conference on grey literature - grey exploitations in the 21st century conference proceedings, Washington D.C. 2-3 November. Amsterdam: TransAtlantic. pp.47-58.

Dick, A. L. 2000. 'Information society' a contradiction in terms. *Reconstruct* March 19:7.

Dixon, B. R., G. D. Bouma, and G.B.J. Atkinson. 1987. *A handbook of social science research*. Oxford: Oxford University Press.

Doran, B. M. 1993. Special libraries: the academic and research context. In: *Librarianship and information work worldwide*. Edited by Line, M., G. Mackenzie and R. Prytherch. London: Bowker Saur 1992. pp. 25-49.

Dosa, M. 1997. *Across all borders - international information flows and applications*. London: Scarecrow Press.

. DSE. 2000. Facts and trends - facts on poverty. *Development and cooperation* 4:6.

Duckitt, P. 1984. The intermediary today and tomorrow. *ASLIB Proceedings* 36(2):79-86.

Durrheim, K. 1999. Quantitative measurement. In: *Research in practice - applied methods for the social sciences*. Edited by M. Terre-Blanche and K. Durrheim. Cape Town: University of Cape Town Press. pp.72-86.

Durrheim K. 1999. Research design. In: *Research design*. Edited by M. T. Blanche and K. Durrheim. Cape Town: University of Cape Town Press pp.29-53.

East, H. 1984. Special libraries and information services and the development of the UK information industry. *ASLIB Proceedings* 36(2):61 - 78.

Eastern and Southern African Universities Programme (ESAURP). 1987. *University capacity in eastern and southern African countries*. London: James Currey; Portsmouth: Heinemann.

. Economic Commission for Africa 1996. African Information Society Initiative (AISII) - an action framework to build Africa's information and communication infrastructure. Addis Ababa: ECA.

Economic Commission for Africa. 1999. *Wither PADIS. United Nations Economic Commission 27 October for Africa First meeting of the Committee on Developing Information (CODI): 28 June - 2 July 1999 Addis Ababa, Ethiopia*. Addis Ababa: United Nations Economic and Social Council. E/ECA/DISD/CODI.1/10 21 June.

Economic recovery and development. 2001. Edited by Adedeji, A., O. Teriba and P. Bugembe, Available: <www.freeafrica.org/leadership11.html> [27 October].

- El Serafy, S. and E. Lutz. 1989. Environmental and natural resource accounting. In: *Environmental management and economic development*. Edited by Gunter, S. and J. J. Warford. Baltimore: World Bank/John Hopkins University Press.
- Encyclopaedia of library and information science*. 1971. Edited by Kent, A. and H. Lancour. v. 5.
- Encyclopaedia of library and information science* 1992. Edited by Kent, A. H. Lancour assisted by W.Z. Nasri. New York: Marcel Dekker.
- Encyclopaedia of library and information science* 1999. Edited by Kent, A. and C. M. Hall. v.65, supplement 28. New York: Marcel Dekker.
- Eponou, T., W. Peterson, A. Wuyts-Fivawo and M. Wilks. 1999. *Planning linkages between research, technology transfer, an farmers' organizations - results of an action-oriented project in Mali, Senegal, Tanzania and Zimbabwe*. The Hague: International Service for National Agricultural Research. ISNAR Research Report number 15.
- Exposing geographic inequity - Lesotho's multiple indicator cluster survey - a district-level report: measuring progress towards the World Summit Goals for Children*. 1998. Compiled by D.R. Thakhisi, produced by the Bureau of Statistics with technical and financial assistance from UNICEF. Maseru: Bureau of Statistics.
- Farace, D. 1997. The rise of the phoenix: a review of new forms and exploitations of grey literature. *Publishing research quarterly*, Summer: 69-76.
- Feeney, M. and M. Grieves (eds). 1994. *The value and impact of information*. London: Bowker-Saur. The British Library Research Information Policy Issues.
- Fitzgibbons S. A. 1976. *The concept of service orientation: an exploratory study on the concept in relationship to the library and information services*. PhD thesis. Graduate School, Rutgers University. New Brunswick, N.J. Ann Arbor, Michigan: University Microfilm International.
- Flamme 2000. <<http://flamme.org>> [2 Jun].
- Foldi, T. 1991. Scientific information. In: Goedegebuure, B.G., H.R. A. Sales and G. S. Aquilar (eds). *Information, a resource for development: proceedings of the Forty-fifth FID conference and congress Havana, Cuba: 19-22 September 1990*. The Hague: FID. FID 690. pp. 219-224.
- Food and Agriculture Organization (FAO) of the United Nations. 2001. Research and extension: a gender perspective. *FAO Focus: women and food security*. Available: <<http://www.fao.org/Focus/E/Women/Extens-e.htm>>[29 Aug.: pp.1-5].
- Fox, C. J. 1983. *Information and misinformation - An investigation of the notions of information, misinformation, informing and misinforming*. Westport, Conn.:Greenwood Press. Contributions in Librarianship and Information Science, no.

- French, T. 1993. *The SCOLMA directory of libraries and special collections on Africa in the UK and Europe*. Compiled and edited by French, T. 5th ed. London: Hans Zell.
- GAIN. 1999. <<http://www.uct.ac.za/org/agi:1999>> [5 May].
- Garbers, J. G. (ed.) 1996. *Effective research in the human sciences: research management for researchers, supervisors and master's and doctoral candidates*. Pretoria: J.L. van Schaik.
- Gardner, R. K. 1981. *Library collections: their origin, selection and development*. New York: McGraw-Hill. Series in library education.
- Garrod, P. and M. Kinnell. 1996. Performance measurement, bench marking and the UK library and information services sector. *Libri* 46: 141-48.
- Gay, J. S. 1982. *Women in development*. Prepared under contract No. 930-000-C-00-1006-00 with USAID. Maseru, Jun. 1.
- Gehrke, U. 1975. Schemes in the FRG for centralised acquisitions of the so-called 'grey literature'. In: *Acquisitions from the third world: papers in ligue de Bibliothèques Europeennes de recherche Seminar, 11-19 September 1973*. Edited by Clarke, D.A. London: Mansell pp. 229-237.
- Gehrke, U. 1985. Information for development - some problems of national co-ordination, regional cooperation and international assistance. *INSPEL* 19(3):166-198.
- GENNET 2000. *United Nations releases most recent statistics on world's women. 6 June. United Nation conference this week follow-up to 1994 Beijing conference. Available:www.unp.ac.za/unpdepartments/politics/gender/gender.htm* [7 Jul].
- Gerrard, S.A. 1966. Handling industrial (scientific and technical) confidential report material. *ASLIB Proceedings* 18(8): 206-217.
- Gilchrist, A. 1984. Cost-effectiveness. In: *Costing and the economics of library and information services*. Edited by Roberts, S.A. London: ASLIB. ASLIB Reader series vol.5: pp.263-273.
- Giuliano, V. E. 1981. Productivity in the information society. In: *Strategies for meeting the information needs of society in the year 2000*. Edited by Boaz, M. T. Littleton, Colorado: Libraries Unlimited. pp.81-82.
- GL'93. 1994. *First international conference on grey literature - Weinberg report, conference proceedings, Amsterdam, Dec. 13-15 1993*. Compiled by Farace, D.J. Amsterdam: TransAtlantic.

- GL'95.. 1995. *Second international conference on grey literature - grey exploitations in the 21st century conference proceedings, Washington D.C. 2-3 November*. Amsterdam: TransAtlantic.
- GL'97. 1998. *Third international conference on grey literature - perspectives on the design and transfer of scientific and technical information, conference proceedings, November, 13 -14, 1997*. Compiled by Farace, D.J. with the assistance of J. Frantzen, Amsterdam: TransAtlantic..
- Glazier, J. D. and Randall R. Powell 1992. *Qualitative research in information management*. Englewood, Colorado: Libraries Unlimited.
- Global knowledge 1997. <<http://www.globalknowledge.org/english/toronto97/home.html:1>> 3 April 2000.
- Goedegebuure, B.G., H.R. A. Sales and G. S. Aquilar (eds) 1991. *Information, a resource for development - proceedings of the forty-fifth FID conference and congress. Havana, Cuba: 19 -22 September 1990*. The Hague: FID. FID 690.
- Goodall, D. L. 1988. Performance measurement: a historical perspective. *Journal of librarianship* 20(2):128-144.
- Gordimer, N. 1998. Cultural globalization: living on a frontierless land. *Cooperation south* 2 :16-21.
- Gorman, G.E. and P. Clayton. 1997. *Quantitative research for the information professional - a practical handbook - a practical handbook* with contributions from M. Lynn Rice-Lively and L. Gorman. London: Library Association Publishing.
- Gray, J. and B. Perry. 1975. *Scientific information*. Oxford: Science and engineering policy series.
- Griffiths, Jose-Marie and D. W. King. 1994. Libraries: the undiscovered national resource. In: *The value and impact of information*. Edited by Feeney M. and M. Grieves. London: Bowker-Saur. pp.78-116.
- Griffiths leuan L. 1993. *The Atlas of African affairs*. 2nd ed. London: Routledge.
- Guba, E. and Y. S. Lincoln. 1986. The countenances of fourth generation evaluation: description, judgement, and negotiation. *Evaluation studies review annual*. Vol.1. Edited by D. S. Cordray and M. W. Lipsey. Newsbury Park: Sage.
- Hafkin, N. 2000. Convergence of concept: gender and ICTs in Africa. In: *Gender and Information Revolution in Africa*. Edited by Rathgeber, E. M. and E. O. Adera. Ottawa: International Development Research Centre <http://www.idrc.ca/acb/showdetl.cfm?&DID=6&Product_ID=471&CADIT=15> 2 June.

- Hall, J. 1967. Technical Report Literature. In: Ashworth W. *Handbook of special librarianship and information work* 3rd ed. London: ASLIB.
- Halm, van Johan. 1978. The development of special libraries as an international phenomenon. Pretoria: *SLA State of the art review* Special libraries Association No.4.
- Hamel, J., S. Dufour and D. Fortin. 1993. *Case study methods - Qualitative research methods*. Vol 32. Newsbury Park: Sage.
- Hancock, E. 1996. Libraries in Lesotho. *Information development* 12(4):24.
- Haravu, L.J. and T.N. Rajan. 1995. Impact of the semi-arid topical crops information services (SATCRIS) at ICRISAT. In: *Making a difference - measuring the impact of information on development: proceedings of a workshop held in Ottawa, Canada 10-12 July 1995*. Edited by McConnell, P. Ottawa: IDRC. pp.49-69.
- Harding, S. 1998. *Is science multicultural? Postcolonialisms, feminisms, and epistemologies*. Indiana: Indiana University Press.
- Harricombe, L. and T.J. Lusher (eds). 1998. *Creating the agile library: a management guide for librarians*. Westport, Conn.:Greenwood Press.
- Harris, S. C.1990. Agricultural information in developing countries. *Library Trends* 38(3):578-634.
- Hartas, J.C. 1967. Technical Report literature: its nature, source and some problems. In: Houghton, B. (ed.) *Information work today - papers presented at a symposium held at Liverpool School of Librarianship in September 1966*. London: Bingley. pp.77-87.
- Havelock, R.G. 1969. *Planning for innovation through dissemination and utilization of knowledge*. Michigan: Ann Arbor: University of Michigan, Institute for social research, Centre for research on utilization of scientific knowledge.
- Henderson, M. M. 1981. Some aspects of technical report processing by Federal agencies. *Science and technology libraries* 1(4):19-26.
- Hill, M. W. 1999. *The impact of information on society - an examination of its nature, value and usage*. London: Bowker Saur.
- Hirst, F.C. and A.G. Myatt. 1975. Agriculture and food. In: *Use of reports literature - information sources for research and development*. Edited by Auger, C.P. London: Butterworths. pp.97-111.
- Holloway, A.H.; E. H. Ridler and B.Yates. 1976. *Information work with unpublished reports*. Institute of information scientists. London: Andre' Deutsch.

- Holstein, J. and J. F. Gubrium 1995. *The active interview - qualitative research methods* v.37. Thousand Oaks, Calif.: Sage Publications.
- Holsti, O. R. 1969. *Content analysis for the social sciences and humanities*. Reading: Addison-Wesley.
- Houghton, B. (ed.). 1966. *Information work today: papers presented at a symposium for information workers held at Liverpool School of Librarianship in September, 1966*. London: Clive Bingley.
- Hounkonnou, D. 1995. Information for rural development: review and perspectives of the CTA. In: *The role of information for rural development in ACP counties: review and perspectives - proceedings of an international seminar. Montpellier, France: 12-16 June, 1995*. Wageningen: CTA pp.30-36.
- Howell, J. B. 1984. *The concept of "development literature" and the establishment of criteria for the creation of a development data base*. PhD thesis. Urbana-Champaign, Ill.: University. of Illinois at Urbana-Champaign.
- Humaida, F. 1994. United Nations depository library system. In: *Anglophone Africa seminar on government information and official publications, University of Zimbabwe, Harare: 15-18 December 1994*. Edited by Moshoeshoe-Chadzingwa, M.M. Wetherby: IFLA Offices, UAP and International Lending. pp.131-137.
- Huttemann, L. (ed.) 1987. *Establishment and management of a national and information service in Botswana; papers of the workshop held in Gaborone, 23-27 February 1987*. Bonn/Gaborone:DSE and Botswana National Library Services.
- Ibeun, M.. O. and M..I. Atinmo. 1999. Relevance of educational qualification to information seeking behaviour: strategies and sources used by Nigerian Fisheries Scientists. *IAALD International Association of Agricultural Information Specialists Quarterly Bulletin* XLIV(3/4):184-190.
- Images of social realities - civil society reports from 9 countries prepared for the Social Summit +5 Geneva 2000*. Copenhagen: MS Lesotho - Danish Association for International Co-operation, in collaboration with IPS.
- Institute of Development Studies (IDS). 2000. *ID21 News* 38, <http://www.ids.ac.uk> [20 Apr].
- Institute of Southern African Studies.1985. *ISAS Annual report 1984-85*. Roma: ISAS.
- Institute of Southern African Studies (ISAS) 1997. *Institute of Southern African Studies Annual Report 1995/96 -1996/97*. Roma: ISAS..
- Institute of Southern African Studies. 2000. *ISAS publication catalogue 2000*. Roma: ISAS.
- International Bank for Reconstruction and Development 1975. *Lesotho: a development challenge - report based on the finding of an economic mission to Lesotho in Jun - July*

- 1973, composed of Messrs. W. Maane and R. van der Lugt. Washington: World Bank.
- International Development Research Centre. 1976. *DEVSIIS the preliminary design of an international information system for the development sciences - prepared by the DEVSIIS Study Team, which worked in Geneva, March - September 1975, on behalf of its co-sponsors*: International Development Research Centre (IDRC), International Labour Office, Organisation for Economic Co-operation and Development. United Nations Department of Economic and Social Affairs, United Nations Development Programme and United Nations Educational and Scientific and Cultural Organization. Ottawa: IDRC.
IDRC 065e.
- International encyclopaedia of communication*. 1989. Vol.2. New York: Oxford University Press.
- International Service for National Agricultural Research (ISNAR). 1989. *Review of Lesotho's agricultural research system - report to the Ministry of Agriculture, Cooperatives and Marketing of the government of Lesotho*. The Hague: ISNAR R48e.
- International Service for National Agricultural Research (ISNAR). 1992. *Management of scientific information for agricultural research in small countries; highlights of a meeting: Reduit, Mauritius, 20-24 April 1992*, The Hague: ISNAR. Small countries study paper No. 8.
- Jacobs, D. 1998. A bibliometric study of the publication patterns of South African scientists. PhD thesis, Information Studies. Pietermaritzburg: University of Natal Pietermaritzburg.
- Jahan R. 1995. *The elusive agenda - mainstreaming women in development*. Dhaka: University Press and London: Zed Books.
- Jensen, M. 1999. <<http://www.uneca.org>> 12 March.
- Jensen, M. 1999. <www.yahoo.com> 12 and 13 March.
- Jermey, K.E. 1966. Control of commercially confidential information in reports. *ASLIB proceedings* 18(8):218-225.
- Johansson, E. (ed.) 1995. Seminar on information provision to rural communities in Africa - proceedings of the seminar held in Gaborone, Botswana, 22 -25 Jun 1999.
- Kabamba, J. 1986. Documentation of non-conventional literature in Africa: problems and prospects. M.A. dissertation. Leicester: Loughborough University of Technology.
- Kabeer, N. 1994. *Reversed realities: gender hierarchies in development thought*. London: Verso.
- Kabudi, A.M.M. 1997. *The development and provision of scientific and technical information*

services in Tanzania: with reference to university libraries. Berlin: Koster.

Kaniki, A.M. 1995. Agricultural information user populations and critical tasks in Africa. In: *Agricultural information in Africa*. Edited by Aina, L.O., A.M. Kaniki and J.B. Ojiambo. Ibadan: Third World Information Services. pp.12-31.

Kaniki, A.M. 1989. *Information needs in Zambia: a study of a two-way information flow*. PhD thesis. Pittsburgh, University of Pittsburgh. Michigan: University Microfilm International.

Kaniki, A.M. 1992. Meeting the needs of agricultural researchers in Africa: the role of unpublished reports. *Information Development* 8(2):83-89.

Kaniki, A.M. 2001. *Internet use and training needs of staff of esAL consortium, Kwazulu-Natal, South Africa: partnership between historically Disadvantaged and Advantaged Institutions (HDIs and HAIs)*: <http://www.ifla.org/IV/ifla65/papers/041-115e.htm>: 11 Jul.

Kann, U. and E.M. Veenendaal. 1987. Can information services in Botswana meet the needs of researchers? In: *Establishment and management of a national and information service in Botswana; papers of the workshop held in Gaborone, 23-27 February 1987*. Edited by Huttemann, L. Bonn/Gaborone: DSE and Botswana National Library Services. pp.61-69.

Kanu, M. 2000. *India and Nepal - human stories of the rural poor: gender mainstreaming*. Rome: International Fund for Agricultural Development (IFAD).

Karlsson, J. 1993. Civil society, democracy and libraries. In: *CNLSA proceedings - resources for future library services*. Edited by van Tonder, B. Pretoria: The State Library: 1994. pp.12-21.

Karlsson, J. 1995. Methods of information provision to rural communities in South Africa. In: *Seminar on information provision to rural communities in Africa - proceedings of the seminar held in Gaborone, Botswana, 22 -25 June 1994*. Edited by Johansson E. Uppsala: Uppsala University Library :47-57.

Karnitis, E. 1998. Grey literature as a segment of the market of scientific and technical information services in Latvia. In: *GI'97 conference proceedings - third international conference on grey literature: perspectives on the design and transfer of scientific and technical information; November 13 -14 1997*. Compiled by Farace, D.J. with the assistance of J. Frantzen. Amsterdam: TransAtlantic. pp.73-78.

