COMMUNICATION AND INFORMATION MANAGEMENT IN PARTNERSHIP DEVELOPMENT: THE CASE OF KWAZULU-NATAL AGRICULTURAL DEVELOPMENT FORUM

BY

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ABSTRACT

Purpose: This study aims to investigate the role of communication and information management in inter-institutional collaboration and review aspects that are crucial for partnerships to function effectively in a multi-stakeholder situation. These aspects include: stakeholders, stakeholder analysis, partnership development and its fundamental values and principles, communication analysis, information and knowledge management and management of conflicts. The study seeks to explore the influence of these aspects for partnership development and sustainability respectively.

The research design, methodology and approach: Qualitative and quantitative strategies are applied for data collection. The research methodology is based on two methodological approaches. These are a review of literature and fieldwork to provide secondary data and primary research conducted among partners in a development forum. The review of literature, including a critical assessment of the key aspects, locates the study perspective in terms of a research paradigm and a grounded theory. The primary research included application tools and techniques of a contextual partnership development analysis methodology (CPDAM) developed for primary data collection.

Analysis: Qualitative data was analysed by manual inspection to identify areas of themes or areas of concern. Quantitative data was analysed by applying Excel® software for the purpose of graphical presentation and distinct visualisation of differences of outcomes. To minimise individual bias, as data analysis is interpretative and subjective, strict research practices and procedures were followed.

Research limitation: Research was carried out with only registered members of the forum. Findings cannot be generalised beyond the area of study, but do provide insight for improving effectiveness of similar network-based fora.

Findings: From this study it was learned that experience is required in problem solving and that networking is a great partnership booster and has the potential of developing new insights

and skills and creating new contextual knowledge that is applicable across various situations. Effective and efficient communication, information and knowledge management as well as management of conflicts are key elements in partnership sustainability. It was also learned that network for such as the KZN-ADF require a mobilizing vision and an activist leadership to realize the potential of volunteer members with individual and collective interests.

Research study value: This study contributes to the general understanding of the operation of development networks and specifically at their management of information and communication. As development, particularly in South Africa, take place increasingly through fora and networks, this study will provide valuable insight into the management and effectiveness of such fora, to their members and to agencies of the state and other stakeholders with whom they work. It is academic research, with a participatory action orientation applicable in real-world situations particularly in a development setting.

DECLARATION

I hereby declare that the research presented in this dissertation is my own work and has not been submitted in any form for any degree or diploma to any University. Where use has been made of the work of others, it is duly acknowledged in the text.

Janguh.	06/12/2007		
Signed	Date		
Francis Muriithi Riungu			
As Supervisor, I agree to submission of this dissertation for examination.			
Signed	Date		
Steven Hugh Worth			

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LIST OF ABBREVIATIONS AND ACRONYMS

CBOs Community Development Organisations

CCR The Coalition of Conflict Resolution

CEAD Centre for Environment, Agriculture and Development

COPPs Communities of Practice Partnerships

CPDAM Contextual Partnership Development Analysis Methodology

CR Community Resources

DBMS Database management System

KZN-DEAT KwaZulu-Natal Department of Environmental Affairs and Tourism

DO Development Organisation

DWAF Department of Water Affairs and Forestry

FS Food Security

FSG Farmers Support Group
GOVT Government Department

IC Independent consultant

IHL Institution of Higher Learning

ILA Interactive Learning and Action

IPO Intention, Process & Outcome

ITD Information Technology Department

ITP Intermediate Technology Publications

KM Knowledge Management

km² Kilometre Square

KZN-PDA KwaZulu-Natal Provincial Department of Agriculture

KZN KwaZulu-Natal

KZN-ADF KwaZulu-Natal Agricultural Development Forum

KZN-DA KwaZulu-Natal Department of Agriculture

KZN-DAEA KwaZulu-Natal Department of Agriculture and Environmental Affairs

m Metre

MIS Management Information System

NGO Non-Governmental Organisation

PAR Participatory Action Research

PDC Private Development Company

PPP Public-Private partnerships

PRA Participatory Rural Appraisal

RAAKS Rapid Appraisal of Agricultural Knowledge Systems

SSA Statistics South Africa

SSM Soft Systems Methodology

TTI Tertiary Training Institute

UKZN University of KwaZulu-Natal

CHAPTER ONE

INTRODUCTION

Introduction

This study describes and highlights participatory engagement of KwaZulu-Natal Agricultural Development Forum (KZN-ADF) in agricultural development in KwaZulu-Natal (KZN). The participatory engagement involves the partnering organisations, individual members and Research Facilitator. The engagement is firstly to find a way of partnering members to have an access of the other member's contact details for engaging with one another in various opportunities arising in the process of services delivery to the clients, easy access of information about KZN-ADF. Thus seeking to have a database where members could easily access information about each other. This kind of arrangement would improve the access of information that is vital for effective service delivery.

After two consultative meetings with Research Supervisor and Executive Committee and detailed review of the pilot research, it was realized that it was not the database that was required, but a form of management information system (MIS). This was confirmed by presentation of the preliminary participatory research engagement results to the Executive Committee and partnering organisations in form of a rich picture establishing that the MIS is a requirement if the forum is to achieve its mandate.

The study explores by way of literature review the engagement by the partnering members' call for a clear understanding of the partnership and partnership development process. Issues that are dealt with include: Stakeholder analysis; Definition of the partnership as a process and as a product; and the phases of partnering: the partnership exploration, partnership building, and partnership maintenance. The study further explores the role of communication, knowledge and information management in partnership development as well as highlighting the importance of managing conflicts in partnership development as an emerging challenge that needs attention for a successful partnership development.

Intervention focuses on KZN-ADF as an organisation composed of many institutions. The aim of the intervention was the improvement of the inter-institutional collaboration for effective and efficient service delivery including improvement targets exploring and opening up opportunity for bilateral communication and the exchange and sharing of experiences, skills, knowledge and information among the stakeholders. Further, the exploration of the role of communication, knowledge, and information management and conflict management as well as the vision of the collaborating institutions, which are key in improving status and sustainability of service delivery in accordance to the goals and objectives set by the KZN-ADF to be achieved during the initial stages of its formation (Mander, 2004; Salomon & Van Rooyen, 2004).

All the stakeholder views are included/captured in the interview and interaction process documentation. In this way the members are empowered to appreciate the importance of their individual and corporate operations in sustainable agricultural development in KZN. The documentation provides a spectrum of the stakeholders' profile, and perspectives on the issues affecting them as a functional forum. All the key representatives of the KZN-ADF institutions are included in the intervention process. The actual intervention design focuses on the organisational communication, knowledge, and information management and management of conflicts. The long-term outcome aims at inter-institutional collaboration and capacity building.

1.1 The problem situation, and its setting

The KZN-ADF was "established in 2000 out of a need to organize service providers for improved service delivery" (Salomon and Van Rooyen 2004:1). While the forum was started by a few organisations, others joined in the course of time. With the growth of the network, there was a debate on the purpose of the forum. With this concern, the forum defined the activities they should focus on. To begin with, two 'schools of thought' emerged with differing opinions thus: One group wants the forum to be a coordinating mechanism to acquire contracts from KwaZulu-Natal Department of Agriculture and Environmental Affairs

(KZN-DAEA). The other group seeks to promote professionalism and good practice through sharing and learning among members.

After harmonizing the two schools of thought, six themes to guide KZN-ADF were developed based on interest groups. These themes are: Land reform; Sustainable farming systems and food security; Farmer Institutions; Extension and Education; Marketing and investment and Product development (Salomon, 2004; Salomon & Van Rooyen, 2004).

Over the course of time, the forum was faced with difficulties resulting in dwindling activities and declining performance. Due to this declining performance, there was a necessity to search for the underlying causes of decline. Out of this concern, a new executive was elected in 2003 that made a commitment to act, each member bringing leadership to a specific initiative. These initiatives included: Member database, code of conduct, research agenda, monitoring system for contracts awarded to members by the KZN-DAEA and benchmark survey of national practice and standards in Agricultural development (Salomon & Van Rooyen, 2004).

Consultative meetings held at various stages of research process helped to develop, and analyse the results of the research. They were reviewed by sharing information and reflections on the research process settings. The Research Facilitator¹ identified with the concerns of the forum because of his long-standing interest in partnership² development. After analysis of the data and information acquired from the key informants, drawing a rich picture as perceived and presenting it to Executive Committee, communication, knowledge and information management as well as management of conflicts emerged as key issues that needed immediate attention. It was revealed that if the above issues were well articulated, a positive input into the sustainability of KZN-ADF members' livelihoods and rural development projects and programmes would be achieved (Salomon 2004; Salomon and Van Rooyen 2004).

¹ A Master of Agriculture (Extension & Resource Management) student, Francis M. Riungu - Centre for Environment, Agriculture and Development).

² Having worked as an Agricultural Extension Officer for over ten years, the research facilitator was confronted by serious issues affecting stakeholders of projects: Government officials, Donors, NGO's, and Local communities. Most of the issues revolved around communication and information management (*Who did what? and who failed to do what? resulting to misunderstandings and unending quarrels*)

1.2 Justification of the research

This study arose out of an initial interest of Research Facilitator having worked as an Agricultural Extension Officer for over ten years. The Research Facilitator had experienced and confronted serious issues affecting stakeholders (Government officials, Donors, NGO's, Local communities, and other public and private development agencies) in projects. These issues revolved around communication, information dissemination, knowledge and competence of subject matter specialists and managing conflict situations. The main questions, which used to arise in development meetings mainly were: *Who did what, and who failed to do what, how was it supposed to be done?* These questions resulted in misunderstandings, confrontation, and unending quarrels, rising suspicions among stakeholders. The result of this kind of working environment resulted in frustrations and poor service delivery to the intended target.

During a course on Stakeholder Analysis and Partnership Development, these issues, which jogged in mind from time to time, were to be discussed and explored. Equipped with that first experience, logically, the Research Facilitator identified with KZN-ADF problem situation as it was presented in the course. The Research Facilitator decided to embark on a research study that would help the KZN-ADF address its concerns and also enables the Research Facilitator to understand, identify and engage in activities that would result in a strong and sustainable inter-institutional collaboration venture.

The Government of KwaZulu-Natal (KZN) was concerned about the development disparity in urban and rural areas and need to have an integrated approach to urban and rural development to address development issues and concerns holistically. It was with some relief that a forum of the nature of the KZN-ADF was launched with a hope of bringing development agents to address concerns in agricultural sector. These main issues of concern were underdevelopment, poverty and fragmented development systems. KZN-ADF was initiated with a hope of aligning the development agencies in agricultural sector to meet the government objectives of having an integrated development approach to urban and rural development and to have effective and efficient service delivery (KwaZulu-Natal Department of Agriculture and

Environmental Affairs (KZN-DAEA), 2005a, 2005b 2005c; Singh, 2002; Mtshali, 1998; Vaughan, 1997). This was coupled with the importance of emerging issues of partnership, communication, information, knowledge, and management of conflicts in the sustainable development arena, regionally, nationally and internationally (Bessette, 2004; Salomon & Van Rooyen, 2004; Fust, 2003; Brinkerhoff, 2002; Middleton, 2002; Hemmati, 2002a). It is against this background that Research Facilitator was motivated to explore the role of communication, knowledge, information, and management of conflicts in an inter-institutional collaboration venture.

1.3 The research problem

The study identified and engaged in activities that would result in a strong and sustainable inter-institutional collaboration. The Research Facilitator decided to embark on a study that would help the KZN-ADF address its concerns and also enables the Research Facilitator to understand the role of communications, information and knowledge management and management of conflicts in a partnership development. It is against this background that the research is investigating the role of communication, and information management and management of conflicts in an inter-institutional collaboration in partnership development, the case of KZN-ADF.

Out of these concerns the Research Facilitator developed and put forward a simple research problem and translated it to a research problem statement as presented in Box 1.1.

Investigating the role of communication, information and knowledge management and management of conflicts in inter-institutional collaboration

Box 1. 1: Research problem statement

1.3.1 Research question

According to Leedy and Ormrod (2005), the research question must be sufficiently large to substantially address the research problem effectively. Hence, it requires qualifiers in terms of

sub questions that are fully researchable and are "easier to address and resolve" the research problem (Leedy & Ormrod, 2005:51). In this study the research question is: What is the role of communication, information and knowledge management and management of conflicts in inter-institutional collaboration or stakeholder collaboration?

1.3.2 Sub-research questions

To work with the research question, three sub-research questions were developed as:

- (1) What communication practices can be distinguished among the stakeholders?
- (2) How do communication, information and knowledge management and management of conflicts affect the performance of the forum?
- (3) What communication structures should be put in place to enable the forum to achieve its objectives?

1.4 The purpose of the study

The purpose of the study was to engage with agricultural development agents who are members of KZN-ADF to understand their concerns in agricultural development sector to unlock the agricultural potential in KZN. In so doing, it was anticipated that the findings would go towards addressing the plight of uncoordinated agricultural development agencies, as well as farmers in of receiving technical assistance through the following objectives:

- Investigate the role of communication, information, knowledge and conflict management in development of partnerships.
- Examine the roles of partnering institutions and organisations in enabling the forum to met its aims and objectives
- Develop a database and Management Information system (MIS) to be incorporated as a web page for KZN-ADF for the purpose of networking.
- Make appropriate recommendations based on the research findings.

1.5 Scope and Limits of the Study

Research for this study was conducted with organisations and individuals who were registered members of KZN-ADF. The study focused on stakeholders and the role of communication, knowledge and information, and managing conflicts in partnership development. In this study, a contextual participatory action research methodology was developed and used for data collection. Only the registered members of KZN-ADF were interviewed. ICT staff were also interviewed for their input on the technical side of acquiring insights and opinion of designing a database and website for KZN-ADF. While the results of this study are applicable across a range of localities and contexts, the data was solely limited in it contents to findings in reference to KZN-ADF and her operation area of KZN.

1.6 Conceptual framework

Figure 1.1 illustrates the conceptual framework and key issues of the research. The conceptual framework is intended to map out the Intention, Process and Outcomes (IPO) of the of the study process in a participatory action research (PAR) setting. The process starts with the pilot research, and then moves to the actual research, the literature review, and data and information collection. Finally, a critical an analysis and discussion of the findings to develop themes and outcomes of the study is done.

The concept of partnership development based on inter-institution collaboration provided the overarching framework of the research. The intention covers the research question as well as research focus. The key issues will be examined in the literature review and in the actual fieldwork to appreciate data and to compare data in reality. The outcomes will ground the reality of fieldwork after reflection of research process as whole. The reflection on outcomes will initiate discussion, conclusion and recommendations.

Conceptual Framework

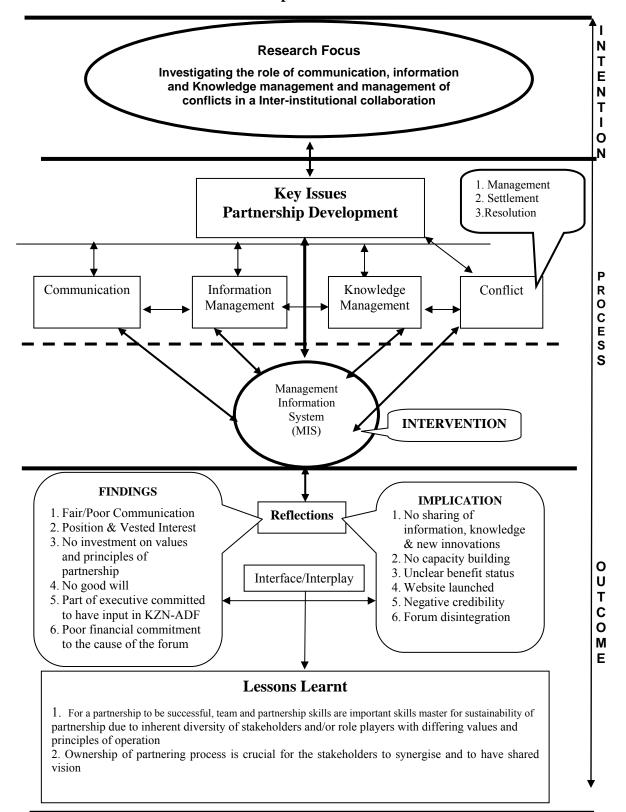


Figure 1. 1: Conceptual framework

1.7 The ethics statement

According to Bouma (1996: 188) "research in social science involves dealing with people and groups". In response to Bouma (1996) concern, this study is dealing with people, on the bases of mutual trust and the self-responsibility as the core norms. All those who were involved in the study in one-way or the other actualised the two core norms of the study in loyalty, honesty and self-integrity. These included Research Participants, Research Facilitator and Research Supervisor. Further, Research Participants had the prerogative of mentioning the information they would like to remain concealed and to be treated as confidential. For purpose of presenting the information Research Participants' identity remained concealed or anonymous.

1.8 Definition of terms

For the purpose of this study, the following working definitions were adopted.

- (1) Partnership: It is a voluntary arrangement as well as a business oriented arrangement viewed as individuals or parties informed by various perspectives, backgrounds and/or organisational cultures and expertise on a common platform discussing, listening and working together as equal partners, in order "to learn and to share knowledge, and to cooperate and make an impact together" (Fust, 2003: 3).
- (2) Stakeholders/Actors/Role-Players: These are viewed as those individuals and/or parties having an interest in particular issues and decisions, and influence decisions including those people who are affected by the decisions made (Hemmati, 2002b; Taket & White, 2000; Guba & Lincoln, 1989).
- (3) **Data/Information:** Used interchangeably in the text And viewed as facts or the raw materials that undergoes transformation process to be information (Thornsbury, Davies & Minton, 2003; Terre-Blanche & Kelly, 1999).

- (4) Information accessibility and availability: It is viewed as the ease of acquiring information and/or knowledge through a medium that acts as a communication device or control mechanism that has security, and control of information considered as an economic commodity that has integrity and value (Rice, McCreadie and Chang, 2001; Benyon, 1997).
- (5) Management Information System (MIS): It is an information collection and analysis system that facilitates access to programmes and participants information. MIS is also seen as an organized assembly of resources and procedures required to collect, process, and distribute data/information for use in decision-making for administrative purposes (Laudon & Laudon, 2000; Lucey, 1979).
- **(6) Knowledge:** Knowledge is viewed as aggregate of facts, information and principles that individuals acquire through learning and experience. It is seen as know-how to perform tasks and functions, thus knowledge is comprised of strategies, practices, methods, and approaches to situations "considered as actionable information" (Jashapara 2004: 16).

1.9 Structure of the dissertation

Chapter One outlines the structure of the thesis chapter by chapter. It introduces the study, highlighting the problem situation, the research problem and its setting, as well as research question and sub-questions. Further, it introduces and describes the research justification, the purpose of the study, scope and limitation, conceptual framework, definition of terms and finally outlines the structure of the dissertation.

Chapter Two is a review the literature exploring current debates on the issues of partnerships, stakeholder analysis and management of conflicts.

Chapter Three is a review of literature exploring communication, information and knowledge management.

Chapter Four is the description of the study area and development setting in KZN.

Chapter Five is a description of research design and methodology, locating the study perspective and clarifying a contextual PAR methodology, CPDAM, applied in the research study, including the methods of data collection and analysis.

Chapter Six is a presentation of findings, including analysis and discussions of the results.

Chapter Seven summarises lessons learnt and presents conclusions and recommendations made as a result of reflection of the whole research study.