Kebede, T. 2001. National priorities. In: *Lesotho 2000: public perceptions and perspectives*. Edited by Rule S. and N. Mapetla . Pretoria: Human Science Research Council. pp.35-48.

Keeves, J. (ed.). 1997. *Educational research methodology and measurement: an international handbook*. Oxford: Elsevier Science.

- Kellermann, B.C.; P.J. Lor. 1997. Seminar on accessing information resources in Southern Africa 11-13 September 1996. *IFLA Journal* v. 23 (?), 317-319.
- Kelly, K. 1999. Calling it a day: reaching conclusions in qualitative research. In: *Research in practice - applied methods for the social sciences*. Edited by M. Terre Blanche and K. Durrheim. Cape Town: University of Cape Town Press. pp.421-437.
- Ketso, L.V. 2001. On a question of the presented budget. Kingdom of Lesotho Parliamentary debates of the National Assembly, Daily Hansard, official report of the Second Meeting - Second Session of the Fifth Parliament. Wednesday, 9th May, 2001 (unrevised). Maseru: National Assembly. pp.14-36.
- Kimane, I. and M. Ntimo-Makara. 1998. The gender dimension of urban migration in Lesotho. In: *Changing gender relations in Southern Africa*. Edited by Schlyter, A., M. Mapetla and A. Larsson. Roma: Institute of southern African Studies. pp.101-128.
- King, D. 1993. Libraries: the undiscovered national resource. In: *The value and impact of information*. Edited by Feeney, M. and M. Grieves. London: Bowker Saur pp.76-116.
- Kiondo, E. 1999. Access to gender and development information by rural women in the Tanga region Tanzania. PhD thesis, Information Studies, Pietermaritzburg: University of Natal Pietermaritzburg.
- Klempner, I.M. 1981. *Science and technology libraries - introduction*. 1(4) Summer:3-4.
- Kochen, M. (ed.). 1975. *Information for action: from knowledge to wisdom*. New York: Academic Press.
- Kochendorfer-Lucius, G. and B. Pleskovic (eds). 2000. *Inclusion, justice and poverty reduction - Villa Borsig workshop series 1999*. Berlin: German Foundation for International Development, Villa Borsig Workshop Series.
- Kolesinskji, A.A. 1981. On the content of the concept "scientific information". In: *Theoretical problems of information science - abstracts of selected publications* 1984. Compiled by A. V. Yu, V.S. Ershova, M.S. Fradkin, I.I. Lyskina and D.B. Sarkissian. FID 609. Moscow: All Union Institute for scientific and technical information pp.160 -161.
- Kothari, C.R. 1990. *Research methodology - methods and techniques*. 2nd ed. New Delhi: Wiley Eastern Ltd.
- Kukubo, R. 1981. Research coordination and cooperation: a case for the Southern African research coordination council. In: *Southern Africa research for development*. Edited by Sefali, M. Roma: ISAS. pp.305-321.

- Kwafo-Akoto, K. 1996. Promoting the exploitation of grey literature in Africa. In: *Second international conference on grey literature - grey exploitations in the 21st century Washington 2-3 November 1995, conference proceedings*. Amsterdam: TransAtlantic. pp.205-214.
- Ladendorf, J. 1973. *Special libraries* 64(7): 273-79.
- Lamberton, D. M. 1990. *The Economics of communication and information*. UK, Cheltenham: Elgar Publishing.
- Lancaster, F.W. 1978. *Guidelines for the evaluation of information systems and services*. Prepared for Unesco under contract. Paris: UNISIST: PGI/78/WS/18.
- Lancaster, F.W. 1977. *The measurement and evaluation of library services*. Virginia: Information Resource Press.
- Lancaster, F.W. 1993. *If you want to evaluate your Library*. 2nd ed. London: Library Association Publishing.
- Langerbein, H. 2000. Does aid do harm?- Africa remains the world's poorhouse despite massive assistance. *Development and Cooperation* 3:25-26.
- Larsson, A., M. Mapetla and A. Schlyter (eds). 1998. Changing gender relations in southern Africa. Roma: Institute of Southern African Studies.
- Leondar, J.C, 1968. Workshop proceedings: report literature and sources of information. *Special libraries*, February: 84-85.
- Lesotho Government, Bureau of Statistics and UNICEF. 1998. Exposing geographic inequity- Lesotho's multiple indicator: cluster survey: a district-level report: measuring progress towards the World Summit - goals for children. Maseru: Lesotho Government/UNICEF.
- Lesotho Government, 2001. <<http://www/lesotho.gov.ls:reports/greports.htm>> [7 Nov:1 - 4].
- Lesotho Government, Ministry of Economic Planning. 1997. Sixth National Development Plan 1996/97-1998/99. Maseru, Lesotho.
- Lesotho Government, Ministry of Economic Planning. 1997. *Strategic economic options study: phase II; final report - summary document*. Maseru, Lesotho.
- Lesotho review of commerce, industry, and tourism. 2001. Maseru: Wade Publications.
- Letuka, P., M. Mamashela, K. Matashane-Marite, B. Morolong and M.S. Motebang. 1998. *Family belonging for women in Lesotho*. Maseru: Women and Law in Southern Africa Research Trust (WLSA).

- Leys, R. 1981. Some observations on class differentiation and class conflict within the labour reserve of Basutoland. In: *University of London, Institute of Commonwealth Studies collected seminar papers on the Society of Southern Africa in the 19th and 20th centuries*, October 1979-June 1980. London: Institute of Commonwealth Studies, University of London. Collected Papers v.27 no.11. pp.87-95.
- Line, M., G. M. and R. Prytherch (eds). 1992. *Librarianship and information work worldwide*. London: Bowker-Saur.
- Long, N. and A. Long (eds). 1992. *Battlefields of knowledge - the interlocking of theory and practice in Social research and development*. London: Routledge.
- Lund, F. 1998. Who's in and who's out - the effects of poverty and inequality on participatory and institutional development. Durban: Olive Organisation Development and Training. Avocado series.
- Lundin, R. 1978. Access to research- what happens to all those reports? *The Australian library journal* 27(1):10-12.
- Lundu, M.C. 1996. The library in the service of society: philosophical foundation. Pretoria: Info Africa Nova.
- Maane W. and R. van der Lugt. 1974. *Lesotho - a development challenge*. Washington D.C. World Bank
- MacDougall, A. 1991. Performance assessment: today's confusion, tomorrow's solution? *IFLA journal* 17:371-378.
- McCarthy, S. 1994. *Africa: the challenge of transformation*. London: Taurus & Co.
- Machai, M. 2000. Discussion held by the researcher with M. Machai, the principal planning officer, and a member of the steering committee for national research council on 9 February.
- Machlup, F. 1980. *Knowledge: its creation, distribution, and economic significance*. Vol. 1: *knowledge and knowledge production*. Princetown, N.J.: Princetown University Press.
- McClure, C.R. 1980. *Information for academic library-decision making : the case for organisational information management*. London: Aldwych Press.
- McClure, C.R. 1985. Measurement and evaluation. In: *American Library Association Yearbook*, Vol..9 1984. Chicago: American Library Association.
- McConnell, P. (ed.) 1995. *Making a Difference: Measuring the Impact of Information on Development - proceedings of a workshop held in Ottawa, Canada 10-12 July 1995*. Ottawa: International Development Research Centre.

- McConnell, P. (ed.) 1995. Measuring the impact of information on development: overview of an International Research Program. In: *Making a difference: measuring the impact of information on development*. Edited by McConnell, P. Ottawa: IDRC. pp.1-27.
- McMahon, R., E. Barton and M. Piot 1980. *On being in charge: a guide for middle-level management in primary health care*. Geneva: WHO.
- Maema, M., S. Turner and T. Putsoane. 1993. Lesotho Highland Water Project: research opportunities beyond 2000. In: *Southern Africa in the 1980s and beyond - Institute of Southern African Studies 1980-1990. Selected papers presented to the ISAS 10th anniversary workshop held at the Lesotho Sun, Maseru 31 Oct.- 2 Nov. 1990*. Roma: ISAS. pp.257-260.
- Mafeje, A. 1993. Socio-cultural dimension of national development in Southern Africa . In: *Southern African in the 1980s and beyond, selected papers presented to Institute of Southern African Studies 10th anniversary workshop held at the Lesotho Sun Maseru 31 October - 2nd November, 1990*. Roma: ISAS. pp.23-37.
- Majoro, M. and S. Hoohlo. 1999. Cost-effectiveness of the National University of Lesotho. Roma: NUL, Department of Economics.
- Makaya, M. (1991). Progress report of the ZIDS library. Harare: Zimbabwe Institute for Development Studies (ZIDS).
- Makeka, T. 2000. Child labour and education, made at the ILO's conference held in Geneva in 2000. Presentation discussed on the lesnet discussion list. Available: <<http://www.lanc.ac.uk/postgrad/taele/>> .
- Makoa, F.K. 1999. Lesotho's rural development policy: objectives and problems. *Review of Southern African studies - a multidisciplinary journal of Arts, Social and behavioural sciences* 3(1) Jun.: 38-59.
- Maltha, D.J. 1976. *Technical literature search and the written report*. London: Pitman.
- Management of scientific information for agricultural research in small countries - highlights of a meeting Reduit, Mauritius: 20-24 April 1992*. Sponsored by International Service for National Agricultural Research (ISNAR), Technical Centre for Agricultural; and Rural Cooperation (CTA), and Mauritius Sugar Industry Research Institute (MSIRI). The Hague: ISNAR. ISNAR Small-countries study paper no. 8.
- Mannix, R.D. 1967. The effective handling of the technical literature. In: Houghton B. (ed.) *Information work today: papers presented at a symposium for information workers held at Liverpool School of Librarianship in September, 1966*. London: Clive Bingley. pp.89-98.
- Mapetla, M. and P. Machai. 1998. Beer brewing as a survival strategy in urban Lesotho. In: *Changing gender relations in southern Africa*. Edited by Schlyter, A., M. Mapetla and A. Larsson. Roma: Institute of southern African Studies. pp.155-183.

- Marais, J.J. 1992. Information literacy and quality of life. In: *InfoAfrica Nova 1992, proceedings of the conference on library and information services for future development of Southern Africa, Pretoria: 6 -8 May 1992*. Edited by A.G. Coetzee. Pretoria: Info Africa Nova. pp.367-77.
- Mark, R. 1970. Technical reports in Canadian university libraries. *Atlantic Provinces Library Association (APLA) bulletin* 34:47-50.
- Marshall, J. 1994. The impact of information services on decision-making: some lessons from the financial and health care sectors. In: *The value and impact of information*. Edited by Feeney, M. and M. Grieves. London: Bowker Saur. pp.195-211.
- Martin, J. 1964. Unintentional duplication of research. *New scientist* 377:338.
- Martyn, J. and F. W. Lancaster. 1981. *Investigative methods in library and information science: an introduction*. Virginia: Information Resource Press.
- Mashinini, V. 1994. National environmental planning and sustainable development: theory and applications in the Lesotho context. *National University of Lesotho journal of research*. 4:87-109.
- Mathealira, M.L. 1989. The position of culture, information and mobilisation in Lesotho. In: *Another development for Lesotho: alternative development strategies for the Mountain Kingdom - report of a seminar on 'Another Development' for Lesotho, organized by Dag Hammarskjold Foundation, Uppsala, Sweden, the Foundation for Education with Production, Gaborone, Botswana and Matsieng Development Trust, held in Maseru, Lesotho, December, 1987*. Uppsala: Dag Hammarskjold: pp.69-74.
- Mazrui, A. 1998. A tale of two continents: *Africa, Asia and the dialectic of globalization*. In: *Cooperation South - special issue on globalization*. [s.i.] :UNDP Special Unit for Technical Cooperation among Developing Countries (TCDC) 2, TCDC. pp. 118-133.
- Mchombu, K. 1987. Communication of information to "barefoot" extension agents. In: *Libraries and literacy, proceedings of the seventh meeting of the Standing Conference of Eastern, Central and Southern African Librarians, together with Reports on SCECSAL/FID Pre-conference Workshop and BLA/DLS/IDRC Post SCECSAL Seminar on Education and Training, Gaborone, August 1986*. Edited by Asamani, J.O. S.B. Monageng, G.K. Mulindwa and H.K. Raseroka. Gaborone: Botswana Library Association. pp.35-56.
- Mchombu, K.J. 1991. Information needs and seeking patterns for rural peoples' development in Africa. Gaborone: University of Botswana.
- Mchombu, K. J. 1995. Impact of information for rural development. In: McConnell, P. *Making a difference - measuring the impact of information on development*. Ottawa: IDRC. pp. 87-102.

- Meadow, C. T. and L. F. Spiteri. 1995. Information factors affecting new business development: Progress report. In: *Making a difference - measuring the impact of information on development - proceedings of a workshop held in Ottawa, Canada 10-12 July 1995*. Ottawa. Edited by McConnell, P. Ottawa: IDRC. pp.152-173.
- Menou J.M.. (ed.). 1993. *Measuring the impact of information on development*. Ottawa: IDRC.
- Menou J.M.. 1991. Strategies and methods for the development of national information systems in the less developed countries. In: *Information, a resource for development - proceedings of the Forty-fifth FID conference and congress, Havana, Cuba: 19-22 September, 1990*. Edited by Goedegebuure, B.G., H.R.A. Sales and G. S. Aquilar. FID 690. The Hague: FID. pp.207-218.
- Merrett, C. 1994. Government publications and the right to know in the post-liberation South Africa. In: *Anglophone Africa seminar on government information and official publications, University of Zimbabwe, Harare: 15-18 December 1994*. Edited by Moshoeshe-Chadzingwa, M.M. Wetherby: IFLA Offices UAP and International Lending. pp.39-46.
- Michelsen, H. and D. Shapiro (eds). 1998. *Strengthening the role of universities in the national agricultural research systems in sub-Saharan Africa: Cotonou, Benin, 17-21 November 1997*. Highlights of a workshop. The Hague: ISNAR.
- Mini, T. P. 1997. Community participation in the establishment of a public library service: a one-shot case study of Georgetown public library. MIS. thesis. Pietermaritzburg: University of Natal.
- Mitchell, J.C. 1983. Case and situation analysis In: *Sociological review* vols.38:187-211.
- Mittelman, J. H (ed.). 1997 *Globalization: critical reflections*. London: Lynne Reinner.
- Mkandawire, T. and C.C. Soludo. 1999. *Our continent, our future: African perspectives on structural adjustment*. Council for the Development of Social Science Research in Africa (CODESRIA) African World Press, and International Development Research Centre (IDRC). Asmara: IDRC.
- Mkhonta, F. 1986 . The documentation centre of the Social Science Research Unit (SSRU) - situation report given at ISAS/NIR/SSRU workshop on PADIS methodologies. Roma: ISAS.
- Mokitimi, N.L. and T.M. Motsamai. 1988. *Agricultural marketing and policy development in Lesotho*. Roma: ISAS.
- Mokuku, C. 2001. Modern biotechnology: environmental and health risks. *Information Flash - Newsletter of the National University of Lesotho*. Friday 14 Sept 2001:3-5.

- Mopheme 2000. Commentary on Development and gender in the SADC region. *Mopheme* 7(16):6.
- Mophethe, E.T. 2001. Reporting about the national conference of environment: that reports should be in the language that is understood by all the Basotho. Radio Lesotho, Seboping programme: 19 Jan.
- More, N. 1997. The information society. *World information report 1997/98*. Paris: Unesco Publishing: 271-283.
- Morse, P.M. 1968. *Library effectiveness - a system approach*. Massachusetts: Massachusetts Institute of Technology.
- Morgan, S. 1990. *Performance assessment in academic libraries*. London: Mansell.
- Morris, M.. D. 1979. *Measuring the condition of the world's poor - the physical quality of life index*. New York: Pergamon Press/Overseas Development Council.
- Moshoeshoe, M. 1985. Grey literature relating to southern Africa - problems of definition, acquisition and handling, with a survey of UK library practice to develop a model for Lesotho. MA thesis. London: University of London.
- Moshoeshoe-Chadzingwa, M.M.(ed.). 1999. *Anglophone Africa seminar on government information and official publications, University of Zimbabwe, Harare: 15-18 December 1994*. Wetherby: IFLA Offices UAP and International Lending.
- Motebang, M. 1999. Lesotho's non-governmental organisations: competent watchdogs for democracy? *Review of Southern African studies - a multidisciplinary journal of Arts, Social and Behavioural Sciences* 3(2):1-18.
- Motsamai, S. 2001. Discussion on issues pertaining to development in Lesotho with Candi Ratabane Ramainoane. *Radio MoAfrika*. Maseru, Lesotho: 23 April 2000.
- Mowlana, H. 1998. Globalization of mass media- opportunities and challenges for the South. *Cooperation South*. UNDP Special Unit for Cooperation among the Developing countries. No. 2:22-39.
- Mowat, I.R.M. 1993. Academic libraries. In: *Librarianship and information work worldwide 1992*. Edited by Line, M., G. Mackenzie and R. Prytherch. London: Bowker-Saur pp. 235-251.
- Mphaka, M. 2000. The Leon Commission. *Lesnet@lists.lancs.ac.uk* [26 July 2000 - 10.09 pm].
- MS Lesotho. 2000. *Images of social realities - civil society reports from 9 countries prepared for the Social Summit+5 Geneva 2000*. Copenhagen, Denmark: MS Lesotho, in association with IPS.