CHAPTER TWO

UNDERSTANDING STAKEHOLDERS, THE DEVELOPMENT OF PARTNERSHIP AND MANAGEMENT OF CONLICTS IN PARTNERSHIP: A REVIEW OF LITERATURE

Introduction

This chapter provides an overview of stakeholders, stakeholder analysis, development of partnership, and management of conflicts in context of an inter-institution collaboration environment and inherent diversity of the stakeholders. The significance of partnership stakeholder analysis is articulated and visualised as fundamental and an essential ingredient in understanding sustainability of partnerships in different environments

2.1 Stakeholders and stakeholder analysis in development of partnership

There is no specific way of defining stakeholders, however they can be conceptualised in their definition. In principle some key words that should be captured in definition are resource users or managers, interest, power, visions, the affected parties, authority, decision making and information exchange. Taket and White (2000) view stakeholders as those actors in a system who stand to benefit, have power, whose lives are affected and those who influence decision making. Allen, Kilvington and Harmsworth (2001) define stakeholders as persons, groups or institutions with interest in a policy, programme or project. Ramírez (1999:2), citing Freeman (1994: iv), defines stakeholders as any group or individual who can affect, or is affected by, the achievement of a corporation's purpose. Röling and Wagemakers (1998:7), while discussing issues of sustainable agriculture, describe "stakeholders...as natural resource users Brinkerhoff (2002) identifies stakeholders as those actors who make and managers". decisions about a partnership or are affected by the consequences. They are an essential part of integrating partners. The author further observes that there may be many stakeholders in a partnership but there are some who are more important than others in order to sustain a partnership. These stakeholders present access to new business prospects as well as influencing the management of group resources (Brinkerhoff, 2002). Drawing from the foregoing authors, stakeholders are those actors in a system, who influence, make decisions or are affected by the consequences of the decisions made.

2.1.1 Stakeholder analysis

According to Grimble and Wellard (1996) stakeholder analysis is a powerful approach, tool as well as a technique used in identifying and assessing the importance of key informants as well as enlisting support from stakeholders. Grimble and Wellard (1996: 175) define stakeholder analysis as "a holistic approach or procedure for gaining an understanding of a system, by means of identifying the key actors or stakeholders and assessing their respective interest in the system". Allen, Kilvington, Harmsworth and Horn (2001) describe stakeholder analysis as a process of understanding who stakeholders are and their participation in decisions making regarding issues that need to be addressed. Guba and Lincoln (1989: 177) advocate that stakeholder analysis should take place an open-ended "constructivist inquiry" methodology. The detailed analysis of all issues affecting the stakeholder informs the success of the partnering process by the interested stakeholders. Drawing from authors' definitions and views, stakeholder analysis provides a visual means of identifying, understanding and enlisting support of stakeholders as well as identifying problem situations in a system.

According to Grimble and Wellard (1996: 177), a stakeholder analysis is useful in a "wide range of policy and management contexts, it is more relevant (and critical) in complex situations where there are compatibility problems between objectives and stakeholders". This helps project initiators to assess the political, social and economic environment in which the project operates. Salomon and Engel (1997) and Grimble and Wellard (1996) further argue that stakeholder analysis offers a methodology for problem solving and stakeholder interaction in environmental and development issues, advancing a platform for comparative analysis of various perspectives and interests among stakeholders. Allen *et al* (2001), Lazar 2000, Ramírez (1999), Röling and Wagemakers (1998), Salomon and Engel (1997) and Grimble and Wellard (1996) concur that, practically, governments, institutions and organisations apply stakeholder analysis to:

- Monitor and evaluate intervention processes, policies that improve the effectiveness and efficiency in projects.
- Understand the existing patterns of interaction and lay strategies to work out conflict situations among the role players.
- Assess the social-economic and political impacts of policies and projects on the environment.
- Identify priority areas of development and behaviour among the stakeholders that can enhance development and maintenance of successful partnering relationships, and
- Create an enabling environment for participation in development.

2.1.2 Identifying roles of stakeholders

Allen, Kilvington and Harmsworth (2001) recommend that the facilitator or team that is facilitating the identifying roles of stakeholders can use stakeholder analysis as a technique of building and strengthening relationships in a participatory multi-stakeholder situation or project. The building and strengthening of relationships among the stakeholders is an interdependent relationship that depends on appropriate identification and understanding of different stakeholders and their roles to invoke a successful partnership.

Alexander (2003), Allen *et al* (2001), Ramírez (1999), Röling and Wagemakers (1998) and Grimble and Wellard (1996) agree that stakeholder analysis is useful in:

- Identifying relationships and characteristics that may enable inter-institutional collaboration, ownership, cooperation as well as conflicts of interests among role players/stakeholders.
- Assessing capacity and participation various stakeholders involved in the project, at successive stages of the project cycle, and
- Helping in disclosure and capturing the interests of stakeholders at initial stage of project;

Alexander (2003) holds that stakeholders play a major role in partnership sustainability. The stakeholders' cohesion is key for partnerships to work, as they participate in various roles that

are fundamental to successful project implementation. Project facilitators need to know the viewpoints and roles to be played by every stakeholder involved in the implementation process of the project (Alexander, 2003).

2.1.3 Benefits of stakeholder participation approaches

Stakeholder participation approaches include a range of means of raising awareness, identifying objectives, agreeing on criteria and policy, and building adaptive capacity. Stakeholder participation has many benefits for success of projects or initiatives (Chand, Sikka, Rajkumar, Sumbumbal, Sam & Madhu 2001; Estrella, 2000). Groot (2002), Estrella (2000), Salomon and Engel (1997), and Engel (1995, 1997) agree that benefits derived from applying stakeholder-based approaches are numerous and indeed, the benefits of applying the approaches are immense. These benefits include:

- Identifying common views and most important agenda to set up a strategic support plan to solicit for resources and actors/role players who can influence implementation functions of a project;
- Appreciating stakeholders' views on the project to improve on management's plan of action;
- Setting up a management team that is inclusive of all role players in early stages; and
- Stakeholders developing ownership, and impartial management guidelines to involve all role players in all stages of project planning and implementation.

2.1.4 Conclusion

Stakeholders comprise individuals and organisations that have an interest (a stake) in some organization, activity, process or issue in which others may also have an interest. Stakeholder analysis is a power tool or technique to identify and assess the importance of key stakeholders who may significantly influence the success of the project. Secondly, stakeholder analysis should be conducted in the early stages of planning project implementation, as a quality improvement initiative to provide a visual means of winning stakeholders support for developing a future action plan of a project. Thirdly, stakeholder analysis is essential in all

projects in order to have successful implementation of the projects, as a well as concrete partnerships.

2.2 Development of Partnership

This section will examine the nature of development of partnerships through a variety of concepts. In attempting to do so, development of partnership is conceptualised in its various definitions and descriptions of partnership types; these being: Developmental partnership, Public-Private partnership and Community of practice partnership. Further the section will deal with partnering process, forms of partnering, and implementation of partnerships, partnership synergy, fundamental values and principles of partnerships and finally a conclusion to summarise the section.

2.2.1 Description of Partnership Development

The understanding of partnership development depends on the context and the perspectives of different stakeholders. Nchabeleng (2000) views it as a process based on joint action by actors working together with the intention of achieving a common purpose based on shared values. The shared values are expressed and communicated freely to solidify the process of partnering. Nchabeleng (2000) emphasises that partnerships development should encourage shared perception and a sense of responsibility as well as team play, without changing the values of the various individual components of joint action among stakeholders. The National Democratic Institute for International Affairs (NDIIA) (2006) views the partnership development as that venture that considers capacity building of the members, improving understanding of the emerging development issues. Further, partnership development promotes working relationships and establishing institutional processes that are inclusive, accessible and transparent as crucial entities for the welfare of all the partners, addressing power imbalances that limit developing new insights for partnerships of development (Salomon & Letty, 2006; Chand *et al.*, 2001; Nchabeleng, 2000).

2.2.2 Partnership perspectives

Mayers and Vermeulen (2002) assert that there are different perspectives of partnership. Some perspectives present partnership as organisational arrangements guided by operating values and principles of collaboration in community investment, strategic alliance in business, economic development and stakeholders' consultations.

Mayers and Vermeulen (2002) perceive partnership as a range of down-to-earth, business-like relationships to ambitious value-based concepts. Badaracco (1991) views partnerships as cooperative investment of resources, with shared benefits and recognition, and shared leadership based on the strength and resources available to each party characterising the relationship. Brinkerhoff (2002) describe partnership as a wide range of deals, contracts, and formal and informal arrangements between institutions or organisations as collaboration of individuals and organisations working together to achieve common goals and objectives. According to Obimpeh (1999) partnership is a relationship and agreement that is actively entered into and is obligatory where different parties bring together their collective vision and engage in joint planning, implementation and evaluation of their joint venture.

Pemberton and Stonehouse (2000) perceive partnership as a two-way process where the beneficiaries' give and take and core ideas focus on linking available resources to a central pool in away that resources are used corporately by partnering organisations to implement individual target projects or joint ventures. Lazar (2000) views it as partners sharing their skills and knowledge to builds social, institutional cohesion, and empowering one another. While Foege (1999) and Doz and Hamel (1998) view partnership as a process of working together to propagate a seed of joint action, leading to achieving a common purpose based on shared vision, values and principles. Jones and Jones (2002) and Taket and White (2000) recommend that the partners working towards development of partnership should participate as equals in the management of scarce resources to empower each other and to optimise resources that are available as well as harnessing benefits therein. The key concern is to enhance the knowledge, expertise and capacity building of individuals and groups, while merging all relevant contributions together in a quest of achieving shared vision.

In all these perspectives of partnership, Mayers and Vermeulen (2002), Brinkerhoff (2002), Pemberton and Stonehouse (2000), Lazar (2000), Obimpeh (1999), Foege (1999), Doz and Hamel (1998) and Badaracco (1991) agree that they are based on shared values and principles. However, Mayers and Vermeulen (2002) assert that partnership relationships are not necessarily balanced, due to unequal levels of resources and influence, but the main focus is on mutual and multilateral relationships that promote joint ventures. The joint ventures are driven by virtues of providing services effectively and efficiently while optimising the use of available resources and minimising the costs of operations (Bennett, Grohmann & Gentry, 1999).

2.2.3 Types of Partnership

Partnership categorisation may be ambiguous. The consequence of the ambiguity is trying to adopt certain criteria of categorising partnerships. Sarmento, Batista, Cardoso, Lousã, Babo and Rebelo (2003), Brinkerhoff (2002), Dodds (2002), Nchabeleng (2000), Plummer (2000), Bennett *et al* (1999) and Wettenhall and Thynne (1999) assert that there is no criterion that is adequate to describe or that can used to satisfactorily categorise partnerships. However use of collaborative relationships between organisations is good enough to categorise partnerships for the purpose of use in this study. According to Nchabeleng (2000:13), the collaborative relationships can be viewed as "the degree of dependence or interdependence of the parties; the amount and quality of information and knowledge which is shared; and the influence each has on the direction of the partnership takes". According to Dodds (2002:39) the categorisation may be on the basis of the "concepts of key values and ideologies ... public participation and various mechanisms of stakeholder involvement, and the wider debate on governance and governance reforms". Drawing from the foregoing there are three categories of partnerships namely:

- Developmental partnership
- Public-Private partnership
- Communities of practice partnership.

2.2.3.1 Developmental partnership

Developmental partnership differs from the ordinary joint ventures. They are nurtured in empowering the partnering organisations and driven by participation in all stages of partnering (Nchabeleng, 2000). The mutual benefit is that all members enjoy spontaneous strength in that they can contribute and play all roles effectively and efficiently. The participating organisations should be involved in formulating the aim/goals and objectives that focus on issues that are beyond an individual vision, to those focusing on shared vision and requiring corporate attention (Nchabeleng, 2000). Salomon and Letty (2006) firstly view developmental partnership as embodied in shared vision, values and principles of practice. Secondly it is viewed as sharing of knowledge and scarce resources to achieve aims and objectives of partnering organisations and target groups. Jones and Jones (2002) view developmental partnership as a voluntarily relationship based on mutual commitment and shared vision, to achieve a common goal. Further Jones and Jones (2002) explore developmental partnership by reflecting on real-world issues such as accountability, transformation, practice, and agenda setting, which leverage the sustainability of partnerships. They maintain that the stable and worthwhile partnerships that embrace those real world issues have the capacity to accelerate development.

Salomon and Letty (2006) Jones and Jones (2002) and Nchabeleng (2000) from their definitions agree that developmental partnership is the way to go in the development arena. Especially in the rural areas where the resources are scarce and needs concerted efforts of all the agencies involved in development in these area to be innovative to win the target groups. The authors focus on the key pillars of developmental partnership as:

- The partners work with each other and with their target groups to have impact, release the shared vision, and to achieve the set goals and objectives.
- Developing, forming and maintaining a working relationship that is productive, is an individual responsibility of organisations in partnership.
- Formulation of purpose is based on shared values and vision in practice that are embedded in mutually understood problems and opportunities, and
- Renewal of on-going cycle of learning and exchanging information and knowledge by partners developing into a mutually supporting and mature relationship.

2.2.3.2 Public-Private Partnership

According to Wettenhall and Thynne (1999), Public-Private Partnership (PPP) is all about sharing the ownership and management responsibility for investment being accountable to the recipients of the contracted services. Plummer (2000) has a differing view of the PPP concept but the end objective to be achieved is similar. Plummer (2000) referred to PPP as the structures of partnering in which government endeavours to establish a bilateral relationship and arrangements with the private sector to offer services in form of investment. While Bennett *et al* (1999) describe PPP as a spectrum of possible relationships in form of subcontracts and direct funding between public and private actors for the cooperative provision of services, and effective and efficient service delivery to the target clients.

In summary, PPP have an obligation to deliver the services to the community effectively and efficiently at affordable and convenient cost. The logistics of costing the services delivered by private sector are agreed on in consultation with government representatives and other stakeholders. The arrangements and agreements could take the form of sub-contracts where government offers some concession to private sector to deliver certain services that fall under public domain. The other arrangement and agreement is where the government is directly funding private the sector to offer certain services on its behalf. Basically PPP development is based on improving and implementing an effective service delivery, where from the public domain it has proved that the intended effectiveness and efficiency needed is not being achieved (Plummer, 2000; Bennett *et al.*, 1999; Wettenhall and Thynne, 1999).

2.2.3.3 Communities of practice partnership

Communities of Practice Partnership (COPP) are people or groups of people that have a common interest and willingness to assist each other. They share the core values of learning, sharing information and knowledge, and corporate productivity (Sarmento *et al*, 2003). The core values enhance and promote individual capacity building. The COPP are in the form of consortiums and networks:

Consortiums: These are individuals, groups, or organisations that team up to achieve a
common goal, driven by common needs. The common needs could be learning to
explore the skills and personnel development needs or sharing knowledge, information

and expertise in an organisation. They are built upon existing partnerships or groups who have worked together formerly. According to Nchabeleng (2000:14) "consortia are usually issue-based groupings of three or more organisations, which have come together to bring a value added approach to programmes". These groups act on trust, building a trust based partnership relationship to optimise resource utilisation at the minimum cost for service delivery to the target clients (Wright & Taylor, 2003; Lazar, 2000).

Networks: These are individuals and organisations harnessing and tapping the potential of individuals and groups to strive, for a common purpose. This involves sharing of information and knowledge, and participating in key decision-making (Taket & White 2000). Fust (2003) asserts that networking opens opportunities for empowerment, especially in the present information age of Internet generation. The expanding provision and opportunities to access information and knowledge is an enormous asset to individual and organisations involved in networking. Key in networking individuals, organisations and institutions is the opening of opportunities to achieve common goals and objectives while minimising the cost of operations as well as reducing the apparent headaches of individual operations with scarce resources. The networking individuals and organisations help each to streamline creative innovations. The innovations in turn empower organisations individually and collectively, as well as contributing to the well being of the target groups or communities. Middleton (2002) asserts that there are enormous provisions of opportunities in the present information age for the networks operations can operate efficiently using advanced information and communication technology (ICT) through the Internet. It has provided opportunities to capacity build and maintain healthy networks aiming to nurture and promote organisational capacities globally (Sarmento et al, 2003).

To appreciate the importance of the partnership whether developmental, PPP or community of practice Fust (2003), Middleton (2002), Nchabeleng (2000), Plummer (2000), Taket and White (2000), Bennett *et al* (1999) and Wettenhall and Thynne (1999) submit that partnerships

are guided by the ideology of empowering the partnering individuals and organisations, and target groups by basically helping them to:

- Identify and analyse the problems they encounter as well as appreciating their own ability in organisational and leadership skills.
- Develop communication and ability to draw strategic plans and resource management,
 and
- Capacity build to know-how, enhancing organisational learning required, taking collective action to solve complex problems and also to resolve conflicts on their own accord.

2.2.4 Partnering process

Salomon and Letty (2006) and Nchabeleng (2000) outline the partnering process to understand the development of partnerships using three criteria to categorise collaborative relationships of partnering organisations and institutions. These are: "the degree of dependence or interdependence of the parties; the amount and quality of information and knowledge which is shared; and the influence each has on the direction the partnership takes" (Salomon & Letty 2006: 5). These categories in accordance with the partnering continuum are joint ventures or developmental partnership, consortium, network, sub-contract and direct funding visualised in figure 2.1 (Solomon & Letty 2006; Nchabeleng, 2000).

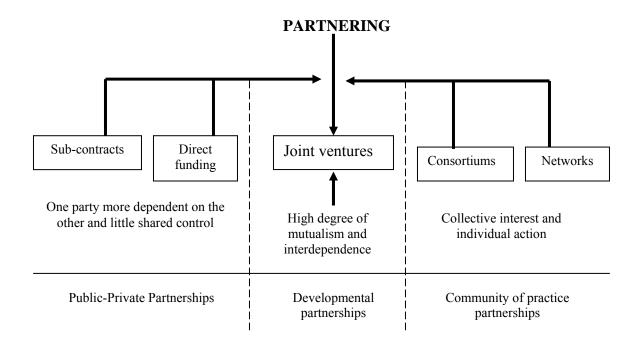


Figure 2. 1: Forms of partnering (modified), Source: Nchabeleng (2000)

2.2.5 Implementation of partnership

Fust (2003) and Middleton (2002) assert that partnerships implementation call for motivation and will to undertake a risk, creating awareness by public education and campaigning for membership. Fust (2003) and Middleton (2002) identify some significant concerns that compel Stakeholders to have a desire to implement working partnerships. These concerns could originate internally or externally. They are:

- To collect and make best use of scarce resources.
- To join up information provision for organisations, and
- To improve service delivery.

Strategic planning lays emphasis on planning operations in terms of linkages and networking. Implementing partnerships intensify collaboration and impact as the theories of partnership development are put in practice to allow the organisations to contribute to the administration and management of the partnership corporately (Crewe & Harrison 1998). To guide administration and management of the partnership to progress and promote the virtual of

partnership, Jones and Jones (2002: 11-13) established a number of tools that are critical for partnership implementation. These are:

- Partnership agreements: These are formal records, based on negotiation of core values.
- **Consultation:** These can take a variety of forms, but the main purpose to move towards power balance (power relationship).
- Shared development vision: This involves establishing a shared development of explicit learning system and programme development.
- **Technical and other supports:** These are important for starting partnerships as a support mechanism, most often provided through periodic and long term consultancy.
- Establishing office (secretariat) as an operation base: The offices are established to service the needs of partnering individuals and organisation. The location of offices should be negotiated mutually and agreed upon by all the parties concerned in the arrangement.

2.2.6 Partnership synergy

Obimpeh (1999) argues that due to scarce development resources ranging from human to natural resources, in public and private sectors, governments agencies, organisations whether governmental or non-governmental and the private sector, develop joint initiatives to be productive. The getting together to harness resources and to offer services effectively and efficiently is synergy. The common and important element is to optimise the use of scarce Basically partnerships should reflect the achievement of the resources at minimal cost. common goal and objectives among the various actors involved in the partnering for the purpose of maximising utilisation and management of scarce resources (Plummer 2000; Wettenhall and Thynne, 1999; Bennett et al, 1999). In synergizing, Fust (2003), Middleton (2002) and Wettenhall and Thynne (1999) submit that the expectation of the partnering organisations or service providers is that the performance should exceed the sum of individual organisation contributions and efforts. It is the desire of the partnering organisations that they overcome undesirable social and economic barriers to joint action. Sharing of new information and knowledge encourages the appropriate, new practices and ways of responding to already existing and future challenges in the process of groups' interaction (Sarmento *et al*, 2003).