- Mukangara, F. 2000. Information resources management for policy formulation, implementation and programme decision-making in government ministries in Tanzania. PhD thesis. Pietermaritzburg: Information Studies, University of Natal Pietermaritzburg.
- Muminov, M.M. and Sh G. Makhkamov. 1980. In: *Theoretical problems of information science*. Moscow 1964 abstracts of selected publications/compiled by Yu, A.V., V.S. Ershova, M.S. Frankin, I.I. Lyskina and D.B. Sarkissian. [All Union Institute for Scientific and Technical Information]. The Hague: FID. FID 609. p.225.
- Mushipi, W. 1987. In: *The establishment and management of library and information services*. Edited by Huttemann, L. Bonn: DSE. pp.162 -169.
- Musiker, R. and N. Musiker (eds). 1999. *Proceedings of the seminar on accessing information resources in Southern Africa: national and sub-regional bibliographic control, Johannesburg 11 -13 September, 1996*. Pretoria: The State Library.
- Muswazi, P. 2000. Swaziana: an assessment. *African research and documentation* N.88:47-62.
- Mutisya, G. 1999. Understanding the nature of the recent Lesotho crisis. *Southern African political and economic monthly*. 12(2) Jan-Feb:11-12.
- Nachlas, R. and A.R. Pierce 1984. Determination of unit cost for library services system. In: *Costing and the economics of library and information services*. Edited by Roberts, S.A. London: ASLIB. ASLIB Reader Series no.5. pp.176- 183.
- Namponya, C.R. 1995. Agricultural libraries and information services in the Southern African Development Community (SADC). In: *Agricultural information services in Africa*. Edited by Aina. L.O., A.M. Kaniki and J.O. Ojiambo. Ibadan: Third World Communications. pp. 40-56.
- Nanus, B. 1981. User needs for information in the year 2000. In: Boaz, M. (ed.) *Strategies for meeting the information needs of society in the Year 2000*. Littleton, Colorado: Libraries Unlimited.
- Nassimbeni, M. and K. de Jager, 2000. Training for access to global information. *Library management*, 21(4):192-196.
- National Research Foundation (NRF). 2001. *NRF Profile*. <http://www.nrf.ac.za/profile>. 25 Sept.
- National Technical Information Service. 2001. <http://www.ntis.gov/search.htm>> [21 Jul.]
- National Technical Information Service. 2001. <http://www.ntis.gov/search.htm>> [21 Dec.]
- National University of Lesotho (NUL). 2000. *Information flash, NUL Newsletter* 6(23):5.
- National University of Lesotho. 2000. *Information flash, NUL Newsletter* 2000 7(1):5

- National University of Lesotho. 2000. *NUL Annual statistical bulletin*. Development and Planning Office, NUL. Roma, Lesotho.
- National University of Lesotho. 1981. National University of Lesotho Five Year Development Plan. Roma: NUL.
- National University of Lesotho. 1997. The National University of Lesotho Strategic plan 1997. Roma: NUL.
- National University of Lesotho. 2000. NUL Transformation Action Plan [2001].
- Nechiporenko, V.P. and L.P. Pavlov. 1998. VNTIC scientific and technical information centre of Russia. In: *GL '97 Conference proceedings - third International conference on grey literature: perspectives on the design and transfer of scientific and technical information, November 13 -14 1997*. Compiled by D.J. Farace with the assistance of J. Frantzen. Amsterdam: TransAtlantic. pp.158-168.
- Newman, W. B. 1982. Acquiring technical reports in the special library: another package for information transfer. *Science and technology libraries*. 2 (4) 1982:45-67.
- Neuman, W.L. 1994. *Social research methods: qualitative and quantitative approaches*. 2nd ed. Boston: Ally and Bacon.
- Neuman, W.L. 1997. *Social research methods - qualitative and quantitative approach*. 3rd ed. Boston: Ally and Bacon.
- Ngara, E. 1995. *The African university and its mission: strategies for improving the delivery of higher education institution*. Roma, Lesotho: ISAS.
- Niang, T. 1995. The promotion of the dissemination agricultural information in Africa, the CTA's role. In: *Agricultural information in Africa*. Edited by Aina, L.O., A.M. Kaniki and J.O. Ojiambo. Ibadan: Third World Information Services. pp.190-196.
- Nisonger, T.E. 1992. *Collection evaluation in academic libraries*. Englewood, Colorado: Libraries Unlimited.
- Nisonger, T.E. 1997. Collection assessment in library without walls. *Library acquisitions: practice and theory* 21(4):478-81.
- Nthunya, E. 1998. Lesotho Environmental Information Network (LEINET) Information Brochure.
- Nweke, K.M.C. 1994. Continuing education and training needs of government information and Official Publications Librarians. In: *Anglophone Africa seminar on government information and Official Publications, University of Zimbabwe, Harare 15 -18 December 1994*. Edited by Moshoeshe-Chadzingwa, M.M. Wetherby: IFLA Offices for UAP and International Lending. pp.115-122.

- Nyamato, R. M. 1999. Utilization of information technology in providing access to information for policy-making and policy formulation in the ministry of health, Kenya. MIS. dissertation. Pietermaritzburg: University of Natal.
- Nyambura, G. 1999. World Bank recognises culture as a key development component. *African publishing review*, 8(5):12-13.
- Nyerere, J. 1999. Good governance for Africa. *Development and cooperation* 2 1999:14-16.
- Nyerere, J. K. 1974. *Man and development*. Dar es Salaam: Oxford University Press.
- Ochieng, R. and J. Radloff. 2001. The relevance, usefulness and appropriateness of new information technologies for women in Africa. In: Stilwell, C. A. Leach and S. Burton (eds.) *Knowledge, information and development: an African perspective*. Pietermaritzburg: School of Human and Social Studies, University of Natal (Pietermaritzburg) pp.88-105.
- Ojiambo, J.B. 1994. Integrating documents concerns into Library and Archives Education Programmes. In: *Anglophone Africa Seminar on Government information and Official Publications, University of Zimbabwe, Harare: 15-18 December 1994*. Edited by Moshoeshoe-Chadzingwa, M.M. Wetherby: IFLA Offices for UAP and International Lending. pp.1-6.
- Ojiambo, J. 1995. Agricultural information system in Kenya. In: *Agricultural information services in Africa*. Edited by Aina. L.O., A.M. Kaniki and J.O. Ojiambo. Ibadan: Third World Communications. pp.108-127.
- Oldman, C. and G. Wills. 1977. *The beneficial library*. England: MCB Books.
- Orr, R.H. 1973. Measuring the goodness of library services: a general framework for considering quantitative measures. *Journal of documentation* 29(3):314-332.
- Osner K. 2000. Empowerment and the institutional basis of successful anti-poverty policies In: *Inclusion, justice and poverty reduction*. Edited by Kochendorfer-Lucius, G. and B. Pleskovic Berlin: German Foundation for International Development, Villa Borsig Workshop series 1999. pp.176-181.
- OSTI. 2001. <<http://www.osti.gov/physicalsciences/wkhistory.html>> [5 August].
- Outside-In Server.2001. Available: http://www.bellanet.org/partners/aisi/nici/Documents_English/Lesopub.en.doc [13 Dec.].
- Oxfam International. 2000. The central role of the state. In: *Education now - break the cycle of poverty*. Available: <http://www.caa.org.au/oxfam/advocacy/education/report/chapter6-1.html>.

Oxford English dictionary. 1989. Prepared by Simpson, J.A. and E.S.C.. 2nd ed. Vol. iii. Weiner: Clarendon Press.

- Paquot, E. 1995. The role of information in rural development issues in ACP countries; preparatory study 2. In: *the role of information for rural development in the ACP countries: review and perspectives - proceedings of an international seminar . Montpellier, France, June 12- 16, 1995*. Wageningen: CTA. pp.85 -111.

Parker, J.S. 1988. *Asking the right questions: case studies in library development*. London: Mansell.

Pathway out of poverty - an action plan for Lesotho. 1996. With a foreword by Honourable M. Senaoana, Minister of Finance and Economic Planning. Maseru: Lesotho Government, Ministry of Finance and Economic Planning.

Peters, T. 1998. Outcome measures for the emerging virtual library In: Harricombe and Lusher, *Creating the agile library - outcome measures for the virtual library*: Westport, Conn.: Greenwood Press. pp.61-79.

Philp, T. 1983. *Making performance appraisal work*. London: McGraw Hill.

Phororo, D. R. 1999. *Four ugly faces of poverty and their scars on Lesotho*. Available: http://www.africanews.org/south/lesotho/stories_19991019_feat9.html. [19 October].

Pinder C. and M. Melling (eds). 1996. *Providing customer-oriented services in academic libraries*. London: SCONUL and Library Association.

Pinelli, T.E. and V. L. Golich. 1998. The reader preferences of NASA technical reports in electronic formats: results of the survey. In: *GL' 97 - Third international conference on grey literature - perspectives on the design and transfer of scientific and technical information held in Luxembourg 13-14 November 1997*. Amsterdam: TransAtlantic. pp. 46-72.

Pinelli, T.E., A.R. Khan, R.O. Barclay and J.M. Kennedy. 1993. The U.S. government technical report and aerospace knowledge diffusion: results of an on-going investigation. In: *GL'93 - First international conference of grey literature - Weinberg Report - conference proceedings*. Edited by Farace, D. Amsterdam: TransAtlantic pp.320-41.

Pinelli, T.E., R.O. Barclay and J. M. Barclay. 1997. Survey of reader preferences concerning the format of NASA-Langley authored technical reports. *Publishing research quarterly*. Summer 1997: 48-56.

Poll, R. and te Boekhorst, P. 1996. *Measuring quality: international guidelines for performance measurement in academic libraries*. [IFLA Section of university libraries and other general research libraries]. Munchen: K.G. Saur. IFLA Publications 76.

- Poole, H. 1985. *Theories of the middle range*. Norwood, New Jersey: Ablex Publishing Corporation.
- Pottinger, L. 2001. Bribery scandal at World Bank project in Lesotho/ South Africa: 50 years is enough. U.S. Network for global economic justice, International Rivers Network. <<http://www.50years.org/ejn/v2n3/lesotho.html>> 1 September.
- Powell, A. 1994. Management models and measurement in the virtual library. *Special libraries* 85:26-63.
- Powell, R. R. 1991. *Basic research methods for librarians*. 2nd ed. Norwood, New Jersey: Ablex Publishing.
- Prasad, G., 2000. Discussion with the author at the Institute of Southern African Studies, National University of Lesotho. Roma: 22 August.
- Prasad, G. 1998 (a). Research, development and dissemination of research results. Unpublished paper prepared for the Science and Technology Department.
- Prasad, G. 1998 (b). Scientific knowledge, wild plants and survival. *Agenda* 38:81-84.
- Pray, C.E. 1998. The private sector in agricultural research systems: will it fill the gap? *World development* 26(6):1127-1148.
- Pritchard, S. M. 1996. Determining quality in academic libraries. *Library trends* 43(3):572-594.
- Prozesky, L. 1999. Discussions between the author and L. Prozesky, librarian at the UNP Life Sciences library, at the Library Pietermaritzburg, at 9hr30, on 9 April.
- Prytherch, R. (ed.). 1998. *Gower handbook of library and information management*. London: Gower.
- Puso, P. 2001. Discussions on issues of politics and governance in Lesotho with C. R. Ramainoane. *Radio MoAfrika*. Maseru: 6 January.
- Randall, D. L. 1999. *Gendered social-relations among adolescents in a South African secondary school: the Greendale case study*. MA dissertation. Pietermaritzburg: University of Natal.
- Randall, V. and R. Theobald. 1998. *Political change and underdevelopment: a critical introduction to Third World politics*. 2nd ed. London: Macmillan.
- Rea, L. M. and R.A. Parker. 1997. *Designing and conducting survey research - a comprehensive guide*. 2nd ed. San Francisco, Calif.: Josey-Bass.

- Reducing poverty through agricultural sector strategies in eastern and southern Africa - summary report of a workshop, Wageningen, the Netherlands 23-25 November 1998.* 1999. Report prepared by Mundy, P. Wageningen: European Commission/Technical Centre for Agricultural and Rural Cooperation.
- Rist, G. 1999. *The history of development: from western origins to global faith.* Translated from French by Patrick Canailler. London: ZED.
 - Roberts, S.A.(ed). 1984. *Costing and the economies of library and information services.* London: ASLIB. ASLIB reader series, v.
 - Rogers 1979. In: *International encyclopaedia of communication.* 1989. Vol.2. New York: Oxford University Press. V.2:14.
 - Rolinson, J., H. Al-Shanbari, and A.J. Meadows. 1996. Information usage by biological researchers. *Journal of information science* 22(1):47-53.
 - Rose, D. and Oriel Sullivan 1993. *Introducing data analysis for social scientists.* Buckingham: Open University Press
 - Rosenberg, D. 1987. Repackaging of scientific and technical information for illiterate and semi-illiterate users: a case of southern Sudan. In: *Proceedings of the standing conference of eastern, central and southern African librarians - SCECSAL VII held in Gaborone, Botswana, 1996.* Edited by J.O. Asamani, S.B. Monageng; G.R. Mulindwa; and H.K. Raseroka.. Gaborone: Botswana Library Association. pp.8-22.
 - Rossi, P. H. and H. E. Freeman 1989. *Evaluation: a systematic approach.* 4th ed. Newsbury Park: Sage.
 - Rounag, J. 1995. *The elusive agenda - mainstreaming women in development.* London: ZED.
 - Rozsa, G. 1988. *Information: from claims to needs - national aptitudes for international co-operation in scientific information economy.* Edited by dr. Th Kabdebo. Budapest: The Library of the Hungarian academy of sciences and kultura Hungarian Foreign Trading Company.
 - Rubin, R.E. 1998. *Foundations of library and information science.* New York: Neal-Schuman Publishers.
 - Rule, S. and N. Mapetla (eds). 2001. *Lesotho 2000: public perceptions and perspectives.* Pretoria: Human Science Research Council.
 - Russell, K. 1997. The value of information in agricultural research. In: USAID/IAALD - *The information frontier: linking people and resources in a changing world. Quarterly bulletin of the International Association of Agricultural Information specialists (IAALD)* XLII (3-4):219-222.

- Sachs, W. (ed.). 1992. *The dictionary of development - a guide to knowledge as power*. London: Zed.
- Safilios-Rothschild, C. 1985. The persistence of women's invisibility in agriculture: Theoretical and policy lessons from Lesotho and Sierra Leone. *Economic Development and Cultural Change* 33(2): 294-317.
- Saracevic, T. and J. B. Wood 1981. *Consolidation of information: a handbook on evaluation, restructuring and repackaging of scientific and technical information*. Pilot ed. Paris: PGI & UNISIST. PGI/WS/16.
- Saracevic, T. 1980. Perceptions of the need for scientific and technical information in less developed countries. *Journal of documentation* 36(3):214-267.
- Seeiso, B. Seeiso 2001. Enquiring when the report of the workshop on Lesotho vision 2020 would be released. Senate Proceedings relayed on Radio Lesotho: 6 Jun. 2001.
- Sefali, M. (ed.).1981. *Southern African development research*, Roma: Institute of Southern African Studies.
- Senaoana, M. 1996. *Pathway out of poverty - an action plan for Lesotho*, with a foreword by M. Senaoana, Minister of Finance, and Economic Planning. Lesotho, Maseru: March 1996.
- Sen G. 2000. Gender mainstreaming in finance ministries- *World development* 28(7):1379-90
- Sene, H. 1990. Bibliographic organization and exchange of information in the French-language countries. In: Wise, M. (ed) *Information and libraries in the developing world.v.2* London: Library Association Publishing. pp 47-58.
- Sengupta-Benoyendra. 1978. Bibliographical organization and control of government documents and technical reports in India. *Indian journal of library sciences* Vol. IV, No.11 Jun:1-10.
- Serpell, R. 1981. Setting priorities for a university research institute in Southern Africa: the example of IAS in Zambia In: Sefali, M. (ed.) *Southern African Development Research Association*. Roma: ISAS. pp. 251-267.
- Setai, B. 1984. Constraints to rural development in Lesotho. Second Carnegie inquiry into poverty and development in Southern Africa, 13 -19 April 1984, Cape Town, South Africa. Cape Town: Conference papers: Vol. 21, No.255.
- Silverman, D. 1993. *Interpreting qualitative data: methods for analyzing talk, text and interaction*. London: Sage Publications.
- Silverman, D. 1985. *Quantitative methodology and sociology*. Aldershot, Hants: Gower.

- Shadish, W. R.(Jr.) and C. S. Reichardt (eds). 1987. *Evaluation studies review annual* vol. 12. Newbury Park: Sage.
- *Sharing innovative experiences - examples of successful initiatives in science and technology in the South*. TCDC, UNDP, Third World Academy of Science and Third World Network of Science Organisation (n.d.). Also available: <http://www.undp.org/tcdc.htm> [n.d.].
- Shrestha, S. 1999. For women in Nepal: the right to land is the right to livelihood. *Women in action* 2 :79-81
- Slobodyanik, M.S. 1980. Ispol'zovanie nauchnykh otechetov spetsialistami NII - The use of scientific reports by research workers. *Nauchnye - i - Tekhnicheskie - Biblioteki - SSSR* 3:15-18. Library and Information Science Abstracts (LISA) 1998.
- Smith, R.S.1981. Interaction within technical reports community. *Science and technology libraries* 1(4):5-18.
- Southall, R. 1994. The labour market and trade unions at the South African periphery. *African Affairs* 93(373):565-586.
- Stanciu, L. 1982. The information epistemological and praxiological functions. In: *Theoretical problems of information science- abstracts of selected publications/* compiled by A. V. Yu, V.S. Ershova, M.S. Fradkin, I.I. Lyskina and D.B. Sarkissian. Moscow: All Union Institute for scientific and technical information. FID 609. p.301.
- Stevens, N. D. 1997. *Communication throughout libraries*. Methuchen, N.J.: The Scarecrow.
- Stevenson, J. 1997. *Dictionary of library and information management*. Middlesex, England: Peter Collin Publishing.
- Stiglitz, J. 2000. Scan globally, reinvent locally - knowledge infrastructure and the localization of knowledge development and cooperation. *Development and cooperation* 4: 8-11.
- Stilwell C., 2001. Repackaging information: a review. In: Stilwell C., A. Leach and S. Burton (eds) *Knowledge, information and development: an African perspective*. School of Human and Social Studies. pp. 40-51.
- Stilwell, C. 2000. Global information issues: LIS educators and the public good. *Library management* 21(4):188-191.
- Stoecker, R. 1991. Evaluating and rethinking the case study. *Sociological review* 39(1):88-112.
- Stone, M. B. 1993. Assessment indicator and the impact of information on development. *Canadian journal of information and library science* 18(4):50-64.

- Stone, M.B. and M.J. Menon 1994. The impact of information on development. *Bulletin of American society for information science* 20(5): 25-26.
- Strauss, A. 1987. *Qualitative analysis for social scientists*. Cambridge: Cambridge University Press.
- Stueart, R. D. and B.B. Moran. 1998. *Library and information centre management*. 5th ed. Englewood Colorado: Libraries Unlimited.
- Sturges, P. 1998. Social intelligence for developing countries: the role of grey literature. In: *GL'97 Conference proceedings - third international conference of grey literature - perspectives on the design and transfer of scientific and technical information held in Luxembourg November 13-14 1997*. Compiled by Farace, D.J. and J. Frantzen. Amsterdam: TransAtlantic pp.102-113.
- Sturges, P. and R. Neill. 1990. *The quiet struggle - libraries and information for Africa*. London: Mansell.
- Sturges P. and G. Chimseu. 1996. Qualitative research in information studies: a Malawian study. *Education for information* 14:117-126.
- Sturges, P. and S. Wills. 1999. Performance measurement and project evaluation for rural African information services. *Information development* 15:205-211.
- Struening, E.L. and M.B. Brewer (eds). 1983. *Handbook of evaluation research*. The University Edition, sponsored by the Society for the Psychological Study of Social Issues. Beverly Hills: Sage.
- Sturman, A 1997. Case study methods. In: Keeves, John P. (ed.) *Educational research methodology and measurement: an introductory handbook*. 2nd ed. Oxford: Elsevier Science.
- Sumsion, J. 1999. Performance indicators. In: *Librarianship and information works worldwide*. Edited by Line, M., G. Mackenzie, and P. Sturges. London: Bowker and Saur. pp.177-207.
- Swanson, R.W. 1975. Performing evaluation studies in information studies, reprinted from *Journal of the American Society for Information Science*, May - Jun 1975. In: *Key papers in the design and evaluation of information systems*. Edited by King, D.W. 1978 New York: American Society for Information Science/Knowledge Industry Publications. pp.58-74.
- Swisher, R. and C. R. McClure. 1984. *Research for decision making - methods for librarians*. Chicago: American Library Association.
- Taque-Sutcliffe, J. 1995. *Measuring Information - an information service perspective*. New York: Academic Press.

- Talingdan-Tabancura, E. 1998. Science and technology information dissemination and promotion at PCIERD-DOST, Phillippines. In: *GL'97 - conference proceedings, second international conference on grey literature held in Luxembourg 13-14 November, 1997*. Compiled by Farace, D.J. and J. Frantzen. Amsterdam: TransAtlantic. pp.188-195.
- Tauli-Corpuz, V. 1999. ICTs: their impact on women and proposals for women's agenda: *Women in action* 2:96-103.
- Taylor, S., N. 1997. Technical reports and non-depository publications. *Journal of government information* 24(6): 481-496.
- Teferi, K. 1996. The management of development information projects in developing countries for Utilization of Grey Literature. In: *GL'95 - conference proceedings - second international conference on grey literature - grey exploitations in the 21st century, Washington D.C. November, 2 -3 1995*. Amsterdam: TransAtlantic pp.169-177.
- Teriba. O. 1988. Evaluation of ISAS. Report submitted under the auspices of ECA to the National University of Lesotho. Roma: National University of Lesotho, ISAS.
- Terre-Blanche, M. and K. Durrheim (eds). 1999. *Research in practice - applied methods for the social sciences*. Cape Town: University of Cape Town Press.
- Tetsu O. 1997. Survey and collection of technical reports published by Japanese private companies. In: *GL'97 - third international conference on grey literature - perspectives on the design and transfer of scientific and technical information Luxembourg November 13-14, 1997*. Compiled by Farace, D.J. and J. Frantzen. Amsterdam: TransAtlantic. pp.102-113.
- Thai, B. 2000. Inside Lesotho's textile industries - textile workers face slavlike conditions and police bullets. In: *Images of social realities - civil reports of 9 countries prepared for Social Summit+5, 2000*. Copenhagen: MS Lesotho - Danish Association for International Co-operation, in collaboration with IPS. p.9.
- Thapisa, A.P.N. 2001. The impact of globalization on Africa - Lead paper. In: *Library management*, 21(4-5):170-177. Also available: <http://www.emerald-library.com> [13 Sept. 2000].
- Theoretical problems of information science - abstracts of selected publications. 1984. Compiled by Yu, A.V., V.S. Ershova, M.S. Fradkin, I.I. Lyskina, and D.B. Sarkissian. International Federation for Documentation. Moscow: FID. FID 609.
- Thorngate, W. 1995. Measuring the effects of information on development. In: *Making a difference - measuring the impact of information on development - proceedings of a workshop held in Ottawa, Canada 10-12 July 1995*. Edited by McConnell, P. Ottawa: International Development Research Centre. pp.195-200.
- Thuto Lesotho (Education in Lesotho) 2000. Discussion about education in Lesotho, with

- reference to T. Makeka's presentation on child labour and education, made at the ILO's conference held in Geneva in 2000. <<http://www.lancs.ac.uk/postgrad/taele>.
- Tsekoa, K. 2001. Discussions on the forthcoming conference titled *Lesotho vision 2020*, with M. Kotele, through the Seboping radio programme. *Radio Lesotho*: Maseru, Lesotho: 8 January 2001.
- Tudor-Silovic and I. Mihel 1988. *Information research - research methods in libraries and information science*. London: Taylor Graham.
- Tuominen, K. and R. Savolainen 1997. A social constructionists approach to the study of information use as discursive action. In: *Information seeking in context - proceedings of an international conference on research in information needs, seeking and use in different contexts 14-16 August, 1996 Tampere, Finland*. Edited by Vakkari, P., R. Savolainen and B. Dervin. London: Taylor Graham. pp.81-96.
- Uhegbu, A.N. 2000. Information communication networking in rural communities: the case of women in Imo State; Nigeria. *Journal of information science* 26(1): 51-59.
- Uhegbu, A.N. 1997. The impact of rural information on community development programmes in the Imo State of Nigeria. *International information and library review* 29:85-94.
- Ulrike, K. 1997. *The Administration of ISO 10444: ISTRN: activities and cooperation of the International authority*. In: *GL'97 - conference proceedings - third international conference on grey literature - perspectives on the design and transfer of scientific and technical information, held in Luxembourg 13-14 November 1997*. Compiled by Farace, D.J. and J. Frantzen. Amsterdam: TransAtlantic. pp.169-173.
- University of Natal 2000 People on the move - assessing poverty programmes in four countries. *NUInfo - campus news of the University of Natal* 10(4):4.
- UNDP 1998. *UNDP Poverty report - overcoming human poverty*. New York:UNDP.
- UNDP 1999. Matters of fact - globalization. *Choices - the human development magazine* 8(2):28.
- UNDP. [n.d.].4 (TWNSO): <http://www.undp.org/tcdc/tcdc.html>.
- UNICEF and Bureau of Statistics 1998. Exposing geographic inequity: Lesotho's multiple indicator cluster survey, a district-level report: Measuring progress towards the World Summit - goals for children. Maseru: Produced by the Lesotho Government Bureau of Statistics/UNICEF.
- Usherwood, B. 1999. Value and impacts studies. In: *IFLA conference papers presented at the 65th IFLA Council and Conference held in Bangkok, Thailand, August 20 - 28, 1999*. The Hague: Silver Platter for IFLA. [CD-ROM].
- Vakkari, P., R. Savolainen and B. Dervin (eds)1997. *Information seeking in context -*

- proceedings of an international conference on research in information needs, seeking and use in different contexts 14-16 August, 1996 Tampere, Finland.* London: Taylor Graham. pp. 81-96.
- Van de Sand, K. [n.d]. Performance and governance - confronting the issues. Briefing. Rome: Programme Management Department, IFAD.
- Van Tonder, H. 2000. Letter from PRAIS to researcher, on agricultural information requests from Lesotho. Maseru: 10 July.
- Vickery, B. C. and A. Vickery 1987. *Information science in theory and practice*. London: Butterworths.
- Waldon, C. 1999. NetAid: A website targets a billion hits to battle poverty: *Choices - the human development magazine*. August 1999:13-16.
- Walter, R.1972. *How Europe underdeveloped Africa*. Dar es Salaam: Tanzania Publishing House.
- Walters, M.1995. *Globalization*. London: Routledge. Key Ideas series.
- Wang, A. and D. M. Alimena. 1981. Managing the Bell Laboratories Technical Report service. *Science and Technology Libraries* 1(4): 27-39.
- Wang P. 1997. User's information needs at different stages of a research project: a cognitive view. In: *Information seeking in context- proceedings of an international conference on research in information needs, seeking and use in different contexts 14-16 August, 1996 Tampere, Finland*. Edited by Vakkari P., R. Savolainen and B. Dervin. London: Taylor Graham. pp.307- 318.
- Water as a source of conflict ? 1999. *Development and cooperation* 2:32-33.
- Webb, E. J., D.T. Campbell, R.D. Swartz and L. Sechrest. 1966. *Unobtrusive measures: non-reactive research in the social sciences*. Chicago: Rand MacNally.
- Webster's new dictionary of synonyms*. 1978. London: Webster.
- Weingand, D.1993. Grounded theory and qualitative methodology. *IFLA journal* 19:17-26.
- Weingand D. E. 1998. *Future-driven library marketing*. Chicago: American Library Association.
- Weintraub, I. 1999. U.S. Agriculture libraries at Land Grant Colleges: meeting the information needs of a changing industry. *IAALD International Agricultural Information Specialists quarterly bulletin* XLIV(3/4):177-179.

- Weiss, C. H. 1972. *Evaluation research - methods for assessing program effectiveness*. Englewood Cliffs: Prentice Hall.
- Wells, C. 1987. *The UN, UNESCO and the politics of knowledge*. London: Macmillan.
- Wengert, R.G. 2001. Some ethical aspects of being an information professional. *Library Trends* 49(3): 486-509.
- Westbrook, L. 1994. Qualitative research methods: a review of major stages, data analysis techniques and quality control. *Library and information science research* 16(1994):241-254.
- White, F. 2000. More on GNP and Genuine Progress Indicators. DISCUSSION LIST Email: prr@lists.worldbank: Available: <http://www.medicine.dal.ca/mcewh/oct-synthesis/colman-htm> [20 October].
- Wichterich, C. 2000. Take Beijing home - Five Years later: will the impetus of the Action Platform be maintained? *Development and Cooperation* 3:8-11.
- Willem, M. and R. van der Lugt. 1974. *Lesotho: the development challenge*. Washington, D.C.: World Bank.
- William, B. 1993. What do large companies seek from a national information policy? In: *The value and impact of information*. Edited by Feeney, M. and M. Grieves. *The value and impact of information*. The British Library Research Information Policy Series. London: Bowker and Saur. pp. 255-282.
- Williamson, V. and F.C.A. Exon. 1996. The quality movement in Australian university libraries. *Library Trends* 44(3): 526-44.
- Wise, M. and A. Olden 1990. *Information and libraries in the developing world - vol.1 :Sub-Saharan Africa*. London: Library Association.
- Wise, M. (ed.). 1994. *Survival under adverse conditions- proceedings of the African library science journals workshop*. (IFLA professional reports, No.38) The Hague: International Federation of Library Associations and Institutions, IFLA..
- Women and Law in Southern Africa (WLSA). 1997. *Beyond inequalities: women in Lesotho*, written by P. Letuka, K. Matashane and B.L. Morolong. Maseru, Lesotho: Women and Law in southern Africa (WLSA) Lesotho and SARDC.
- Wood, L. 1988. Performance measurement and evaluation. In: *Handbook of library and information management*. Edited by Prytherch. Aldershot: Gower. pp.124-148.
- World Bank. 2001. *Attacking poverty, World Development Report 2000/2001*. Washington: World Bank/Oxford University Press.

- World Bank. 2000. *Entering the 21st century World Development Report 1999/2000*. Washington: World Bank/Oxford University Press.
- World Bank. 1985. *World Bank annual report 1985*. New York: The World Bank.
- World Bank. 1990. *World Development Report 1990*. New York: The World Bank.
- World Bank. 1999. *World development report: knowledge for development* - including selected world development indicators, 1998/99. Published for the World Bank - IBRD by Oxford University Press.
- World Health Organization. 1980. *On being in charge: a guide for middle-level management in primary health care*. Edited by McMahon, R., E. Barton, and M. Piot. Geneva: WHO.
- Wright, C. 1999. Female singlehood and urban space in Lesotho. *Review of southern African studies* - a multidisciplinary journal of Arts, social and behavioural sciences 3(2):76-103.
- Yin, R. K. 1984 *Case study research : design and methods*. Applied social research methods series, vol. 5. Beverly Hills: Sage.
- Yin, R. K. 1992. The case study method as a tool for doing evaluation. *Current sociology* 40(1):121-137.
- Yin, R.K. 1994. *Case study research: design and methods*. 2nd ed. Applied social research methods series, vol. 5. London: Sage.
- Zaaiman, R.B., P.J.A. Roux and J.H. Rykheer 1988. *Use of libraries for the development of Southern Africa- popularising research results - final report on the investigation for the South African institute for librarianship and information science*. Pretoria: UNISA - Department of Library and Information Science.
- Zell, H. 2000. *The Electronic bookwork - a web navigator*. Oxford: African Books Collective.
- Zilzstra, B.H.A. 1993. History of US STI and subject categories. In: *GL '93 conference proceedings - first international conference on grey literature: Weinberg report 2000, Amsterdam December, 13-15 1993*. Edited by Farace, D.J. Amsterdam: TransAtlantic. pp.270-289.
- Zulu, S. E.C. 1994. Africa's survival plan for meeting the challenge of information technology in the 1990s and beyond. *Libri* 44(1):77-94.

APPENDIX 1

A QUESTIONNAIRE FOR NUL ACADEMIC COMMUNITY

Teaching, research, administrative staff and students

Code: acad.....

Date:.....

This questionnaire is part of a study being conducted to assess both the services of ISAS Documentation centre and its products, specifically technical reports. Knowing who produce these reports, how much, and who uses them can assist us improve information services. As a member of the academic community who is likely to write or read reports or both, you might have valuable experience that informs this enquiry. You may also have views about the strengths and weaknesses of the centre, which will help us make an objective assessment. This will help in our planning and provision of our services. It might also help other authorities of similar situations. The general enquiry is on production, readership, use of technical reports, their management by information brokers, the benefits or effect if any. Please, kindly spare some time to answer all the relevant questions as fully as possible.

Identification

Tick in the appropriate box, and specify what is applicable to you. Please ignore the numbers in the square brackets. They are for use by the researcher.

1. Gender:

Male	[]	[1]
Female	[]	[2]

2. Age: In which age group do you belong ?

Please tick the appropriate box

below 30	[]	[1]
31 - 39	[]	[2]
40 - 49	[]	[3]
50 and above	[]	[4]

3. Designation:

NUL Staff	[]	[1]
NUL Student	[]	[2]
Lesotho Civil servant	[]	[3]
Other, specify.....		[4]

4. To which constituency do you belong ?
- | | | | |
|---------------------|--------------------------|--------------------|-----|
| Faculty | <input type="checkbox"/> | Specify dept | [1] |
| Institute | <input type="checkbox"/> | Specify which..... | [2] |
| Library | <input type="checkbox"/> | | [3] |
| Administration | <input type="checkbox"/> | | [4] |
| Govt. ministry | <input type="checkbox"/> | Specify..... | [5] |
| Other, Specify..... | | | [6] |

5. What is your Status ?
- | | | |
|-----------------------------|--------------------------|------|
| Undergraduate student | <input type="checkbox"/> | [1] |
| Postgraduate student | <input type="checkbox"/> | [2] |
| Assistant Research fellow | <input type="checkbox"/> | [3] |
| Assistant Lecturer | <input type="checkbox"/> | [4] |
| Assistant Administrator | <input type="checkbox"/> | [5] |
| Assistant Librarian | <input type="checkbox"/> | [6] |
| Lecturer | <input type="checkbox"/> | [7] |
| Research Fellow | <input type="checkbox"/> | [8] |
| Assistant Registrar | <input type="checkbox"/> | [9] |
| Senior Lecturer/Res. Fellow | <input type="checkbox"/> | [10] |
| Senior Assistant Librarian | <input type="checkbox"/> | [11] |
| Senior Assistant Registrar | <input type="checkbox"/> | [12] |
| Associate Professor | <input type="checkbox"/> | [13] |
| Deputy Librarian | <input type="checkbox"/> | [14] |

Please tick the appropriate box

- | | | |
|-------------------------|--------------------------|------|
| Deputy Registrar/Bursar | <input type="checkbox"/> | [16] |
| Full Professor | <input type="checkbox"/> | [17] |
| Other, specify..... | | [18] |

6. Where do you live ? Tick the box that applies to you

- | | | |
|----------------------|--------------------------|-----|
| Roma | <input type="checkbox"/> | [1] |
| Maseru | <input type="checkbox"/> | [2] |
| Elsewhere in Lesotho | <input type="checkbox"/> | [3] |
| Outside Lesotho | <input type="checkbox"/> | [4] |

7. ISAS Documentation centre is used for various purposes such as for consulting ISAS reports/documents, for reading non-ISAS or user's own materials, for making general information enquiries, for photocopying and so forth. Do you in this regard use ISAS Documentation Centre ?

Yes	<input type="checkbox"/>	[1]
No	<input type="checkbox"/>	[2]

If 'Yes' go to 8 through 10, skip 11 to 12

If 'No', go to 11

8. Please indicate how often do you use ISAS Documentation centre by ticking appropriate box.

Once per month	<input type="checkbox"/>	[1]
2 - 4 times per month	<input type="checkbox"/>	[2]
Between 1 to 5 times a week	<input type="checkbox"/>	[3]
Once or more per day	<input type="checkbox"/>	[4]

9. For how long have you been using ISAS documentation centre, irrespective of the frequency of use as stated in question 8 above ? Please tick the appropriate box

Less than a year	<input type="checkbox"/>	[1]
1- 5 years	<input type="checkbox"/>	[2]
6 - 10 years	<input type="checkbox"/>	[3]
11- 1979	<input type="checkbox"/>	[4]

10. If you do not live in Roma, do you ever travel to Roma specifically for use of ISAS documentation centre ?

Yes	<input type="checkbox"/>	[1]
No	<input type="checkbox"/>	[2]

If 'Yes', go to 13

If No, but you still use ISAS Documentation Centre when you happen to be in Roma, go to 13

11. If you do not use ISAS documentation centre, are there any other information centres/libraries in Lesotho that you use?

Yes	[]	[1]
No	[]	[2]

12. If 'Yes', please list them.

.....

.....

.....

.....

.....

If you do not use ISAS Documentation centre, and have listed the centres that you use, or, if you have indicated that there are no information centres that you use in Lesotho, thank you very much for the information. Please return the questionnaire.

13. If you use ISAS Documentation centre, are there any other information centres/libraries that you use as well in Lesotho ?

Yes	[]	[1]
No	[]	[2]

If No, go to 15

14. If 'Yes', please list them and continue from 15

.....

.....

.....

.....

15. Listed below are types of technical reports. Please indicate by ticking the appropriate box on the right, if you have written, produced or assisted in the production of any of these, and the frequency of your participation in the production.

Have not	Seldom	Do so
produced	do	Regularly

16. Academic reports (theses, dissertations, students' academic reports, etc) [] [] []
17. Conference proceedings (final reports from gatherings like seminars, colloquia, etc) [] [] []
18. Situation/state-of-the-art reports (surveys or reviews by activists in the field, such as country papers for symposia) [] [] []
19. Project reports (feasibility study, project proposals, Progress/mid-term, interim, final) [] [] []
Continue to tick appropriate box for the type you do or not write/produce
20. Incident/enquiry (investigations into crises, events, cases, done by commissions) [] [] []
21. Official reports (annual reports, budgets, speeches, highlights, white papers) [] [] []
22. Special committees/inter-governmental reports for standing or ad-hoc tasks [] [] []
23. If you have participated in the preparation of reports as consultant or expert, continue with the questionnaire. If you have not, go to question 30

In most cases where you participated as consultant/expert indicate how were you selected and rank the frequency of that method ? Tick Rank

Advertisement	[]	[]	[1]
Head-hunt	[]	[]	[2]
Combination of methods	[]	[]	[3]
Other methods, specify	[]	[]	[4]

24. According to your experience, how often are drafts returned to authors/experts/consultants for content modification/moderation/revision before those reports are approved and issued by commissioning or sponsoring bodies ?

They are never content modified	[]	[1]
They are rarely modified, revised	[]	[2]
They are often modified, revised	[]	[3]
Very often they are modified	[]	[4]
They are always modified	[]	[5]

25. Please indicate specifically, one particular report which you regard as the most important that you were involved in producing

26. In what way(s), and to whom in general was it important ?

.....