2.2.7 Fundamental values and principles of partnership

Mayers and Vemeulen (2002), Lazar (2000) and Taket and White (2000) assert that cross-sectoral partnering has potential benefits, whether between business community, government, non-profit-making Non-governmental organisations (NGOs) or individual professionals. The inter-institutional collaboration is the new approach offering partnering organisations a competition benefit and the motivations. For that reason collaboration is possible where there is strategic planning. The strategic planning is possible where there is healthy partnership in political, social-cultural and institutional context (Veenswijk & Hakvoort, 2002). Veenswijk and Hakvoort (2002) and Lazar (2000) agree in principle that the quality of the partnership in which organisations operates, creates competitive advantage empowering the organisations in partnership that lead to mutual support of each, for service delivery to the community.

Salomon and Letty (2006) and Nchabeleng (2000) argue that the institutional and organisational arrangements in partnerships engagement that enhances leadership skills for efficient and effective service delivery accentuate active participation in the service delivery. They build a base of shared values, learning, and experiences thus making the partnership active. Strong partnership service norms are a powerful force in shaping leadership behaviours. Fust (2003), Middleton (2002), Foege (1999) and Obimpeh (1999) assert that when there are crises, strong partnership service norms easily trigger approaches of problem solving in a collaborative way leading to a collective action. The collective action is only possible where the partnership bedies are aware of fundamental values and principles of participating in the partnership. The true meaning of values and principles of partnership can be realised if the participants understand that partnership is contractual, collegial and holds strongly on collaborative and consultative visuals (Mayers & Vemeulen, 2002; Lazar, 2000).

Rackham, Friedman and Ruff (1996) contend that successful partnerships are based on a high degree of trust by partners, the partnering organisations appreciating each other's contributions

towards the achievement of the goals set, establishing an aggressive approach to attain the set goals and aligning the partnering organisations to a common vision and with strong sense of shared values. Partnership Principles emphasise the importance of approaches used in presenting the perspectives are descriptive accounts of particular initiatives and discussions of emerging topical issues, with the intention of providing contextual information and articulation of theory and analysis of partnering process (Fust, 2003). Evident in the approaches and perspectives used is that, for partnerships to be effectively operational, there is need for guiding principles.

Drawing on the insights of Fust (2003), Mayers and Vermeulen (2002), Middleton (2002), Veenswijk and Hakvoort (2002), Taket and White (2000), Lazar (2000), Foege (1999), Obimpeh (1999) and Rackham *et al* (1996), the following emerge as some important principles for partnership:

- Legal and binding formal contracts. They enable the parties to identify and solve problems in their joint venture.
- A process approach rather than rigid definitive project is encouraged. The process approach allows for flexibility where specific terms for review and modification are integrated.
- Ownership is an important aspect because it makes all the members responsible for their activities and results. Due to cooperate ownership there is cooperative formulation of intervention mechanisms, collective implementation and evaluation processes ensuring that security of contributions is put in place.
- Need for transparency and accountability. This refers to shared responsibility and understanding of the prospect, opportunity, risks and cost.
- Partners work jointly learning from each other and planning together. Each person's expertise and skills are acknowledged and valued.
- The overall aims and objectives are equally shared and owned by all the parties. This includes their intended purpose, priorities and anticipated result.
- The monitoring and evaluation, of progress to be done on regular basis, to ensure prompt intervention and action.

2.2.8 Conclusion

For partnership to be productive and to achieve the goals and objectives set by the stakeholders of the partnership, the inherent diversity among stakeholders in the partnership requires managing and organising. An initial stakeholder analysis facilitates this by providing a thorough knowledge of the stakeholders and their role in and influence over the partnership. The values and principles of partnership are important enablers of interaction of the partners and operation of the joint ventures, and well adhered to, they help in the maintenance of good relationship and the growth of mutual trust among the stakeholders.

Partnership should be based on voluntary approach that is self-organising, where the partners contribute for the good of the other members while sharing responsibility with mutual respect of the other partners' ideals. To strengthen the partnerships these ideals should be critically considered with use of participatory approaches in their joint ventures and be open for other organisations to join on equal terms to avoid future conflicts.

2.3 Managing conflicts in a partnership

There are various ways of conceptualising managing conflicts in a partnership. These are in interrogating the meaning and definition of conflict itself, conflict analysis, underlying causes, classification, conflict intervention strategies and preferences and different ways of resolving conflicts among contentious parties by means of conflict management, settlement or resolution (Centre for Conflict Resolution (CCR), 2000). Fisher, Ludin, Willams, Abdi, Smith and Williams (2000) contend that conflict is a common phenomenon in every day life. Broadly speaking, conflict entails disagreements resulting from individuals or groups that differ in perceptions and perspectives. Perceptions and perspectives are influenced by individuals' attitudes, beliefs, values, opinions and needs. Group dynamics also play a great role in aggravating conflict, reinforced by power imbalance. Conflict can also originate from past rivalries and personality differences and from differing academic or socio-cultural background (Cheldelin & Lucas, 2004). Therefore managing conflicts is an essential requirement for organisations to be successful in business and development ventures.

2.3.1 Definition of conflict

There is no single definition that can adequately address conflict, for conflicts differ depending on the context of the situation. Meredith and Mantel (2000), while looking at the process of project planning, assert that conflict surfaces through people interacting at the same level or various levels in organisations. In the process of interaction, differences arise primarily due to misunderstandings between the actors. Thus Meredith and Mantel (2000:226), summarise conflict as "the process, which begins when one party perceives that the other has frustrated, or is about to frustrate some concern of his". Conflict is an outcome of differing points of views and the interplay of three conditions. Cheldelin and Lucas (2004) identify the three conditions that comprise conflict:

- Two parties fight to dominate use of a scarce resource for their own benefit
- Two parties have an interdependent relationship, without a shared vision
- Two parties with differing ideological stance

Drawing from Cheldelin and Lucas (2004), Meredith and Mantel (2000) and Fisher *et al* (2000) conflict can be defined as state of misunderstandings between the actors with an interdependent relationship differing in ideological stance and without a shared vision resulting from individuals or groups that differ in perceptions and perspectives inclined to dominate use of a scarce resource for their own benefit.

2.3.2 Conflict analysis

To understand a conflict, it is important that an analysis of the situations and issues causing the disagreement be conducted. Cheldelin and Lucas (2004) and Fisher *et al* (2000) give a number of reasons for conducting a conflict analysis. These reasons are:

- To understand background and perspectives of all groups and to know more about how they relate to each other, and the past and current history of the problem situation,
- To identify the factors, the trends that underpin conflicts and the relevant groups that are having disagreements, and
- To learn from past successes and failures and use them as benchmarks and reference points to strengthen and leverage disagreements.

According to Groot (2002), Hemmati (2002b) and Fisher *et al* (2000) a conflict analysis requires transparency, mutual learning, collective vision and adaptability from all the parties. Conflict analysis should be carried out carefully in consideration of all the actors/stakeholders. It demands an input from them all in an effort to have an amicable solution. The actors involved in conflict situations have the ability to change a conflict situation or to make it extremely difficult to understand. The stakeholders need to sort out the levels at which these conflicts are occurring to develop a plan of action that is representative of the situation and issues. The issues differ from one level to another, hence a need to understand the issues that lead to conflict in various levels (Loginov, 2006; Cheldelin & Lucas, 2004).

Cheldelin and Lucas (2004:14-20) cite three levels of conflict analysis: Level I dealing with "analysis of micro issues mainly concerned with types, sources and dynamics" of conflicts; Level II dealing with "analysis of meso issues identified as identities and situations"; and Level III dealing with "analysis of macro issues like culture, traditions and structures" that ignite conflicts. Loginov (2006:102), when discussing "conflict as a resource of economic development", articulates the type of conflicts. First "conflict one: corporate wars for technical superiority" (2006:104). This conflict deals with the dynamics of who is who in the ownership of intellectual property and issues of competition in quality control of consumer goods. Second, 'conflict two: National interests and National legislation' (2006: 105) which encompasses issues and impacts of counterfeit products, generic products and trademarks on economic development. Third, 'conflict three consists of the clashing interests of society and business' (2006:108).

Pruitt and Carneval (1993) assert that the collective action by all the stakeholders in a conflict situation is a necessary requirement through which negotiation can be achieved. Without collective action, the differing standpoints put the actors at odds with one another where each is positioned to expose or impose their solution thereby defeating the effort of achieving collective action. For negotiation to yield positive results, it is imperative that the stakeholders' first focus on understanding and defining the nature of the problem they are dealing with at various levels (Cheldelin & Lucas, 2004; Fisher *et al*, 2000).

2.3.3 Underlying causes of conflict

The underlying causes of conflict should be addressed adequately to have an amicable result or conclusion. Cheldelin and Lucas (2004:16) refer to the underlying causes as "the parties' relationships, needs, interests, values and ideologies". Loginov (2006), Coleman (2006), Pruitt (2006), Cheldelin and Lucas (2004), Barash and Webel (2002) and Fisher et al (2000) assert that the underlying causes of conflict are embedded in perceptions, beliefs, gender difference, emotional inconsistency within an individual, poverty, economic inequality, social stresses, political and power play, mismanagement of scarce resources, philosophical discrepancy, cultural differences, identity crisis, poor communication, undefined roles and responsibilities, and interference with individuals' rights of survival and coexistence. The wrong manifestation of these underlying causes normally plays a major role in conflict escalation if they are not contained to manageable levels within an institutions or organisations. These are all important factors, which need to be known and understood before attempting to resolve any conflict or to make decisions of approach to handle conflict. Trying to negotiate before identifying and understanding the underlying causes or before needed information is available essentially escalates the existing conflict. Thus it is then important that one to take caution before getting into negotiation (Pruitt 2006; Loginov, 2006; Barash & Webel, 2002).