27. Have you deposited any of the reports you wrote or participated in producing, to any of the Lesotho libraries/documentation centres ? Tick appropriate box.

Yes	[]	[1]
No	[]	[2]

28. If yes, specify one report deposited and the library/information centre where it was deposited.

Report:

Library/documentation centre:

29. If 'No', state reasons why you have not.

30. For what purpose(s) do you normally use ISAS documentation centre ? Please tick as many options listed below, as they apply to you, and rank them in their order of importance from 1 as low and 3 as the highest

	Tick if <u>applicable</u>	Rank importance	
		<u>if ticked</u>	<u>ignore</u>
Student assignment(s)	[]	[]	[1]
Student project(s)	[]	[]	[2]
Teaching assignment(s)	[]	[]	[3]
Research assignment(s)	[]	[]	[4]

Consultancy work	[]	[]	[5]
Conference/seminar paper	[]	[]	[6]
Administrative work	[]	[]	[7]
A mix of several purposes	[]	[]	[8]
Other, please specify.....	[].	[]	[9]

31. Are these your typical information needs

Yes	[]	[1]
No	[]	[2]
Other, specify.....	[]	[3]

FINDING DOCUMENTS/REPORTS BY SOURCES

32. When you are looking for a report/document, which of the following do you often know ?

Please tick box(es) appropriate and rank them by frequencies 1 as the most frequent, and 3 not so often

	<u>Tick</u>	<u>Rank</u>	
Author	[]	[]	[1]
Title	[]	[]	[2]
Subject/topic	[]	[]	[3]
Author, title, subject/topic	[]	[]	[4]

34. When any of the details above are known, what do you do? Please tick appropriate box.

Self-service before ordering the item	[]	[1]
Immediately order from staff, with known details	[]	[2]
Combination of self-service and staff assistance	[]	[3]

If 'self-service' go to 35

If 'assisted' partly or fully, go to 37

35. In the case of 'self-service', please indicate which of the following guides (tools) you consult, and please rank how often you use the guide with 1 for least, and 3 most frequently used

	<u>Tick</u>	<u>Rank</u>	
Computer data bases on my own	<input type="checkbox"/>	<input type="checkbox"/>	[1]
Computer service through assistance of staff	<input type="checkbox"/>	<input type="checkbox"/>	[2]
Manual catalogues/indexes/bibliographies, on my own	<input type="checkbox"/>	<input type="checkbox"/>	[3]
Combination of manual and computerised sources on my own	<input type="checkbox"/>	<input type="checkbox"/>	[4]
Combination of manual and computerised sources, assisted	<input type="checkbox"/>	<input type="checkbox"/>	[5]

36. How would you describe the process of using the different guides or finding tools available at ISAS ?

Very easy	<input type="checkbox"/>	[1]
Easy	<input type="checkbox"/>	[2]
Not easy	<input type="checkbox"/>	[3]
Somewhat difficult	<input type="checkbox"/>	[4]
Very difficult	<input type="checkbox"/>	[5]

37. If you are/were fully or partly assisted, how accurate are staff in getting the report that you require or that match your needs ?

They often provide me with exactly what I require	<input type="checkbox"/>	[1]
They often provide what is close to what I require	<input type="checkbox"/>	[2]
They often provide what is far from what I want	<input type="checkbox"/>	[3]

38. For persons who use guides/primary sources like bibliographies, lists, indexes, computer data bases that announce or alert you to materials that have newly been acquired or are available, how up-to-date are these primary sources in making you aware of what is available ? Tick appropriate box.

They are up-to-date	<input type="checkbox"/>	[1]
They are not up-to-date	<input type="checkbox"/>	[2]
Undecided	<input type="checkbox"/>	[3]

39. Are the sources easily available in terms of owning by purchasing or for free?

Yes	<input type="checkbox"/>	[1]
No	<input type="checkbox"/>	[2]
Other, specify.....	<input type="checkbox"/>	[3]

40. Are the sources easy and widely accessible beyond the confines of ISAS ?

Yes, they are accessible	[]	[1]
No, they are not	[]	[2]
Other, specify.....		[3]

41. As a user of ISAS documentation centre, is there any one document/report that you recently (from 1999 to 2000) looked for from the centre, found and read/used ?

Yes	[]	[1]
No	[]	[2]

If 'No', go to 48

42. If 'Yes', indicate the report/document by either title, author or any form of identification,
Identification (s):

For what purpose did you use the report you consulted? Please tick the appropriate box(es)

Student assignment	[]	[1]
Student project writing	[]	[3]
Official research project/official task	[]	[4]
Student project supervision	[]	[5]
Teaching	[]	[6]
Consultancy	[]	[6]
Conference	[]	[7]
Report writing	[]	[8]
Other, specify.....	[]	[9]

43. By checking the relevant box, please assess the report you have used by **value**, meaning the benefit you accrue, in terms of the information you needed, and taking into consideration your efforts like costs, time you incurred to get that benefit.

Of great benefit and value	[]	[1]
Of little benefit and value	[]	[2]
Of no benefit and value	[]	[3]

44. Of what level of **quality** in terms of credibility, trustworthiness, expertise was information in the report you used ?

It was of very poor quality	[]	[1]
It was of poor quality	[]	[2]
It was of average quality	[]	[3]
It was of good quality	[]	[4]
It was of very good quality	[]	[5]
Unable to determine	[]	[6]

45. Briefly explain why you describe it as poor quality ?

46. Briefly explain why you describe it as good quality ?

47. Briefly assess the **appropriateness** of the document used, in terms of its title matching the content, coverage of the subject, and matching your expectation when requesting it

It was very inappropriate	[]	[1]
It was inappropriate	[]	[2]
It was appropriate	[]	[3]
It was very appropriate	[]	[4]
Unable to determine	[]	[5]

48. When you are/were unable to get a report/item or information you are/were looking for at ISAS, what do you, or did you do ? More than one response may apply. **E** appropriate box(es).

Opt to return to ISAS later to retrace the item	[]	[1]
---	-----	-----

Give up a search on the information	[]	[2]
-------------------------------------	-----	-----

Trace the item from the producer of the material	[]	[3]
--	-----	-----

Look for it from friends, colleagues, etc	[]	[4]
---	-----	-----

Other alternative(s), specify.....	[]	[5]
------------------------------------	-----	-----

Locate it from other information centres/libraries [] [6]

48.b If they are located from elsewhere, please specify such libraries/centres that you would normally contact in cases when material are not available at ISAS

49. Have you had to return to ISAS for the same purpose?

Yes [] [1]

No [] [2]

50. If you had to return to ISAS for the centre to trace the material, how often was this done?

Very often [] [1]

Seldom [] [2]

51. In cases when you have had to return to ISAS, how successful was/were the next trial[s] at ISAS ?

Very successful [] [1]

Successful [] [2]

Rarely successful [] [3]

Never successful [] [4]

52. How successful have you been in tracing material from producers ?

Very Successful [] [1]

Successful [] [2]

Rarely been successfully [] [3]

Never successful [] [4]

53. How successful have you been in tracing material from colleagues, friends, such private sources ?

Very Successful [] [1]

Successful [] [2]

Rarely been successfully [] [3]

Never successful [] [4]

54. Have you experienced incidences when you were unable to find a report/document or information you needed from ISAS centre, and been unable as well to get it from any other centre or other possible alternatives in Lesotho as listed in question 48 above ?

Yes [] [1]

No [] [2]

If 'No', go to 56

55. If 'Yes', please describe briefly what consequence the unavailability had on the situation, need, or problem for which you required information, if there was any.

56. Have you used from ISAS, the report collection that pertains to:
Women's conference, Copenhagen 1980

Yes [] [1]

No [] [2]

If 'No, go to 58

57. If 'Yes', what can you say about its coverage ?

It is very poor [] [1]

It is poor [] [2]

It is moderate [] [3]

It is good [] [4]

It is very good [] [5]

58. Have you used from ISAS, the report collection that pertains to:
Women's conference, Nairobi, 1985

Yes [] [1]

No [] [2]

If 'No' go to 60

59. If 'Yes', what can you say about its coverage ?

It is very poor [] [1]

It is poor [] [2]

It is moderate [] [3]

It is good [] [4]

It is very good [] [5]

60. Have you used from ISAS, the report collection that pertains to:

Women's conference, Beijing 1990

Yes [] [1]

No [] [2]

If 'No', go to 62

61. If 'Yes', what can you say about its coverage ?

It is very poor [] [1]

It is poor [] [2]

It is moderate [] [3]

It is good [] [4]

It is very good [] [5]

62. Have you used from ISAS, the report collection that pertains to:
Human Rights Conference, Copenhagen 1992

Yes [] [1]

No [] [2]

If 'No', go to 64

63. If 'Yes', what can you say about its coverage ?

It is very poor [] [1]

It is poor [] [2]

It is moderate [] [3]

It is good [] [4]

It is very good [] [5]

64. Have you used from ISAS, the report collection that pertain to:
Food Summit, Rome 1993

Yes [] [1]

No [] [2]

If 'No', go to 66

65. If 'Yes', what can you say about its coverage ?

It is very poor [] [1]

It is poor [] [2]

It is moderate [] [3]

It is good [] [4]

It is very good [] [5]

66. Have you used from ISAS, the report collection that pertains to:
Population Summit, Cairo 1994

Yes	[]	[1]
No	[]	[2]

If 'No' go to 68

67. If 'Yes', what can you say about its coverage ?

It is very poor	[]	[1]
It is poor	[]	[2]
It is moderate	[]	[3]
It is good	[]	[4]
It is very good	[]	[5]

68. Have you used from ISAS, the report collection that pertains to:
Social Summit, Copenhagen 1998

Yes	[]	[1]
No	[]	[2]

If 'No', go to 70

69. If 'Yes', what can you say about its coverage ?

It is very poor	[]	[2]
It is poor	[]	[3]
It is moderate	[]	[4]
It is good	[]	[5]
It is very good	[]	[6]

70. Have you used from ISAS, the report collection that pertains to:
Women's conference, New York 2000

Yes	[]	[1]
No	[]	[2]

If 'No', go to 72

71. If 'Yes, what can you say about its coverage ?
- | | | |
|-----------------|-----|-----|
| It is very poor | [] | [1] |
| It is poor | [] | [2] |
| It is moderate | [] | [3] |
| It is good | [] | [4] |
| It is very good | [] | [5] |
72. Do you feel that there is the likelihood of other people benefiting from your using/reading the reports you have used ?
- | | | |
|----------------|-----|-----|
| It is likely | [] | [1] |
| It is unlikely | [] | [2] |
| I do not know | [] | [3] |
| Other, comment | | |
73. If it is likely, who and in what specific way are they likely to benefit ?
74. Do you know any development project in Lesotho, that is not succeeding or did not succeed as planned?
- | | | |
|-----|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |
- If 'No' go to 77
75. If 'Yes', please describe that development project by
- Title
- Authority and or sponsor
- Year/duration of operation
- Scope/Focus
76. In your view, what are the factors that contributed to its failure ?

77. There are instances when research studies have been duplicated because parties involved could not have access to previous reports or information. Are you aware of such instances?

Yes [] [1]

No [] [2]

If 'No', go to 79

78. If 'Yes', describe the first and the second project/scheme that was a duplication, using the following details

First project's title

Authority/sponsor

Year/duration of operation

Focus/scope

Second project's title

Authority/sponsor

Year/duration of operation

Focus/scope

79. One of ISAS's objectives is to manage the report literature which is presumed to channel information for development. Through your experience, how would you assess the adequacy of that objective? Tick as appropriate.

Very adequate [] [1]

Adequate [] [2]

Inadequate [] [3]

Very inadequate [] [4]

Unable to tell [] [5]

80. If it is adequate/very adequate, briefly explain in what way it is so.
81. If it is inadequate, briefly explain in what way it is so?
82. How do you assess ISAS documentation centre's performance in discharging its obligation of managing the report literature ?
- | | | |
|-------------------------|-----|-----|
| Very good performance | [] | [1] |
| Good performance | [] | [2] |
| Not so good performance | [] | [3] |
| Poor performance | [] | [4] |
| Very poor performance | [] | [5] |
| Unable to tell | [] | [6] |

We thank you very much for this valuable information.

Return the questionnaire to the sender as shown below, or through the NUL Mail Room.

Matseliso Moshoeshe-Chadzingwa

Room 3

ISAS - NUL

Tel: 340247,

340601- Ext. 3867

Or 854122

APPENDIX 2

A QUESTIONNAIRE FOR INFORMATION WORKERS

Code: IW.....

Date:.....

Site:.....

A study is being conducted on the performance of technical reports as a channel of information for development for which we seek information from a number of groups involved in the production, distribution, dissemination and use of technical reports. Librarians, documentalists, and their systems, as intermediaries in the mentioned process, are regarded crucial in providing relevant details. You are therefore kindly asked to spare a few minutes to help answer the questionnaire. You are kindly requested to answer it yourself and not with a colleague since s/he too has her/his own questionnaire. It will thus make a difference if all give their independent opinion on the enquiry.

IDENTIFICATION

Tick appropriate box on the left, and ignore the box with a code number.

1. Gender: Female [] [1]
 Male [] [2]

2. Age: Below 30 [] [1]
 31 - 39 [] [2]
 40 - 49 [] [3]
 50 and above [] [4]

3. Educational and professional qualifications

Please give your highest qualification

4. Work Status:

Please indicate your status at work

- | | | |
|---|-------|-----|
| Desk assistant, Library assistant, | [] | [1] |
| Assist. Librarian/assist. Documentalist/assist. Archivist | [] | [2] |
| Librarian/Documentalist, Archivist | [] | [3] |
| Senior Librarian/Senior Documentalist/Sen. Archivist | [] | [4] |
| Assoc. Prof./ Deputy and Chief Librarian | [] | [5] |
| Other, specify..... | [] | [6] |

5. When was the library/information centre in which you currently work established ?

6. For how long have you been working for this centre? Tick appropriate box

Less than 5 years ☐ [1]

6 - 9 years ☐ [2]

10 - 19 years ☐ [3]

Over 20 years ☐ [4]

7. Libraries and information centres often have policies, missions and objectives stating, for instance, their focus, what their subject coverage is, and all what the centres may fundamentally strive for, and in line with the parent organisation. It is such guidelines which may determine priorities on acquisitions and patronage. In most cases, though there may be no stated missions or policies, for administrative purposes, libraries/information centres have several standing practices that they adhere to on major areas. Would you tell in this regard if your library/centre has a general policy on what it stocks and for who? Please tick appropriate box/es

Yes, there is a policy ☐ [1]

Yes there are several standing practices ☐ [2]

No there is no policy ☐ [3]

If 'No' go to 10

8. If 'Yes', is a policy, mission statement or objective, written ?

Yes, there is a written policy ☐ [1]

No, it is not written ☐ [2]

9. If there is a written one, could you kindly provide a copy for reference of this study?

Yes ☐ [1]

No ☐ [2]

10. If there is no written policy, do you think it is necessary ?

11. If 'Yes' there is a policy and there are standing practices, what are they on the following:

: Acquisitions, type of material and stock

: Clientele, target users or patron

12. If there are policies, are they always adhered to by all working in the centre/library ?

- | | | |
|-------------|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |
| Do not know | [] | [3] |

13. If 'No', can you comment briefly why and how they are not?

14. Is there a separate annual budget for the acquisition purposes

- | | |
|-----|-----|
| No | [1] |
| Yes | [2] |

If 'No', go to 16

15. If 'Yes', can you give an estimated percentage of each of the following for the years 1999 and 2000 ?

	1999	2000
Acquisitions
Processing
Dissemination

16. Please list all the types of material that your library/information centre is acquiring
.....
.....

17. Sources of stock may vary from formal purchases from bookshops, to automatic depositories from parent organisations, government departments and international agencies, just to mention some. Materials for libraries/information centres may also come from informal sources like requests from individuals, collecting from seminars, special or ad hoc donations or deposits and so forth from within or outside a country. Below, are categories of sources from which you are requested to estimate and rank how much your library/centre gets in its collection. Please tick as many as appropriate, and rank from 5 as the highest, 1 as the lowest, and 0 as giving none to your centre/library.

	0	1	2	3	4	5	ignore
Bookshops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[1]
NUL Administration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[2]
NUL Faculties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[3]
NUL Institutes (except ISAS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[4]
ISAS in particular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[5]
NUL Information centres/libraries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[6]
Government Ministries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[7]
Aid/develop. agencies in Lesotho	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[8]
NGOs /societies in Lesotho	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[9]
NUL individual academics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[10]
Individuals outside NUL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[11]
Consulting firms in Lesotho	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[12]
Organisations within SADC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[13]
International bodies abroad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[14]
Others, specify.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[15]

In the list given below, are given types of technical reports, please indicate which types your centre/library acquire, and in what quantities, if any. Tick appropriate box and ignore box with code number

19. Academic reports - theses, dissertations, inaugural speeches:

None	<input type="checkbox"/>	[1]
Low	<input type="checkbox"/>	[2]
Average	<input type="checkbox"/>	[3]
High	<input type="checkbox"/>	[4]
Unable to estimate	<input type="checkbox"/>	[5]
Not applicable	<input type="checkbox"/>	[6]

20. Situation/state-of-the-art : - survey or reviews done by experts in the field, providing most up-to-date information in a subject, areas, or about a country for formal conferences, symposia

None	<input type="checkbox"/>	[1]
Low	<input type="checkbox"/>	[2]
Average	<input type="checkbox"/>	[3]
High	<input type="checkbox"/>	[4]
Unable to estimate	<input type="checkbox"/>	[5]

21. Project's reports: - research proposals
 - feasibility study reports
 - progress/mid-term/interim reports
 - final reports
- | | | |
|--------------------|-----|-----|
| None | [] | [1] |
| Low | [] | [2] |
| Average | [] | [3] |
| High | [] | [4] |
| Unable to estimate | [] | [5] |
22. Conference proceedings or reports from events such as seminars, colloquia, symposia, congresses organised by own corporate body
- | | | |
|--------------------|-----|-----|
| None | [] | [1] |
| Low | [] | [2] |
| Average | [] | [3] |
| High | [] | [4] |
| Unable to estimate | [] | [5] |
23. Organisational/corporate's annual reports, highlights, reviews and like technical papers
- | | | |
|--------------------|-----|-----|
| None | [] | [1] |
| Low | [] | [2] |
| Average | [] | [3] |
| High | [] | [4] |
| Unable to estimate | [] | [5] |
24. Incident/Enquiry : - investigations into events, cases, crises, phenomenon conducted by an independent team (commissions of enquiry giving recommendations)? Indicate there are none, low quantities, average or high quantities
- | | | |
|--------------------|-----|-----|
| None | [] | [1] |
| Low | [] | [2] |
| Average | [] | [3] |
| High | [] | [4] |
| Unable to estimate | [] | [5] |

25. Considering the main sources of stock as mentioned in question 17, can you indicate show much of TRs are acquired from those sources, in the fields of gender and agriculture. ? Mark in a scale ranging from 1 as the lowest and 5 as the highest. Details provided in italics are given as an example how to answer.