2.3.4 Classification of conflict

Conflict normally arises due to various issues or factors, which are incompatible or competing within an individual, group or among groups in the process of interaction (Billikopf, 2003; Barash & Webel, 2002; Meredith & Mantel, 2000). Cheldelin and Lucas (2004) classify conflicts using interaction domain as: Intra-individual; Inter-personal; Inter-group; and Intra-group conflicts. These interaction domain are clarified as below:

• Intra-individual Conflict: It is the struggle within an individual. This can be due to identity crisis, unresolved issues within oneself and lack of self-esteem. The self-interaction is in crisis causing a problem in decision-making. The main cause can be placing high expectations and setting unrealistic goals and objectives which do not yield the expected results (Cheldelin & Lucas, 2004).

- Inter-personal conflict: It refers to struggles between two or more persons in a group. The members of the same group are unable to focus on the same things that need to be done to achieve the group vision and goals. This is characterised by uncooperative behaviour of the individuals who are in conflict. The causes of inter-personal conflict are undefined responsibilities, work overload and mistaken perceptions. These causes need to be addressed for the group to be effective and efficient in the utilisation of scarce resources, including themselves as human resource of the group (Billikopf, 2003; Meredith & Mantel, 2000).
- Inter-group Conflict: It refers to conflict between two or more groups. It occurs mainly when an overly competitive attitude between groups over use of scarce resources is present. It is difficult to handle unless the warring groups are willing to discuss the issues that are causing conflict freely and openly. Healthy discussions of the prevailing circumstances lead to a consensus and a concrete plan of action. The groups' mutual understanding of the other brings down the communication barriers of prejudice and stereotyping among the groups. Amicable understanding of the groups' roles offers a space for free operation and optimising the use of scarce resources (Cheldelin & Lucas, 2004).
- Intra-group conflict: It is also referred to as organisational conflict. It occurs mainly as when there are undefined roles and responsibilities, poor communication and philosophical difference within the group. This kind of conflict renders organisations ineffective and inefficient. The trend leads an organisation to fail and is often accompanied by stress to the people involved in the group activities. This kind of a situation can be improved by organisational restructuring, by improving communication and specifying the role and responsibilities of the group members (Cheldelin & Lucas, 2004; Barash & Webel, 2002).

2.3.5 Conflict Intervention

One effective means of managing conflict is conflict intervention. Intervention in any situation requires thorough knowledge and skills of facilitating an intervention process and handling conflicts. This is coupled with the awareness of the situation to be dealt with. It is important that the facilitator of the intervention process have insights into the positions taken by the parties in conflict. The interests of both parties as well should be taken into consideration. This calls for intervention strategies. These are skilful approaches involving planning, implementing, coordinating, controlling and evaluating actions; balancing strong and weak points to attain a better end in favour of the two parties (Fisher *et al* 2000).

Blauert and Quintanar (2000) observe that skilled and trained personnel need to be involved in conflict intervention to prevent unnecessary misery when there are conflicts to be resolved in organisations. High quality leadership accompanied by appropriate human resource management approaches in partnering institutions and organisations are required to deal with arising institutional and organisational conflicts, and to counteract the impact of conflicting issues effectively. Hemmati (2002b) concedes that a conflict intervention process where two or more parties (stakeholders) are in conflict needs to be facilitated by people who have knowledge and skills in collaborative management skills.

Enayati (2002) argues that those who are involved in helping the conflicting parties to reconcile so that intervention can yield expected benefits should carry out an intervention process with very sober minds. During the planning and implementation of the intervention process, a neutral platform needs to be initiated as a check and balance for the parties involved (Pruitt and Carneval, 1993). All stakeholders need to be involved in all stages of the planning process. This is to emphasis the importance of mutual understanding and appreciating that conflict is a shared problem. Perceived positively it can yield mutual benefit (Pruitt, 2006; Enayati, 2002). As a matter of human nature in unusual situations, there is a tendency of adopting survival techniques, especially when there are unfamiliar factors in the situation. It is then a good approach for those who are involved in the intervention to understand conflict

handling preferences or modes to give an edge on addressing conflict situations (Cheldelin & Lucas, 2004).

2.3.6 Conflict handling preferences

The parties in a conflict may have various preferences of handling the issues that contribute to conflicts. The parties in conflict may adopt one of these preferences depending on the position and interest held on the situation. The interest and position held determine the attitude and behaviour towards the conflict situation. The preference or mode of handling the conflict depends on the attitude and behaviour developed to face the conflict situation (Sandy, Boardman & Deutsch 2006; Billikopf 2003; Barash & Webel, 2002; CCR, 2000). These preferences or modes of handling conflicts are: avoiding, accommodating, competing compromising, and collaborating. These preferences are described below:

- Avoidance preference: It is a situation where the antagonistic parties are not ready to address the conflict. The concerned parties run away from confronting the reality even though they may be aware of the consequences that may emerge from avoiding the issues that need to be addressed. Avoidance is a situation whereby the role-players are lacking self-confidence and cooperation. They have adopted a negative attitude. They are not willing to resolve the problems affecting them, and not willing to deal with issues that are bringing unhealthy state of affairs. The consequence of this kind of a situation is that both parties will lose, referred to as 'lose/lose' situation (Sandy et al, 2006).
- Accommodation preference: It is a state of a party recognition the rival party's and need to relax on some of it set goals to win the other party. Winning is for the purpose of coexisting in the niche to optimise the use of the scarce resource. The preference can be viewed as a weakness in that one party gives in, that is 'lose' notion, and viewed as strength in that the other party achieves its interest that is 'win' notion. It is more concerned with the group harmony, when one party offers a free space for the other party to operate in (Cheldelin & Lucas, 2004).

- **Power as in competition preference:** It is based on the gain and/or controlling and the other party losing, 'win/lose' notion. There is low regard of the other party concerns. In terms of power it is dictatorial and undemocratic leading to domination that is not healthy. It mainly focuses on the self-interests and position defeating the effort of amicable agreements on the issues of concern to the two parties (Cheldelin & Lucas, 2004; Fisher *et al*, 2000).
- Compromise preference: It is a preference or mode that results in partial satisfaction of both parties involved in conflict. The outcome of this preference is 'win some/lose some'. The outcome results to partial satisfaction of the two parties concerns. Barash and Webel (2002:283) contend that "compromise assumes that both contenders are equally worthy, so that splitting the difference between them will produce a fair settlement".
- Collaborative preference: It is a creative way of turning an unhealthy situation into a healthy situation for the benefit the two parties involved in a conflict. There is high regard for the two parties interests. The outcome of collaborative preference in a conflict situation is 'win/win' which is a healthy state for both parties. The parties are more concerned with problem solving to satisfy both parties with a hope of generating a lasting solution to the conflict (Coleman & Deutsch, 2006).

2.3.7 Intervention strategies to mitigate conflicts

Fisher *et al* (2000) argues that intervention requires a facilitator who takes a neutral position with help of recorder who is impartial. The facilitator and the recorder should have a clear mind about the conflict handling preferences and/or modes and skills of applying intervention strategies. They should be in a position to encourage the conflicting parties to focus on the issues and not the personality differences as well as being creative and committed to the intervention process to achieve the set goals (Brown, 2002; Hill, 2002; McRae, 2002; Cheldelin & Lucas, 2004). Facilitation involves creating favourable conditions for all to have an opportunity to speak their views. The actors in the intervention process need to be very

clear about their position and the kind of commitment that they may get into at the end of process. The position and commitment arrived at should lead to mutual trust, shared values, respect and obligation to the process (Taket & White, 2000; Zartman, 2000; Groot, 2002).

Strategies should be based on effective planning and coordination of the parties involved in conflict to minimise the possibility of resistance and not overcoming the resistance in negotiation (CCR, 2000). Fisher *et al* (2000), Taket and White (2000), Zartman (2000), Brown (2002), Hill (2002), McRae (2002), Billikopf 2003 and Cheldelin and Lucas (2004) acknowledge five strategies that can be used to moderate an intervention process as consensus building, facilitating a dialogue, negotiations, mediation and arbitration. These five strategies are elaborated as below:

- Consensus building: It is the process where two parties in conflict engage within one another to find common ground. It is usually an iterative process achieved slowly. It often requires the involvement of a neutral third party for agreements to be arrived at harmoniously. The partner organisations in consultation are required to be involved in all the stages of the consensus building process to help the parties negotiating make informed decisions (Fisher *et al* (2000).
- Facilitating a dialogue: The parties involved need to agree cordially on ground rules for communication, objectives and agenda issues to be covered during negotiation, as well as reviewing the meeting logistics to accommodate the two parties. Postnegotiations where groups involved need to implement the decisions made by endorsing the final documents prepared by both parties (Cheldelin & Lucas, 2004).
- **Negotiations:** The main objective negotiation is to settle the dispute balancing the two sides' interests. For negotiations to be effective, pre-negotiation emerges as key in the intervention process. Pre-negotiation is a platform for harmonizing issues to discuss during formal negotiation. It involves the partners who intend to initiate a successful negotiation process bringing conflict to a peaceful end (Billikopf, 2003; CCR, 2000).

- **Mediation:** This involves a third party that has no authority over the issues but helps the concerned parties come up with an acceptable settlement of the situation as well encouraging the conflicting parties to find long lasting solutions without counter accusation (Brown, 2002; CCR, 2000).
- **Arbitration:** This involves an independent person who listens carefully to both sides, makes decisions on their behalf that may or may not be binding depending on the terms of reference the arbitrator is using to approach the negotiations (Fisher *et al*, 2000; CCR, 2000).

2.3.8 Approaches to manage conflict

Conflicts occur due to differing perceptions and perspectives that develop due to perceived competition that emerges in the process of interaction and sharing of common resources (Barash & Webel, 2002; Cheldelin & Lucas, 2004). The approach chosen by the conflict facilitator to address conflict situation depends on the underlying causes and other environmental situations/factors that are in play for a particular case (CCR, 2000). Fisher *et al* (2000) contend that various approaches are used to deal with conflict depending on their predisposing factors that cause contention, the level of conflict and the urgency of harmonising the issues to manageable levels. CCR (2000), Fisher *et al* (2000), Cheldelin and Lucas (2004) identified five approaches. These approaches are significant to all organisations and institutions to understand as well as having systems allowing these approaches to be used for solving problem of issues perceived as external or internal problem issues. These approaches are conflict prevention, settlement, management, resolution and conflict transformation.

• Conflict prevention: It is a check and balance approach that creates a way forward before issues go out hand to result to actual faction reactions to a situation. It is a healthy approach as it cultivates a mutual understanding of the situation, where actors get together to discuss perpetrating issues. It is aims essentially to address the issues that affect the two parties and critique of the problem-solving approaches for conflict analysis that are mutually to both parties (Taket & White, 2000).

- Conflict settlement: It examines ways of letting the contending groups to get back to senses to negotiate and bargain on a common platform to address the issues facing them peacefully for co-existence with each, leading to peaceful agreements. It is a useful for those groups, which are exploiting common resources; in this situation no single party may achieve all their set goals. The situation is to avoid the full-blown conflict at least allowing time to study the actual cause of the problem or the conflict (Raider, Coleman & Gerson, 2006; Mayers & Vermeulen, 2002; CCR, 2000).
- Conflict management: Conflict management operates from the premise that conflict is inevitable and should be managed to maximise the positive results and minimise the negative results of the conflict. It can be conceptualised in terms of managerial functions. These managerial functions are planning, coordinating, implementing, communicating and controlling. In view of managerial functions conflict management is viewed as a constructive function to initiate and encourage self and organisational growth and learning, where the actors are empowered to understand their problems (CCR, 2000).
- Conflict resolution: Understanding of conflict resolution principles and the ability to identify the likely reactions of the counterpart based on behaviour includes self knowledge and knowledge of the other parties' behaviour, perceptions and perspectives of the conflict. Conflict resolution seeks to reconstruct the broken relationships and to evolve an environment that is healthy for both parties that are antagonistic. The issues causing the conflict can be resolved with assistance of outside help or they work out the conflict by themselves without involving a third party (Barash & Webel, 2002),
- Conflict transformation: According to Fisher *et al* (2000) conflict transformation is a purposeful action by those involved in a conflict to resolve a problem they are encountering. The problems encountered could be within the individuals working in an organisation or organisations. The notable ideal of conflict transformation is that it further addresses issues that are beyond individual and organisation. It addresses

micro as well as macro issues that are of concern to the affected. These issues could be social, economic and political stresses. It is embedded in long-term empowerment strategies as a vision of problem solving.

2.3.9 Managing conflicts: summary

Managing conflicts in partnership requires interrogating the meaning and definitions of conflict and underlying causes of the conflict situation. A careful examination of conflict handling preferences, strategies to mitigate and approaches intervention in managing conflicts are crucial in partnering organisations to withstand waves of discomfort when there are issues to be dealt within an organisation. Equipped with the knowledge and skills of managing conflicts, classification of conflict is imperative a starting point of intervention process to assist the groups in conflict to own the issues surrounding them and come up with appropriate solutions applicable in their own context.

2.4 Conclusion

Partnership development is a process characterised by embracing diverse cultures and social traits of the organisations concerned. There is also equal access to and open exchange of information and knowledge, mutual learning, flexibility and collective vision. The greatest challenge of partnerships is developing a framework of operations that as consistency and accountability, and the need to build a favourable institutional environment. Inherent in partnership development is the respect of diversity and different ways of knowing, willingness to share and to respect each other's skills and knowledge in quest of strengthening joint ventures (Mayers & Vermeulen, 2002; Taket & White, 2000).

Conflicts are explored, as they are viewed as a norm in normal in life, but abnormal to work with and experience. They are energy draining, costly and cause waste of a precious resources (time) when viewed from negative point of view. When viewed positively, they are healthy creating new frontiers of operations and approaches to structural and organisational changes to accommodate new developments in the environment (Fisher *et al*, 2000). The arguments in

the literature are applicable across various types of conflict situations. Whether a facilitator is facilitating groups in partnership, at workplace, institutions and organisations including the countries at war, the content are applicable to help the group resolve the conflicts and to develop new and healthy relationships (Cheldelin & Lucas, 2004; Barash & Webel, 2002).

CHAPTER THREE

COMMUNICATION, INFORMATION AND KNOWLEDGE MANAGEMENT AS PRIMARY ASPECTS IN DEVELOPMENT OF PARTNERSHIPS – A REVIEW OF LITERATURE

Introduction

This chapter will examine the communication, information and knowledge management as primary aspects of development of partnerships by showing their importance roles of in changing or transforming of the individuals' knowledge into organisational knowledge that leads to social innovation, successful networking in collaborating organisations and finally conclusions.

3.1 Communication and its complexity in partnership

Van Staden *et al* (2002) describe communication as a complex process that can influence or be influenced by situations of the prevailing environment. First complexity, communication can only be described in terms of the means by which it takes place, as forms, ways and the medium of communication. Dimbleby and Burton (1992: 221) described communication as "a process of creating and sharing meaning through the transmission and exchange of signs". McQuail and Windahl (1993:4) simply described communication as a "social interaction through messages" which is purpose driven. The purpose could be to fulfil the needs and to meet the intent of communication by passing information to those sharing a common interaction environment. The needs could be a range of personal, social, economic and political needs compounded by intent of creating healthy relationships for survival in strategic development of sustainable partnerships (Steyn & Puth, 2000; Miller, 1995).

The second complexity is locating the communication research approach perspective. These are primarily two; the southern and northern research traditions. Melkote and Steeves (2001) view communication from the southern research tradition development perspective focuses on empowerment of the stakeholders to decide on their destiny. It is primarily dealing with issues

of empowerment and social equity to create awareness to stakeholders or the communities to take charge of their social action to progress towards a positive social change. Northern tradition is basically dealing with organisational problems and efficiency (Prozesky & Mouton, 2001). However both research perspectives have embraced active participation by stakeholders as a unifying factor and at the same time evolving new insights to enrich the knowledge that can provoke appropriate changes. In some cases the research studies³ would move across both traditions to be productive (Prozesky & Mouton, 2001).

Drawing from Van Staden *et al* (2002), Prozesky and Mouton (2001), Melkote and Steeves (2001), Miller (1995), McQuail and Windahl (1993) and Dimbleby and Burton (1992) assert that communication can be perceived as a process that is purpose driven with intention of achieving an objective(s). Secondly as a process involving two or more parties with multiple reactions and impacts out of synthesis of the received information, where sender as a source of information sends information through a channel to the recipient, who in turn responds in accordance to the awareness created by the message.

3.2 Communication as a critical resource for analysis

Turner (2003) asserts that communication is a critical resource for institutions and organisations to engage with each productively in business, hence communication is significant as an enabling factor for effective organisations in business. It is also an interaction of environment and the mechanism or machines involved in the line of communication from a technical or physical angle, susceptible to interference from the environment factors (McQuil & Windahl, 1993; Richie, 1991).

Then effective communication analysis creates a space for the actors to understand the way they engage with each other in visualisation of issues, technically and socially to understand the environment in which they act and whether they are effectively communicating among themselves (Salomon & Engel, 1997). Hastings (1993) argues that communication is an

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³ The KZN-ADF research study would be dealing with organisational problem solving situation as well as issues of empowering the forum members in an inter-institutional collaboration of partnering organisations in agricultural development sector in KwaZulu-Natal (KZN).

essential element for effective learning, knowledge and information sharing and dissemination of information among the organisations with a shared vision. It is imperative that communication analysis among the organisation is done from time to time to understand various issues in that them within the area of operation, to optimise resource utilisation (Bessette, 2004). Dimbleby and Burton (1992: 6), Melkote and Steeves (2001) classified communication into four categories to help organisations to understand that communication varies. Understanding that communication varies helps organisations to devise effective means and ways of dealing with communication problems depending on their categories. Communication as tool of learning is worthy the analyses for the Stakeholders to fully benefit from it use. Table 3.1 shows the categories and description of aspects of each category.

Table 3. 1: Categories of communication

Categories of	Description of key aspects in each category
communication	
Intrapersonal	Involves internal arguments within one-self, when reflecting on the events of the
	day and trying to evaluate the successes and disappointments and assigning other
	ways and approaches to correct areas that were not effectively handled.
Interpersonal	Conversation between two people or more either engaged in an argument or in an interview situation mainly referred to as face-to-face communication. It is used for possibility and associatively putting forward association.
~	for negotiations and assertively putting forward cases that need attention.
Group	An interaction within groups and by groups of people to others. It is divided into small and large groups; the main difference is the behaviour of interaction. Mainly the large and small groups' purposes for meeting are different. Small groups, for example in family situation, meet at home to share a common shelter for the household, while large groups meet for business purposes to discuss a
	community development project or for relaxation in entertainment.
Mass	It is characterised by the way people in large numbers receive information and
	messages at once exemplified by a radio or TV an announcements.

Referring to the Table 3.1, Turner (2003) argues that due to inherent diversity in organisational situations, a careful examination of communication categories and implication of the dynamics of use involved around them is necessary, to assess and evaluate in different environments turns significant to effectively communicate. It is important to realise that communication does not happen in a vacuum, but in the interaction of people and environment from a social angle (Turner, 2003).

3.2.1 Communication process

Dimbleby and Burton (1994:15) and Melkote and Steeves (2001:105) describe communication process as "who says what in which channel to whom and with what effect". Miller (1995) assertively holds that working towards learning more about communication process enables one to become an effective communicator. Steyn and Puth (2000) argue that understanding of the communication process is increasingly being recognised as an essential process to be known fully across various sectors or organisations collaborating in development to improve on human life. Dickinson and Deighan (1999) emphasis the importance of effective collaboration and communication in teamwork, they argue that for a team to participate effectively, it demands a relationship that is healthy for work to progress to have effect on the intended target. Communication is a "model arising for collaboration and underpinned by relationships, networks, common purpose, ... a spiders' webs', which brings together different interest communities to encourage participation for individual and team participation" (Dickinson & Deighan, 1999:280).