<u>Subject</u>	<u>Source</u>	<u>Tick</u>	<u>How much</u>
Agriculture:			
eg	<i>NGOs</i>	[√]	[3]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]

<u>b. Gender:</u>	<u>Source</u>	<u>Tick</u>	<u>Rank</u>
eg.	<i>Government ministries..</i>	[√]	[0]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
	[]	[]
Gender cont.			
	[]	[]
	[]	[]
	[]	[]
	[]	[]

26. Basing yourself on the given seven types of technical reports listed from question 19 to 24, and as listed below, can you estimate which types in your library/centre are prevalent in the fields of gender and agriculture ? Please tick appropriate box , and rank quantities in your current stock from 0 as none to 5 as the highest. The details in italics are given as an example.

<u>Field</u>	<u>Type of reports</u>	<u>Tick</u>	<u>Rank</u>	<u>Ignore</u>
Agriculture:	Academic reports	[]	[]	
			[1]	
	Conference proceedings	[]	[]	[2]
	Situation/state-of-the-art	[]	[]	[3]
	Projects reports	[]	[]	[4]
	Organisational/corporates	[]	[]	[5]
	Incident/enquiry	[]	[]	[6]
Gender:	Special/Intergovernmental	[]	[]	[7]
	Academic reports	[]	[]	
			[1]	
	Conference proceedings	[]	[]	[2]
	Situation/state-of-the-art	[]	[]	[3]
	Projects reports	[]	[]	[4]
	Organisational/corporates	[]	[]	[5]
	Incident/enquiry	[]	[]	[6]
	Special/Intergovernmental	[]	[]	[7]
	<i>Special/Intergovernmental</i>	[√]	[2]	[7]

Listed below are kinds of global events that generated various types of technical reports.

Did your centre collect/acquire/get reports emanating from these international and regional conferences ? Please tick appropriate box

- | | | | | |
|-----|-------------------------------|-------------|-----|-----|
| 27. | Women's conf. Copenhagen 1980 | Yes | [] | [1] |
| | | No | [] | [2] |
| | | Do not know | [] | [3] |
| 28. | Women's conf. Nairobi, 1985 | Yes | [] | [1] |
| | | No | [] | [2] |
| | | Do not know | [] | [3] |
| 29. | Food Summit, 1993 | Yes | [] | [1] |
| | | No | [] | [2] |
| | | Do not know | [] | [3] |
| 30. | Social Summit Copenhagen | Yes | [] | [1] |
| | | No | [] | [2] |
| | | Do not know | [] | [3] |
| 31. | Human Rights Conf. 1993 | Yes | [] | [1] |
| | | No | [] | [2] |

		Do not know	[]	[3]
32.	Women's conf. Beijing 1990	Yes	[]	[1]
		No	[]	[2]
		Do not know	[]	[3]
33.	Women's conf. New York 2000	Yes	[]	[1]
		No	[]	[2]
		Do not know	[]	[3]
34.	Population Summit, Cairo 1994	Yes	[]	[1]
		No	[]	[2]
		Do not know	[]	[3]
35.	SADC Agricultural Ministerial Summit 1999	Yes	[]	[1]
		No	[]	[2]
		Do not know	[]	[3]
36.	2 nd Food Summit Rome 1997	Yes	[]	[1]
		No	[]	[2]
		Do not know	[]	[3]

Restricted access

37.	Does your service receive classified, restricted. secret reports ?		
	Yes	[]	[1]
	No	[]	[2]

If 'no' go to 41

38.	If 'Yes', are they handled differently ?		
	Yes	[]	[1]
	No	[]	[2]

39	If 'Yes', how differently are they handled ?		
----	--	--	--

40.	If 'Yes', how do you get them before acquiring?		
-----	---	--	--

	When we hear about them we request from producers	[]	[1]
	They are deposited automatically by producers	[]	[2]

Various non-conventional ways of acquisition	[]	[3]
Other, specify.....	[]	[4]

41. If 'No' are efforts being made to acquire them ?
- | | | |
|-----|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |

PROCESSING

42. Which of the following is applied to TRs by your library
- | | Fully done | Partially done | Not done | <u>ignore</u> |
|-----------------|------------|----------------|----------|---------------|
| Cataloguing | [] | [] | [] | [1] |
| Classification | [] | [] | [] | [2] |
| Abstracting | [] | [] | [] | [3] |
| Indexing | [] | [] | [] | [4] |
| Synthesis/Notes | [] | [] | [] | [5] |
| SDI/repackaging | [] | [] | [] | [6] |
| Other, specify | [] | [] | [] | [7] |

43. How much of your TRs are announced on the Internet ?
- | | | |
|----------|-----|-----|
| A little | [] | [1] |
| A lot | [] | [2] |

AWARENESS OF AND ACCESSIBILITY TO COLLECTION

There is a belief that awareness of availability and access to collection, facilitates browsing that activates needs.

44. Does your centre uphold this belief ?
- | | | |
|-------------|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |
| Do not know | [] | [3] |
| Other | [] | [4] |

45. If 'Yes', please describe how your library makes users in all their categories aware of what is in stock and of current materials; if current awareness tools are subject-aggregated, how frequent they are, how they are disseminate; if catalogues are manual, online or both and if they are available within the library, on local or wider area networks.

NEEDS/DEMANDS

46. How is your library/centre informed about needs that users place on information channelled by TRs ? Rank which ever is prevalent from 1 the lowest to 5 the prevalent method.

	<u>Tick</u>	<u>Rank</u>	<u>ignore</u>
Users express needs/demands at the enquiries	[]	[]	[1]
Intermediaries conduct needs assessment studies	[]	[]	[2]
Intermediaries anticipate needs from topical issues	[]	[]	[3]
Other, specify	[]	[]	[4]
Do not know	[]	[]	[5]

Needs of TRs by sectors

47. Who mostly need/demand TRs that channel information on agriculture? Please rank in order of lowest needs as [1] and the highest as [5]

	<u>Tick</u>	<u>Rank</u>	<u>Ignore</u>
Researchers from institutes (exclude ISAS)	[]	[]	[1]
Researchers from ISAS in particular	[]	[]	[2]
Academic staff faculty of agriculture	[]	[]	[3]
Students faculty of agriculture	[]	[]	[4]
Other students	[]	[]	[5]
Other Faculties	[]	[]	[6]
NUL Administrative staff	[]	[]	[7]
Officials from the Ministry of Agriculture	[]	[]	[8]
Officials from other ministries	[]	[]	[9]
Donor community	[]	[]	[10]
Individual farmers and practitioners	[]	[]	[11]
Agricultural related NGOs	[]	[]	[12]
Other	[]	[]	[13]

48. Is your centre able to meet the agricultural information needs of its clientele?

Yes, almost satisfactorily	[]	[1]
Yes, to a limited extent	[]	[2]
No	[]	[3]
Unable to tell	[]	[4]

49. Who mostly need/demand TRs that channel information on gender ? Please rank in order of lowest needs as [1] and the highest as [5]

	<u>Tick</u>	<u>Rank</u>	<u>Ignore</u>
ISAS Researchers	[]	[]	[1]
Researchers from other institutes	[]	[]	[2]
Academic staff faculty of agriculture	[]	[]	[3]
Academic staff of humanities	[]	[]	[4]
Academic staff of science	[]	[]	[5]
Academic staff of social sciences	[]	[]	[6]
Academic staff of law	[]	[]	[7]
Academic staff of education	[]	[]	[8]
Academic staff of health sciences	[]	[]	[9]
Administrative staff	[]	[]	[10]
Students from faculty of agriculture	[]	[]	[11]
Students from humanities	[]	[]	[12]
Students from sciences	[]	[]	[13]
Students from social sciences	[]	[]	[14]
Students from law	[]	[]	[15]
Students from education	[]	[]	[16]
Students health sciences	[]	[]	[17]
Ministry of Environ, Youth & Gender	[]	[]	[18]
Other government officials	[]	[]	[19]
NGOs	[]	[]	[20]
Aid/development agencies	[]	[]	[21]
Other, specify.....	[]	[]	[22]

50. Is your centre able to meet the gender-related information needs of its clientele?

Yes, almost satisfactorily	[]	[1]
Yes, to a limited extent	[]	[2]
No	[]	[3]
Unable to tell	[]	[4]

51. Do you often follow up on user's special requests that are not met on the spot ?
Tick.

Yes, we often do	[]	[1]
Yes, but seldom	[]	[2]
No we do not	[]	[3]

52. In cases where you follow up, which sources or centres often meet your requests ?
You may tick more than one but indicate the level at which each is helpful, from [1] denoting little help to [3] for maximum help

	<u>Tick</u>	<u>Rank</u>	<u>ignore</u>
Relevant government ministries	[]	[]	[1]
Development aid agencies	[]	[]	[2]
Individuals/consultants/researchers	[]	[]	[3]
Specialised documentation centres	[]	[]	[4]
Other, specify.....	[]	[]	[5]

53. How many requests for TRs are received through the Internet ?

None	[]	[1]
A little	[]	[2]
Average	[]	[3]
A lot	[]	[4]

USE

54. Please estimate level of **USE** by the following groups, of TRs on and about agriculture in Lesotho, from [0] as non-use, and lowest of [1] to the highest of [5]

	<u>Tick</u>	<u>Rank</u>	<u>Ignore</u>
ISAS Researchers	[]	[]	[1]
Researchers from other institutes	[]	[]	[2]
Academic staff faculty of agriculture	[]	[]	[3]
Academic staff of humanities	[]	[]	[4]
Academic staff of science	[]	[]	[5]
Academic staff of social sciences	[]	[]	[6]
Academic staff of law	[]	[]	[7]
Academic staff of education	[]	[]	[8]
Academic staff of health sciences	[]	[]	[9]
Administrative staff	[]	[]	[10]
Students from faculty of agriculture	[]	[]	[11]
Students from humanities	[]	[]	[12]
Students from sciences	[]	[]	[13]
Students from social sciences	[]	[]	[14]
Students from law	[]	[]	[15]
Students from education	[]	[]	[16]
Students health sciences	[]	[]	[17]
Government officials	[]	[]	[18]
NGOs	[]	[]	[19]
Aid/development agencies	[]	[]	[20]
Other, specify.....	[]	[]	[21]

55. Please estimate level of USE by the following groups, of TRs that pertain to gender in Lesotho

	<u>Tick</u>	<u>Rank</u>	<u>Ignore</u>
ISAS Researchers	[]	[]	[1]
Researchers from other institutes	[]	[]	[2]
Academic staff faculty of agriculture	[]	[]	[3]
Academic staff of humanities	[]	[]	[4]
Academic staff of science	[]	[]	[5]
Academic staff of social sciences	[]	[]	[6]
Academic staff of law	[]	[]	[7]
Academic staff of education	[]	[]	[8]
Academic staff of health sciences	[]	[]	[9]
Administrative staff	[]	[]	[10]
Students from faculty of agriculture	[]	[]	[11]
Students from humanities	[]	[]	[12]
Students from sciences	[]	[]	[13]
Students from social sciences	[]	[]	[14]
Students from law	[]	[]	[15]
Students from education	[]	[]	[16]
Students health sciences	[]	[]	[17]
Government officials	[]	[]	[18]
NGOs	[]	[]	[19]
Aid/development agencies	[]	[]	[20]
Other, specify.....	[]	[]	[21]

56. How much of use of TRs is your centre able to satisfy through the Internet ?

None	[]	[1]
A little	[]	[2]
Average	[]	[3]
A lot	[]	[4]

EFFECTS/IMPACT OF USE

57. ISAS's obligation, among other duties is to manage the report literature which is presumed to channel information for development. Through your experience as a user of the centre, how would you assess the adequacy of that mission/objective. Please tick.

Very adequate	[]	[1]
Adequate	[]	[2]
Inadequate	[]	[3]
Very inadequate	[]	[4]
Unable to tell	[]	[5]

58. If you think it is adequate, can you briefly tell in what way it is adequate ?

59. If it is inadequate, can you briefly tell in what way it is so?
60. How do you assess ISAS documentation centre's performance in discharging its obligation of managing the report literature, since 1979 when the centre started ?
- | | | |
|-----------------------|-----|-----|
| Very good performance | [] | [1] |
| Good performance | [] | [2] |
| Moderate performance | [] | [3] |
| Poor performance | [] | [4] |
| Very poor performance | [] | [5] |
| Unable to tell | [] | [6] |
61. If performance ranges from "poor, to very poor", can you state briefly what you regard as ISAS main failures with its specialized TRs services ?

We thank you very much for your views. Please return the questionnaire through the NUL Mail Room by addressing to the researcher named below.

MM Moshoeshoe-Chadzingwa
 ISAS, NUL, Tel: 340601: Ext. 3867 or 3886
 Or: cell: 854122

APPENDIX 3

INTERVIEW PROTOCOL FOR GOVERNMENT OFFICIALS

CODE : govtoff

DATE:.....

SITE:.....

For government officials comprising decision makers, planners and such senior executives.

The purpose of my meeting you is to seek your views pertaining to the study being conducted on performance assessment of technical reports as a channel of information for development, and with special reference to Lesotho, and in the field of agriculture and gender. The aim of this research is also to explore how effective information services in Lesotho are in facilitating that performance of technical reports. As a government official, as policy makers and/or a planner you play a pivotal role as producers/writers and as users of reports. Moreover, as the overall authorities over information services that are intermediaries in the process, you can inform this enquiry in terms of the current and future thinking about information management and development for the country. In this regard, may I kindly requested you to answer the following questions as candidly as you can.

Identification

(Tick and/or specify as appropriate)

1. Gender Male [] [1]
 Female [] [2]

2. What age group do you fall into

 below 30 [] [1]
 31 - 39 [] [2]
 40 - 49 [] [3]
 50 - and above [] [4]

(If respondent does not give category, indicate the estimated age group).

3. Designation: Though this particular information is optional, do you mind giving me your specific designation ?
4. Ministry: What is the actual name of the Ministry and the Department that you are working for ?
5. Length of service For how long you have been working in the government service ?

Less than 6	[]	[1]
6 - 10 years	[]	[2]
11 - 20 “	[]	[3]
21 and over	[]	[4]

6. Abode: Where do you live, if in Maseru, specify where ?

Production and distribution

Listed below, are types of technical reports. I will read to you, one type and request you to advise whether you produce or do not. You may be aware that your Ministry or department/section has produced. In that case I will request to be referred to the actual officer that might know.

7. Have you therefore, your ministry/office/section produced/issued the following and how often ? (Tick in a box that answers for each type)

Do not produced	Seldom	Issue issue	Not easy to estimate Regularly
--------------------	--------	----------------	--------------------------------------

8. Conference proceedings (final reports of gatherings like seminars, colloquia) [] [] [] []
(Note or ask for a copy of any one being referred to):

9. Situation/state-of-the-art reports (surveys or reviews by activists in the field, such as country papers for symposia) [] [] [] []
(Note anyone being referred to, if any)

10. Project reports (feasibility study, proposals, Progress/mid-term, interim, final) [] [] [] []
(Note or ask for a copy of anyone being referred to)

11. Incident/enquiry (investigations into crises, events, cases, done by commissions) [] [] [] []
(Note anyone being referred to)

12. Official, Internal reports (annual reports, budgets, official speeches, highlights, white papers [] [] [] []
(Note or ask for anyone being referred to)
13. Special committees/inter-governmental reports
standing or ad-hoc tasks reporting [] [] [] []
(Note anyone being referred to, if any)
14. Academic reports - theses, dissertations, students' project papers)
[] [] [] []
15. Others, specify.....
[] [] [] []
16. I will read the ones that you have given as are issued. (Note, there are a maximum of 8)
Indicate how they produced type by type?

- 17.
- | | By
who | Please rate | | | | Do not
know
(ignore) | |
|---------------------------------------|-----------|-------------|--------|-------|--------|----------------------------|-----|
| | | Never | Rarely | Often | Always | | |
| ministerial or government's own staff | [] | [] | [] | [] | [] | [] | [1] |
| commissioned consultants/experts | [] | [] | [] | [] | [] | [] | [2] |
| combination of internal and external | | [] | [] | [] | [] | [] | [3] |
| dictated by donor | | [] | [] | [] | [] | [] | [4] |
| other, specify..... | | [] | [] | [] | [] | [] | [5] |

- 18.
- | | By
who | Please rate | | | | Do not
know
(ignore) | |
|---------------------------------------|-----------|-------------|--------|-------|--------|----------------------------|-----|
| | | Never | Rarely | Often | Always | | |
| ministerial or government's own staff | [] | [] | [] | [] | [] | [] | [1] |
| commissioned consultants/experts | [] | [] | [] | [] | [] | [] | [2] |
| combination of internal and external | | [] | [] | [] | [] | [] | [3] |
| dictated by donor | | [] | [] | [] | [] | [] | [4] |
| other, specify..... | | [] | [] | [] | [] | [] | [5] |

19.

	By who	Please rate				Do not know (ignore)	
		Never	Rarely	Often	Always		
ministerial or government's own staff	[]	[]	[]	[]	[]	[]	[1]
commissioned consultants/experts	[]	[]	[]	[]	[]	[]	[2]
combination of internal and external		[]	[]	[]	[]	[]	[3]
dictated by donor		[]	[]	[]	[]	[]	[4]
other, specify.....		[]	[]	[]	[]	[]	[5]

20.

	By who	Please rate				Do not know (ignore)	
		Never	Rarely	Often	Always		
ministerial or government's own staff	[]	[]	[]	[]	[]	[]	[1]
commissioned consultants/experts	[]	[]	[]	[]	[]	[]	[2]
combination of internal and external		[]	[]	[]	[]	[]	[3]
dictated by donor		[]	[]	[]	[]	[]	[4]
other, specify.....		[]	[]	[]	[]	[]	[5]

21.

	By who	Please rate				Do not know (ignore)	
		Never	Rarely	Often	Always		
ministerial or government's own staff	[]	[]	[]	[]	[]	[]	[1]
commissioned consultants/experts	[]	[]	[]	[]	[]	[]	[2]
combination of internal and external		[]	[]	[]	[]	[]	[3]
dictated by donor		[]	[]	[]	[]	[]	[4]
other, specify.....		[]	[]	[]	[]	[]	[5]

22.

	By who	Please rate				Do not know (ignore)	
		Never	Rarely	Often	Always		
ministerial or government's own staff	[]	[]	[]	[]	[]	[]	[1]
commissioned consultants/experts	[]	[]	[]	[]	[]	[]	[2]
combination of internal and external		[]	[]	[]	[]	[]	[3]
dictated by donor		[]	[]	[]	[]	[]	[4]
other, specify.....		[]	[]	[]	[]	[]	[5]

23.	By who	Please rate				Do not know (ignore)	
		Never	Rarely	Often	Always		
ministerial or government's own staff	[]	[]	[]	[]	[]	[]	[1]
commissioned consultants/experts	[]	[]	[]	[]	[]	[]	[2]
combination of internal and external		[]	[]	[]	[]	[]	[3]
dictated by donor		[]	[]	[]	[]	[]	[4]
other, specify.....		[]	[]	[]	[]	[]	[5]

24.	By who	Please rate				Do not know (ignore)	
		Never	Rarely	Often	Always		
ministerial or government's own staff	[]	[]	[]	[]	[]	[]	[1]
commissioned consultants/experts	[]	[]	[]	[]	[]	[]	[2]
combination of internal and external		[]	[]	[]	[]	[]	[3]
dictated by donor		[]	[]	[]	[]	[]	[4]
other, specify.....		[]	[]	[]	[]	[]	[5]

25.	By who	Please rate				Do not know (ignore)	
		Never	Rarely	Often	Always		
ministerial or government's own staff	[]	[]	[]	[]	[]	[]	[1]
commissioned consultants/experts	[]	[]	[]	[]	[]	[]	[2]
combination of internal and external		[]	[]	[]	[]	[]	[3]
dictated by donor		[]	[]	[]	[]	[]	[4]
other, specify.....		[]	[]	[]	[]	[]	[5]

26. Can you tell us how long it normally takes to produce an internal type of report like an Annual Report?

(Please tick an appropriate answer, or, note who we are referred to)

More than a year	[]	[1]
One year	[]	[2]
Less than a year	[]	[3]
Other, please specify	[]	[4]

27. Do you have a copy of the latest such an internal report that you may show or donate for our study to peruse ? (If not readily available, can we come later ?)

28. Where consultants/experts/commissions are employed to produce reports, are they ever required to revise, modify, or moderate the contents of reports ?

Yes [1]

No [2]

(If 'No', to interrogate further after 29 and 30)

29. If yes, how often are experts/consultants/authors requested to modify/moderate/revise the contents before reports may be approved/issued by your ministry ?
(Please tick in the appropriate box).

Reports are never content modified [] [1]

They are rarely modified, revised [] [2]

They are often modified, revised [] [3]

Very often they are modified [] [4]

They are always revised, modified [] [5]

Unable to estimate [] [6]

If you do not know, who would perhaps know in this Ministry/department/section?

(Note the reference given)

30. Does your Ministry normally produce documents classified as secret, limited access or restricted distribution, or technical reports that may not be available to libraries and the public ?

Yes [] [1]

No [] [2]

31. What percentage would you say the classified reports produced by your Ministry are ?
(Tick estimated %age)

Less than 30% [] [1]

30 39 [] [2]

40 49 [] [3]

Above 50% [] [4]

32. If 'classified', are they distributed to any recipients outside the ministry/department ?
- | | | |
|-------|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |
| Other | [] | [3] |

33. For what purpose are your ministry's technical reports normally generated ?
(Read out a number of examples and tick as appropriate, or skip)

In-house managerial purposes	[]	[1]
As obliged by contracts with donors	[]	[2]
others	[]	[3]
	[]	[4]

34. If 'Yes', who are they distributed to ?

35. Are there any written regulations, guideline or policies to be followed on how to distribute different categories of your Ministries reports ?

Yes	[]	[1]
No	[]	[2]
Do not know	[]	[3]

If 'yes', may ask see or have a copy for reference of this study ?
(If one available, may we photocopy)

36. If 'No' would you think such a policy is necessary ?

Yes	[]	[1]
No	[]	[2]
Do not know	[]	[3]

37. If there is a policy, what does it say, and/or can a copy be provided ? Tick as appropriate

There is an un-written policy	[]	[1]
There is a written policy but a copy unavailable	[]	[2]
Other, specify.....	[]	[3]

38. Are there any libraries/information centres that get free copies from your Ministry ?
- | | | |
|-------------|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |
| Do not know | [] | [3] |

39. If there are such libraries, state them if you know (including the Ministerial depository if there is any.

40. If 'No', do you think it is necessary that copies be deposited into any libraries ?
- | | | |
|------------------------|-----|-----|
| Yes it is necessary | [] | [1] |
| No it is not necessary | [] | [2] |
| Other, specify..... | [] | [3] |

41. In countries where National Research Councils exist such as in Botswana and Zimbabwe, or where the Law give the mandate to National Archives like in Kenya, or to National Libraries, for example in South Africa, they normally monitor consultancy work, research results and guide where, as a rule to deposit preliminary or final results. In Lesotho where a National Research Council (NRC) does not exist, there is no monitoring in most cases. Would you view this as a good or a bad practice; or it does not matter much ?

(Tick in a box)

- | | | |
|------------------------|-----|-----|
| It is bad, | [] | [1] |
| It is good | [] | [2] |
| It makes no difference | [] | [3] |
| Do not know | [] | [4] |
| Other, specify.. | [] | [5] |

42. Would you please give a reason for your response (Expect one from the 5 options)

Have you or others in your ministry/department in particular, attended, prepared a report, or part of it for in any of the following international fora ?

Please state what role you played.

- | | You | wrote a report | Only attended | Other official | Do not know |
|---------------------------------|-----|----------------|---------------|----------------|-------------|
| 43. Women's conf. Denmark, 1980 | [] | [] | [] | [] | [] |

- | | | | | | | |
|-----|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 44. | Women's conf. Nairobi, 1985 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 45. | Women's conf. Beijing 1990 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 46. | Food Summit, Rome 1993 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 47. | Population Summit, 1994 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 48. | Social Summit Denmark 1998 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 49. | Women's conf. New York 2000 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

50. If you participated in any or some or all of these gatherings, can you describe one important benefit, if there was any short or long term benefit that was earned for the ministry, country, sector, in your own observation

51. Is there any other international conference, not listed from 43 to 49 above, that you regard important, and that you participated in by attending or contributing to a country report ?

Yes ☐ ☐

No ☐ ☐

(If yes, go to 52)

(If 'no' go to 55)

52. Mention the details of that conference

Title/Name

Year

Venue

Sponsor

53. What was your kind of participation, please tick relevant box

Only attended Report presentation Both

☐ ☐ ☐

54. Please state the benefit of that fora, either to yourself - being work-related or otherwise, to the country or the people, a particular sector of development, government structures/machineries or all, if any.
(Probe into saying more, and record as examples are mentioned).

USE/Non-use

55. How would you rate use/readership of technical reports within the government ministries?

(Please tick in the appropriate box)

Very high	<input type="checkbox"/>	[1]
High	<input type="checkbox"/>	[2]
Average	<input type="checkbox"/>	[3]
Low	<input type="checkbox"/>	[4]
Very low	<input type="checkbox"/>	[5]
Non-use	<input type="checkbox"/>	[6]
Do not know	<input type="checkbox"/>	[7]

56. If use ranges from low to non-use, what would you say are the causes?

No need for use	<input type="checkbox"/>	[1]
Busy otherwise	<input type="checkbox"/>	[2]
No information management to promote the services and from which to avail reports	<input type="checkbox"/>	[3]
Do not know	<input type="checkbox"/>	[4]

57. How would you rate use of technical reports in your own department/unit ?

Very High	<input type="checkbox"/>	[1]
High	<input type="checkbox"/>	[2]
Average	<input type="checkbox"/>	[3]
Low	<input type="checkbox"/>	[4]
Do not know	<input type="checkbox"/>	[5]

58. Is there any report produced by your ministry in the past two years that you would regard as having been very useful within your organisation ?

Yes	<input type="checkbox"/>	[1]
No	<input type="checkbox"/>	[2]

(If 'No' go to 61)

59. If 'yes', can you give its title
60. Describe in what way and to whom the report was useful ?
61. Is there any of your ministry's report that you would regard as having been very useful beyond your organisation ?
- | | | |
|-------|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |
| Other | [] | [3] |

(Get a report whose subject or sponsorship or affiliation relates to the Ministry)

62. Have you come across this report, or heard about it ? (Tick appropriate box)
- | | | |
|-----|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |

(If possible, judge if familiarity with the report is evident, and record)

63. Do you use any library or libraries in Lesotho ?
- | | | |
|-----|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |

(If 'No' go to 66)

(If 'yes' continue with 64)

64. If yes, which one/s ?

65. Do you use ISAS documentation centre ?

Yes	[]	[1]
No	[]	[2]

66. If yes, you have used, how often do you use ISAS documentation centre
- | | | |
|------------|-----|-----|
| Frequently | [] | [1] |
| Rarely | [] | [2] |
| Other | [] | [3] |

67. For what specific needs do you use it ?

68. In most cases that you used the centre, were your needs met ?
- Yes
No
Other
69. If ‘Yes’, please describe the situation that required your use of the documentation centre, and how it was affected by the needs which were satisfied
70. If ‘No’, briefly describe how the situation was affected when information needs were not met.
71. There are instances when research studies have been duplicated because parties involved could not have access to previous reports or information. Are you aware of such instances?
- | | | |
|-----|-------|-----|
| Yes | [] | [1] |
| No | [] | [2] |
- (If ‘No’, go to 73)

72. If ‘Yes’, please describe the first and the second project that was a duplication.
You may freely describe the projects/schemes as you find suitable, or you may give their details as follows:

First project’s title

Authority/sponsor
Year/duration of operation
Focus/scope

Second project’s title

Authority/sponsor
Year/duration of operation
Focus/scope

73. Do you know any development project in Lesotho, that relates/d to either to government, or to aid agency/ies, NGO/s, or any company/institution that is not succeeding or did not succeed as planned?
- | | | |
|-----|-------|-----|
| Yes | [] | [1] |
| No | [] | [2] |

('No', go to 73)

71. If 'Yes', please mention by any form of identification
Title
Authority and or sponsor
Year/duration of operation
Scope/Focus
72. List the factors that you regard as having contributed to its failure ?
73. If you have any, you may give your brief comments on issues that you feel you need to clarify further about the production and use of technical reports and information management in Lesotho, especially as regarding the role of government and development.

We thank you very much for being this informative.

APPENDIX 4

INTERVIEW PROTOCOL FOR NON-GOVERNMENTAL ORGANISATION (NGOs)

We are grateful that you have taken this appointment. The purpose for asking for an interview you is to seek information for a study we are doing out on Performance assessment of technical reports as a channel of information for development. It is believed that for various tasks that people discharge in their everyday life, they use information that is channeled through them by different forms. For your duties as firstly the middle-activists between the scientists, researchers who come up with innovations; and between, as well as actually being the practitioners, people on the ground or as extension workers, we would like to know which channels of information you use. We are assessing in particular, one channel which is used, being technical reports, to determine how it transmits information on findings/ideas/inventions/solutions from researchers, scientists, policy makers, specialist advisers; and secondly to repackage and pass on those innovations the community, practitioners, farmers, house-makers, nursing mothers and so forth. For this data collection, we would like to know if research results that get into reports finally get to you and the intended beneficiaries. To that effect, could you kindly answer the questions we are going to ask as fully as you can? We wonder, as well, if you mind if we may tape-record our conversation for our future reference?

(Tape-record all if permission is granted, otherwise, do not)

IDENTIFICATION

1. What is the correct and official name of your organization? (Write the name/title of NGO)
2. Are you a registered NGO ?
Yes
No
Do not know

3. If 'Yes', when were you registered ? (Write down the year, if unknown , both try to estimate)

3.1 What is the focus of your Organization: (To note sector, geographical scope and development group/s)

4. **Production and distribution**

Listed below, are types of technical reports. I will read to you one type at a time and request you to advise whether your organisation produces or do not. You may personally in some cases not have all the details, but be aware as to who in your knows, or has produced. In that case I will request to be referred to the actual officer that might know or has produced

4. Have you, therefore, or your organisation produced/issued the following and how often ?

(Tick in a box that answers for each type)

Incident/enquiry: - investigations into events, cases, crises, phenomenon conducted by an independent team (commissions of enquiry giving recommendations)? Indicate there are none, low quantities, average or high quantities

None	[]	[1]
Low	[]	[2]
Average	[]	[3]
High	[]	[4]
Unable to estimate	[]	[5]

5. Situation/state-of-the-art :- surveys or reviews done by experts in the field, providing most up-to-date information in a subject, areas, sector, and position paper about an organisation or country for formal conferences, symposia

None	[]	[1]
Low	[]	[2]
Average	[]	[3]
High	[]	[4]
Unable to estimate	[]	[5]

6. Project's reports:
 - research proposals
 - feasibility study reports
 - progress/mid-term/interim reports
 - final

None	[]	[1]
Low	[]	[2]
Average	[]	[3]
High	[]	[4]
Unable to estimate	[]	[5]

7. Conference proceedings or reports from events such as seminars, colloquia, symposia, congresses organised by own corporate body

None	[]	[1]
Low	[]	[2]
Average	[]	[3]
High	[]	[4]
Unable to estimate	[]	[5]

8. Organizational/Internal/official corporate's regular reports, annual, highlights, reviews, budgets, official speeches,

None	[]	[1]
Low	[]	[2]
Average	[]	[3]
High	[]	[4]
Unable to estimate	[]	[5]

9. Does your organisation receive any of these reports produced by others and at what level ? Please tick.

Incident/Enquiry	None	[]	[1]
	Low	[]	[2]
	Average	[]	[3]
	High	[]	[4]
	Unable to estimate	[]	[5]

10.	Situation/Surveys	None	[]	[1]
		Low	[]	[2]
		Average	[]	[3]
		High	[]	[4]
		Unable to estimate	[]	[5]

11.	Projects reports	None	[]	[1]
		Low	[]	[2]
		Average	[]	[3]
		High	[]	[4]
		Unable to estimate	[]	[5]

12.	Conference proceedings	None	[]	[1]
		Low	[]	[2]
		Average	[]	[3]
		High	[]	[4]
		Unable to estimate	[]	[5]

13.	Organisation's reports	None	[]	[1]
		Low	[]	[2]
		Average	[]	[3]
		High	[]	[4]
		Unable to estimate	[]	[5]

16. Did your organisation contribute report or information for any of the following international conferences?

Women's Conference Copenhagen 1980

Yes [] [1]

No [] [2]

Do not know [] [3]

17. If your Organisation contributed information in a form of a report, was there any benefit, consequence of your contribution, to the organisation itself, and/or to its clientele ?

- 18 Women's Conference Nairobi, 1985

Yes [] [1]

No [] [2]

Do not know [] [3]

19. If your Organisation contributed information in a form of a report, was there any benefit, consequence, effect or impact of your contribution, to the organisation itself, and/or to its clientele ?

20. Food Summit, 1993

Yes [] [1]

No [] [2]

Do not know [] [3]

21. If your Organisation contributed information in a form of a report, was there any benefit, consequence, effect or impact of your contribution, to the organisation itself, and/or to its clientele ?

22. Social Summit Copenhagen 1995

Yes	[]	[1]
No	[]	[2]
Do not know	[]	[3]

23. If your Organisation contributed information in a form of a report, was there any benefit, effect, impact or consequence of your contribution, to the organisation itself, and/or to its clientele ?

24. Human Rights Conf. 1993

Yes	[]	[1]
No	[]	[2]
Do not know	[]	[3]

25. If your Organisation contributed information in a form of a report, was there any benefit, consequence, effect or impact of your contribution, to the organisation itself, and/or to its clientele

27. Women's Conference Beijing 1990

Yes	[]	[1]
No	[]	[2]
Do not know	[]	[3]

28. If your Organisation contributed information in a form of a report, was there any benefit, effect, consequence or impact of your contribution, to the organisation itself, and/or to its members/clientele

29. Women's Conference New York 2000

Yes	[]	[1]
No	[]	[2]
Do not know	[]	[3]

30. If your Organisation contributed information in a form of a report was there any benefit, effect, consequence, impact of your contribution, to the organisation itself, and/or to its clientele

31. Population Summit, Cairo 1994

Yes	[]	[1]
No	[]	[2]
Do not know	[]	[3]

32. If your Organisation contributed information in a form of a report, was there any benefit, effect, consequence or impact of your contribution, to the organisation itself, and/or to its members/clientele.

33. I will read out to you the same conferences and will request you to advise if somebody in his/her official capacity representing your organisation attended any, and who sponsored ? If the Organisation was self-sponsoring please clarify as "self".

33. Women's Conference Copenhagen 1980 (To tick appropriate box)

Attended	[]	[1]
Sponsor	
	
Did not attend	[]	[2]
Do not know	[]	[3]

35. Women's Conference in Nairobi 1985

Attended	[]	[1]
Sponsor	
Did not attend	[]	[2]
Do not know	[]	[3]

36. FAO Food Summit, Rome 1993

Attended	[]	[1]
Sponsor	
	
Did not attend	[]	[2]
Do not know	[]	[3]

37. Social Summit, Geneva 2000

Attended	[]	[1]
Sponsor	
	
Did not attend	[]	[2]
Do not know	[]	[3]

39. Human Rights Conference 1993

Attended	[]	[1]
Sponsor	
	
Did not attend	[]	[2]
Do not know	[]	[3]

40. Women's Conference Beijing 1990

Attended	[]	[1]
Sponsor	
	
Did not attend	[]	[2]
Do not know	[]	[3]

41. Women's Conference New York 2000

Attended [] [1]
Sponsor
.....
Did not attend [] [2]
Do not know [] [3]

42. Population Summit Cairo 1994

Attended [] [1]
Sponsor
.....
Did not attend [] [2]
Do not know [] [3]

43. Has there been a conference not listed above at which your organisation was represented, which you regard as having been useful and important to your organisation ?

Yes [] [1]
No [] [2]

(If 'No', go to 46)

44. If 'Yes', there has been one, please provide its details

Title:

Date:

Sponsor:

Venue:

45. In what way was that conference useful and important ?

46. I will again read out to you a number of channels I have listed, which are used to record, acquire and disseminate information. Please indicate the frequency of use of each in your organization, if you do use at all.

	Not used	used a little	Moderately used	Used Heavily
Books	[]	[]	[]	[] [1]
Reports	[]	[]	[]	[] [2]
Journals and magazines	[]	[]	[]	[] [3]
Leaflets, charts, posters	[]	[]	[]	[] [4]
Radio / Audio-visuals	[]	[]	[]	[] [5]
Meetings, seminars, workshops, retreats	[]	[]	[]	[] [6]
Visits by office personnel	[]	[]	[]	[] [7]
Fairs, exhibitions,	[]	[]	[]	[] [8]
Own, or other informal sources, specify...	[]	[]	[]	[] [9]
	[]	[]	[]	[] [10]

47. If reports are used, can you show samples of those reports that are used for acquiring and disseminating information. (Record bibliographic details of reports).

48. Does your Organization, in finding information relevant to development work, use information services such as libraries and documentation centres ? (To tick)

Yes [] [1]

No [] [2]

(If 'No', to go to 50)

49. If you do use such services, indicate those that you often use

50. Were you interviewed recently (for the past 12 months), for data regarding the experience of your organization like I am doing ? (To tick)

Yes [] [1]

No [] [2]

(If 'No', to go to 62)

51. If yes, state where they were coming from ? (To tick appropriate box)
- | | | |
|---|-----|-----|
| Government and its departments, | [] | [1] |
| Academic institutions - university and colleges | [] | [2] |
| Aid and development agencies | [] | [3] |
| Do not know | [] | [5] |
52. Do you know any development project in Lesotho, that relates/d to government, or to aid agency/ies, NGO's, or any company/institution that is not succeeding or did not succeed as planned?
- | | | |
|-----|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |
- (If 'No' go to 55)
53. If 'Yes', mention it in any form of identification, like
- Title
- Authority and or sponsor
- Year/duration of operation
- Scope/Focus
54. List a number of factors that contributed to its failure ?
55. Who constitute beneficiaries of your services and works of your Organization?
56. What kind of benefits do they get ?
57. I will read and describe the types groups that are normally having links with NGOs, and ask you to indicate if your Organization has in the past two years had any links, and of what kind. (To probe into finding who financially sponsor, what type interaction they have will all)

57. Government, (Ministries, Departments, senior officials, planners, decision-makers, teachers, information workers, district and regional officers, chiefs, extension workers)

Yes [] [1]

No [] [2]

(If No to go to the next groups)

58. If 'Yes', what sort of links ?

59. Academics (researchers, lecturers, teachers, information workers, extension workers)

Yes [] [1]

No [] [2]

(If No to go to the next groups)

60. If 'Yes', what sort of links ?

61. Aid development agencies (donor agents, inter-governmental or international bodies, external development organizations)

Yes [] [1]

No [] [2]

(If 'No', go to the next group)

62. If 'Yes', what sort of links ?

63. Other NGOs (charity organizations, self-help agencies, informal groups)

Yes [] [1]

No [] [2]

(If 'No', go to 65)

64. If 'Yes', what kind of links?

65. If you have, you may give more general comments on how performance of technical report information production and use relate to your organization ?

Thank you very much for this information.

APPENDIX 5

AN INTERVIEW PROTOCOL FOR AID AGENCIES

Code: AA

Date:

Site:

Introduction:

Thanking the respondent for giving me the appointment, and enquiring if s/he may be recorded.

This survey is part of a study being conducted to assess both the services of ISAS Documentation centre and its products, specifically technical reports. Knowing who produce these reports, how much, and who uses them can assist us improve information services. As a development agency, development partner or representative who is likely to generate or support the production of reports, you might have valuable experience that informs this enquiry. You may also have views about the strengths and weaknesses of the Lesotho information systems that are supposed to manage this literature, which will help us make an objective assessment. This will help in our planning and provision of our services. It might also help other authorities of similar situations. The general enquiry is on production, readership, use of technical reports, their management by information brokers, the benefits or effect if any. The Institute of Southern African Studies which is the development-oriented principal research arm of the National University of Lesotho is made a case by which to explore the relationship between information and development with special reference to the agriculture and gender sectors. Kindly answer all the relevant questions as candidly as possible.

1. What is the name of the agency
2. Designation or status of respondent, within the development agency.
3. Technical reports are described as the type of non-conventional, grey or report literature which is commissioned by, or emanates from a body of some authority for a specific identified developmental programme or its problem, and being issued on time as the work of experts possessing some technical know-how in a given field or task to be tackled. As such, the results of that work, study, investigation, periodic assessment or scientific process, clearly fits the problem identified. The materials are produced for a particular consumption, seldom for public, hence, though their availability is often restricted as they are in limited quantities, technical reports are in

high demand, a problem area for information workers, yet valuable in diverse development activities, especially research.

Does your agency produce or assist in the production of technical reports on and about Lesotho ? Tick appropriate box.

Yes	[]	[1]
No	[]	[2]

If 'No', go to 41

If 'Yes, continue.

If your answer in 3 above is 'Yes', please consider the following:

In the list below are areas on which Reports are produced. The areas also describe the types of technical reports according to this study. Please indicate in each case whether or not the areas translate to the kinds of reports you produce or sponsor in Lesotho

4. Conference proceedings or reports from events such as seminars, colloquia, symposia, congresses organised by own corporate body

No	[]	[1]
Yes	[]	[2]
5. Project's reports:
 - research proposals
 - feasibility study reports
 - progress/mid-term/interim reports
 - final

No	[]	[1]
Yes	[]	[2]
6. Incident/Enquiry :
 - investigations into events, cases, crises, phenomenon conducted by an independent team (commissions of enquiry giving recommendations)

No	[]	[1]
Yes	[]	[2]
7. If 'yes' can you mention and show an example you issued ?

No	[]	[1]
Yes	[]	[2]
8. Academic report - theses, dissertations, inaugural speeches ?

No	[]	[1]
Yes	[]	[2]

9. Project's reports:
- research proposals
 - feasibility study reports
 - progress/mid-term/interim reports
 - final
- | | | |
|-----|-----|-----|
| No | [] | [1] |
| Yes | [] | [2] |
10. Situation/State-of-the-art :
- survey or review done by experts in the field, providing most up-to-date information in a subject, areas, or about a country for formal conferences, symposia
- | | | |
|-----|-----|-----|
| No | [] | [1] |
| Yes | [] | [2] |
11. Organisational/corporates's annual reports, highlights, reviews etc.
- | | | |
|-----|-----|-----|
| No | [] | [1] |
| Yes | [] | [2] |
12. For any of type that you affirmed that you produce from 9 to 11, can you mention and/or show an example ?
- | | | |
|-----|-----|-----|
| No | [] | [1] |
| Yes | [] | [2] |
13. Does your agency usually produce documents classified as secret, limited access or restricted distribution, or technical reports that may not be available to libraries and the public ?
- | | | |
|-----|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |
14. What percentage would you say the classified reports produced by your agency are ?
(Tick estimated %age)
- | | | |
|---------------|---------|-----|
| Less than 30% | [] | [1] |
| 30 | 39 [] | [2] |
| 40 | 49 [] | [3] |
| Above | 50% [] | [4] |
15. If 'classified', are they distributed to any recipients outside the agency ?
- | | | |
|-------|-----|-----|
| Yes | [] | [1] |
| No | [] | [2] |
| Other | [] | [3] |

16. Please indicate as appropriate disciplines in which your agency produces technical reports? Tick in a box.
- | | | |
|---|--------------------------|------|
| Agriculture and food | <input type="checkbox"/> | [1] |
| Health | <input type="checkbox"/> | [2] |
| Population and demography | <input type="checkbox"/> | [3] |
| Economics and planning | <input type="checkbox"/> | [4] |
| Rural development, chieftainship and local governance | <input type="checkbox"/> | [5] |
| Politics and international relations | <input type="checkbox"/> | [6] |
| Natural resources - water and minerals | <input type="checkbox"/> | [7] |
| Trade and industry | <input type="checkbox"/> | [8] |
| Education and training | <input type="checkbox"/> | [9] |
| Environment | <input type="checkbox"/> | [10] |
| Gender | <input type="checkbox"/> | [11] |
| Youth | <input type="checkbox"/> | [12] |
| Law justice and human rights | <input type="checkbox"/> | [13] |
| Other, please specify | <input type="checkbox"/> | [14] |
17. Indicate by ticking appropriating box(es) who conducts studies/surveys and write the reports ? Tick appropriate box
- | | | |
|--------------------------------------|--------------------------|-----|
| Own staff | <input type="checkbox"/> | [1] |
| Commissioned/out-sourced consultants | <input type="checkbox"/> | [2] |
| Combination of staff and consultants | <input type="checkbox"/> | [3] |
| Other, specify | <input type="checkbox"/> | [5] |
18. Does your agency use outside consultants/experts - that is persons not employed by your agency to work on your behalf for the purposes of Report production? Please tick.
- | | | |
|-----|--------------------------|-----|
| Yes | <input type="checkbox"/> | [1] |
| No | <input type="checkbox"/> | [2] |
19. Please indicate how they are found
- | | | |
|------------------------|--------------------------|-----|
| Advertisements | <input type="checkbox"/> | [1] |
| Head hunt | <input type="checkbox"/> | [2] |
| Combination of methods | <input type="checkbox"/> | [3] |
| Other, specify..... | <input type="checkbox"/> | [5] |
20. On the average, how long does a standard report take to prepare and finally produce/issue by your agency?
- | | | |
|------------------------------|--------------------------|-----|
| Less than three months | <input type="checkbox"/> | [1] |
| Between three and six months | <input type="checkbox"/> | [2] |
| Between six and twelve | <input type="checkbox"/> | [3] |
| More than twelve months | <input type="checkbox"/> | [4] |
| They vary enormously | <input type="checkbox"/> | [5] |
| Other, specify..... | <input type="checkbox"/> | [6] |

21. How often are drafts returned to authors/experts/consultants for content modification/moderation/revision before those reports may be approved and issued by the commissioning/sponsoring bodies?

They are never content modified	[]	[1]
They are rarely	[]	[2]
They are often modified	[]	[3]
Very often they are	[]	[4]
Always they are	[]	[5]
Unable to estimate	[]	[6]

- 21a Report numbering

Are any of the mentioned reports issued by your agency given some numbering for identification or future management ?

Yes	[]	[1]
No	[]	[2]

22. Please indicate who the reports are often produced for

Own agency	[]	[1]
Government	[]	[2]
Own agency +government	[]	[3]
NGOs	[]	[4]
Academic community	[]	[5]
Other, specify		

DISTRIBUTION

23. Those Technical Reports that are not classified and produced your agency are they available to the public

Yes	[]	[1]
No	[]	[2]

24. If 'Yes', they are available, who request/acquire them outside the agency ?

25. Are there any libraries/information centres in Lesotho that get free copies from your agency ?

Yes	[]	[1]
No	[]	[2]
Do not know	[]	[3]

26. If there are such libraries/information or documentation centres that are recipients can you mention them?

27. Are there any libraries/information centres outside Lesotho that receive free copies ?

Yes [] [1]

No [] [2]

Do not know [] [3]

28. If there are recipient centres outside Lesotho, can you mention two ?

.....
.....

29. There is a desire that before issuing Technical Reports information they channel should also be in both the full version and the synthesized version that has summaries/abstracts, translations, in order to stimulate repackaging and use. Do you agree with this view?

Yes [] [1]

No [] [2]

Indifferent [] [3]

30. If 'Yes' why ?

31. If 'No', why.....

32. Timeliness of production

It is believed that TRs are produced promptly, and by comparison, faster than most channels. Does your agency embrace this view ?

Yes [] [1]

Not necessarily [] [2]

Do not know [] [3]

33. If 'yes', why ?.

34. If 'No', why ?

35. How is the timeliness of production and distribution of Reports achieved by your agency?

36. Formats

It is believed that for Reports to be manageable, they should be comprehensible, be easy to handle in style and format. Is this idea subscribed to by your organization

Yes	[]	[1]
Not necessarily	[]	[1]
Other	[]	[2]

37. How is this aspect of 'format' generally achieved by your agency?

38. In countries where National Research Councils exist such as in Botswana and Zimbabwe, or where the Law gives the mandate to National Archives like in Kenya, or to National Libraries, for example in South Africa, they normally monitor consultancy work, research results and guide where, as a rule to deposit preliminary or final results. In Lesotho where a National Research Council (NRC) does not exist, there is no monitoring in most cases. Would you view this as a good or a bad practice; or it does not matter much ?

(Tick in a box)

It is bad,	[]	[1]
It is good	[]	[2]
It makes no difference	[]	[3]
Do not know	[]	[4]
Other, specify..	[]	[5]

39. Would you please give a reason for your response (Expect one from the 5 options)

40. There is a belief that institutional producers like your agency produce/use Reports in order to meet certain organizational aims.

Would this be true in terms of the aims and objective of your agency and reasons for producing/using Reports ?

Yes	[]	[1]
No	[]	[2]

41. If the production and use of Reports by your agency satisfies aims and objectives of your agency, in what way do they ?

42. Has your agency sponsored any ISAS developmental activity with like research, conference, training, publishing, information management at all?

Yes	[]	[1]
No	[]	[2]
I do not remember/know	[]	[3]

If 'No/do not know go to 45

If 'Yes', continue

43. How would you rate costs that ISAS as a partner input into Reports management (production, consumption, dissemination) ?

Not high	[]	[1]
Somewhat high	[]	[2]
Very high	[]	[3]
No response	[]	[4]

44. What was the consequence, effect, impact of any of the support that your agency gave? you collaborated with ISAS ?

45. The following are different types of information channels which are being compared in terms of their production costs in Lesotho. Can you estimate how, according to the experiences of your agency how the types cost per unit?

Please tick appropriate box.

	<u>Not costly</u>	<u>Somewhat costly</u>	<u>Very costly</u>	<u>Ignore</u>
Technical reports	[]	[]	[]	[1]
Books	[]	[]	[]	[2]
Periodicals	[]	[]	[]	[3]
Unable to estimate	[]	[]	[]	[4]

46. How do you rate interest that is presumably expressed by various groups that need/use Reports generated by your agency ?

Please estimate level of interest by the following groups, of TRs on and about agriculture in Lesotho, from [0] as non-use, and lowest of [1] to the highest of [5]

	<u>Tick</u>	<u>Rank</u>	<u>Ignore</u>
ISAS Researchers	[]	[]	[1]
Researchers from other institutes	[]	[]	[2]
Academic staff faculty of agriculture	[]	[]	[3]
Academic staff of humanities	[]	[]	[4]
Academic staff of science	[]	[]	[5]
Academic staff of social sciences	[]	[]	[6]
Academic staff of law	[]	[]	[7]
Academic staff of education	[]	[]	[8]
Academic staff of health sciences	[]	[]	[9]
Administrative staff	[]	[]	[10]
Students from faculty of agriculture	[]	[]	[11]
Students from humanities	[]	[]	[12]
Students from sciences	[]	[]	[13]
Students from social sciences	[]	[]	[14]
Students from law	[]	[]	[15]
Students from education	[]	[]	[16]
Students health sciences	[]	[]	[17]
Government officials	[]	[]	[18]
NGOs	[]	[]	[19]
Aid/development agencies	[]	[]	[20]
Other, specify.....	[]	[]	[21]

47. Considering your costs in terms of aims, policies, funds, time, personnel, physical infrastructure, as stated from 42 to 45 would you assess all your input as being cost-beneficial ?

Yes [] [1]
 No [] [2]
 Other, comment

48. There are instances when research studies have been duplicated because parties involved could not have access to previous reports or information. Are you aware of such instances?

Yes	[]	[1]
No	[]	[2]

(If 'No', go to 50)

49. If 'Yes', please describe the first and the second project that was a duplication. You may freely describe the projects/schemes as you find suitable, or you may give their details as follows:

First project's title

Authority/sponsor

Year/duration of operation

Focus/scope

Second project's title

Authority/sponsor

Year/duration of operation

Focus/scope

50. Did your organization sponsor any from Lesotho to attend the following international and regional conferences, and which groups were assisted ?

	Academics	Government officials	NGOs	None	Do not Know
Women's conf. Denmark 1980	[]	[]	[]	[]	[]
Women's conf. Nairobi, 1985	[]	[]	[]	[]	[]
Women's conf. Beijing 1990	[]	[]	[]	[]	[]
Human Rights Conf. 1992	[]	[]	[]	[]	[]
Food Summit, Rome 1993	[]	[]	[]	[]	[]
Population Summit, 1994	[]	[]	[]	[]	[]
Social Summit Denmark 1998	[]	[]	[]	[]	[]
Women's conf. New York 2000	[]	[]	[]	[]	[]
2 nd Food Summit, Rome 199?	[]	[]	[]	[]	[]
SADC Agric Ministerial Summits	[]	[]	[]	[]	[]

51. Upon each of the groups listed below, please comment about those that you sponsored if there has there been any direct or indirect, even short or long term consequence, effect, benefit, impact ?.

Government officials

Academics

NGOs

We sincerely thank you for both your valuable time and information given.

NATIONAL UNIVERSITY OF LESOTHO

Telephone: +266 340601
Fax: +266 340000
Telegram: Uniter, Roma, Lesotho
Telex: 4303 LO
Website: <http://www.nul.ls>



P.O. Roma 180
Lesotho
Africa

Development and Planning Office

Ref.: NUL/LTB/37
MPS/ml

26th November, 2000

TO WHOM IT MAY CONCERN

REQUEST FOR ASSISTANCE IN RESPECT OF MRS MOSHOESHOE-CHADZINGWA

This is to confirm that Mrs M. Moshoeshoe-Chadzingwa who is an employee of the National University of Lesotho, is currently doing a field work in the country, for her doctoral studies with the University of Natal.

We request that you kindly assist her accordingly with data she requires for the stated research purposes.

Thank you,

Yours sincerely,

M.P. SEHAPI
SECRETARY, LOCALIZATION AND TRAINING BOARD



School of Human and Social Sciences

Private Bag X01, Scottsville
Pietermaritzburg 3209, South Africa
Telephone: (033) 260 5320/5290
Fax: (033) 260 5092
General enquiries:
e-mail: mkhize@nu.ac.za
scut@nu.ac.za

TO WHOM IT MAY CONCERN

REQUEST FOR CO-OPERATION WITH DOCTORAL RESEARCH PROJECT

The purpose of this letter is to introduce you to Mrs M. Moshoeshoe-Chadzingwa who is based in the Institute of Southern African Studies (ISAS) Documentation Centre at the National University of Lesotho, Roma. Her thesis centres on the vitally important question of information and development and is entitled "Performance Assessment of Technical Reports as a Channel of Information for Development: a Lesotho Case Study."

Mrs Moshoeshoe-Chadzingwa is currently engaged in collecting her data and your co-operation is essential to the successful completion of this important local project. We would greatly appreciate any assistance that you can offer her.

Yours sincerely

Professor Christine Stilwell
Primary Supervisor
Tel 033 2605095
E-Mail stilwell@nu.ac.za

Professor Andrew M Kaniki
Co-Supervisor, Director of Information Studies
Programme, Pro-Vice Chancellor (Academic)
Tel 033 2605916
E-mail kaniki@nu.ac.za

APPENDIX 8

Information centres used as optional and, or supplementary to ISAS

Agricultural Information centre
Agricultural Research Library
Audit's Library
British Council Library
Bureau of Statistics Library
Central Bank Library
Central Planning Library
Customs and Excise Library
Energy Department Library
European Union Library
FAO Library
High Court Library
Institute of Education Documentation Centre
Institute of Extra Mural Studies Library
Institute of Labour Studies Documentation Centre
Lesotho Council of NGOs Library
Lesotho Highlands Development Authority Library
Lesotho National Library Services
National Assembly Library
National Environmental Secretariat Library
NUL (Thomas Mofolo) Library
Roads Department Library
SADC-Environment Liaison Management Services Library
Sales Tax Department Library
Transformation Resource Centre
UNDP Library
UNESCO Library
UN Information Centre
UNICEF Library
USAID Library
WHO Library