To understand what happens in the communication process, Dimbleby and Burton (1994), Melkote and Steeves (2001) and Van Staden *et al* (2002) perceive the communication process as a linear process visualised in figure 3.2. McQuail and Windahl (1993) perceive it as an interaction cyclical process among the actors or the role-players visualised in figure 2.3. These processes are important as key aspects for communication to be effective and efficient. These two processes are:

• A linear communication process: It is a communication process is straight in action and not showing an active interaction with the environment. Environment is show as the source of the noise termed as communication barriers and an element or a provision of feedback, to revolutionise communication as a two-way process. A social and physical interaction whereby there is transmission of information, ideas, attitudes, or emotion (the message) from one person or a group of people (the sender) through a channel to another person or others (the receiver) who in turn reacts by providing feedback (Van Staden *et al* 2002). Figure 3.1 shows the components of a linear communication process.

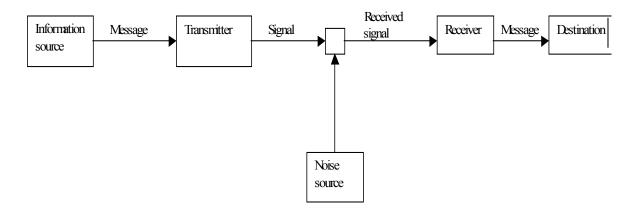


Figure 3. 1: A Linear communication process, Source: Melkote & Steeves (2001)

• A Cyclical communication process: It is an active impression of the human communication dynamic. The human communication process is so dependent on the prevailing conditions and changes over time as situations and conditions change. Dance's model figure 3.2 essentially responds to the environment to that effect. It "underlines the dynamic nature of communication. The communication process, like all social processes, contains elements, relations and environments that are continually changing" (McQuail & Windahl, 1993: 21). Secondly it qualifies and demonstrates the human interaction behaviour as people get to know each other and acquire more information and knowledge, the zone of interaction expands. It takes various shapes as different individuals interact with an increasingly expanding environment illustrating the human characteristics of expanding information and knowledge acquiring process as they interact with environment (McQuail & Windahl, 1993). Figure 3.2, shows the dynamic the dynamic expanding nature of communication in the process of interaction.

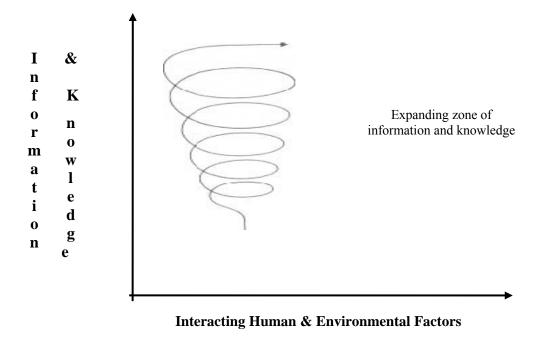


Figure 3. 2: Dances Helical Model, Source: McQuail and Windahl (1993:21)

To have a deeper understanding of effective communication processes along the communication channel, it is significant to understand the impacts of communication barriers and feedback in a communication channel or system. The system here refers to both the person-to-person or physical communication facilities like telecommunication.

3.2.2 Communication barriers in a system

They are dysfunctional factors or *noises*, which cause a communication breakdown or distraction preventing the receiver from receiving the message, or resulting in the signal being received differing from the one sent. In development spheres individuals as well as organisations need to be conversant with these dysfunctional factors or noise, in order to avoid communication breakdown (Samovar *et al.*, 2006).

Turner (2003) asserts that attention to various components of communication process, which are sender (source of information) message, channel, barriers, receiver and feedback or the interacting factors, is mandatory to ensure that communication occurs. The attention is

focused on communication barriers and feedback as they are all-responsive to the prevailing environment and have a great impact on communication (Richie, 1991).

3.2.3 Communication feedback in a system

According to Guba and Lincoln (1989) feedback is a vital element in all processes of communication (Van Staden *et al*, 2002). In context of project, feedback would mean monitoring and evaluating it continuously and constantly making follow up and assessing the progress made to attain the value and it worth to achieve management goals and objectives. The process demands constant communication among all the stakeholders working in partnership. The worth or the value of the project is determined through the feedback received at every stage of what is working and what needs to be changed to improve on the progress. This is achievable through constant communication by the networking of the partnering organisations (Raju, 2001; Scott, 1986). Figure 3.3 shows the components of a communication system. The components affect the effective communication acting as a constant remainder to the stakeholders that they cannot operate in isolation and succeed in their project and initiatives, but require networking to overcome these barriers in the channel.

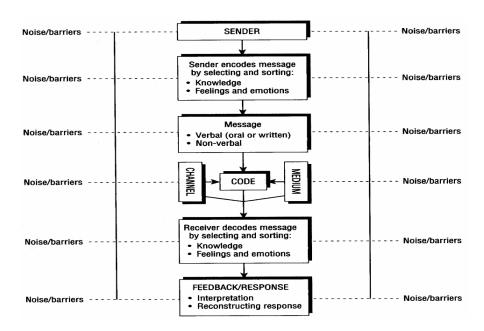


Figure 3. 3: Communication components, Source: Van Staden et al (2002)

3.2.4 Working with communication as a competence

The challenge of work with communication as a competence is there is need for effective communication in development circles an in partnership to progress amidst all sorts of communication barriers (Melkote & Steeves, 2001). Scott (1986) suggests ways of overcoming barriers, which include the use of face-to-face communication, sensitivity to other people's background, use of unambiguous language, avoiding subjective emotional language, establishment of trust between the receiver and the sender, getting rid of defensive attitudes and being a good listener. Samovar, Porter and McDaniel (2006) acknowledge the complexity of communication in different cultures, whether in cultural or organisational spheres. Communication is practically and substantially influenced and affected by organisational culture. This has a major impact on roles of communication in collaborating organisations.

3.2.5 Roles of communication in collaborating organisations

Phillips (1979:100) points out that "communication is not only a process but also a relationship" for human interaction and progression of organisations in different areas of development. Effective communication between an organisation and the outside world, the main aim is to maintain sound public relations, growth and success of any organisation (Powell, 2003; Lilley, Lightfoot and Paulo, 2004). Van Staden et al (2002) assert that for an organisation to succeed in collaboration with others, organisations should desire to effectively communicate internally. While equally, they need to communicate externally to the partner "Organisational communication can thus be internal and external organisations. communication (Van Staden et al 2002:14)". It is then essential to examine the roles of communication and implications for organisational interaction and development (Turner, 2003). Communication that is appropriate and effective involves a process from the source of the information (the message) to the end (Destination). Communication process determines the end result at receiver point from the sender and back from the receiver to the sender. To exchange information or ideas effectively, communication of relevant information is essential for partnering organisations (Steyn & Puth, 2000; Miller, 1995). It is then essential to

examine the roles of communication and its implications for organisational development (Turner, 2003). These roles are:

- Dialogue as an interaction process: It is a form of communication that leads people to a greater awareness and self-empowerment to recognise and explore issues that are of concern to them (Melkote and Steeves, 2001). Powell (2003) argues that, individual success and performance in organisational communication are indicators of the achievement of the goals set by organisations, which emphasise communication as a tool of management. Thus for organisations seeking to refine and facilitate dialogue, a combination of approaches to communication need to be practised for effective and efficient communication to enhance dialogue. Dialogue as an interaction process embraced in an organisational culture empowers members of that organisation to focus on organisation's development goals and objectives (Turner, 2003; Roy, 2001). Steyn and Puth (2000) and Roy (2001) assert that dialogue, as an interaction process is a way of getting to know and familiarising with one another. It promotes two-way communication process. It encourages shared and bilateral problem solving approaches among the stakeholders as a decision-making processes (Steyn & Puth 2000). Interaction is beneficial as it enhances communication in organisations. It is worthwhile to give attention to creative and innovative ways of encouraging interaction in an organisation to facilitate and promote organisational communication (Roy, 2001).
- **Building relationship:** It is based on the collaboration of individuals or organisations to achieve or to have a shared vision in development (Dickison & Deighan (1999). It is certainly important to view communication as a core element in building relationship. Communication is also important for stakeholders to engage with each other to realise a common vision. Communication is thus a critical resource for institutions and organisations to improve social-economic status of the target groups (Thione, 2000; Phillips, 1979).
- **Dissemination of information:** It is complex and comprises of the interplay of many elements. In this era of information and knowledge communication is playing an

important role in organisations public relations to improve customer service and product quality. Organisation improvement, wholly depends on the how the information on the necessary changes is received and disseminated to adapt to changing market behaviour and the technological changes in the various fields of development. The decision making to accommodate changes depends on the appropriate reception of information disseminated on the new knowledge, information and approaches to development issues (Steyn & Puth 2000).

3.2.6 Conclusion

Kunnumkal (2001) assert that communication is connectivity of activity to make sense of the surrounding environment as well as a learning process used for sharing experiences and information to revolutionise poor economies and partnering organisation (Roy 2001). Communication in an organisation determines how knowledge and information is shared among the actors to create and enhance a mutual relationship. It also impacts and determines dissemination of information and knowledge in order to realise the desired outcome and sustainability of the organisations (Powell, 2003). The partnering organisations that form partnership enjoy the benefits interaction to share experiences advancing positively the information and knowledge management. Knowledge management is an essential ingredient for a sustainable and a productive partnership (Jashapara, 2004; Powell, 2003).

3.3 Knowledge management

Knowledge management (KM) has received considerable attention in the information technology (IT) and information systems (IS) and other areas of development communities (Gottschalk 2005). It is continuously gaining acceptance in industry, enterprises, public and private organisations, and academia and research fields (Davis, Subrahmanian & Westerberg, 2005; Petrides, 2004). Al-Karaghouli, Fitzgerald and Alshawi (2005) argue that three key problematic issues are how to create, capture and share information and experience (i.e. knowledge), so that it is easily accessible in a partnership environment. To understand knowledge in a better way a term "Knowledge Capture" is used (Kazi *et al*, 2002:156).

Malhotra (2003) argues that managing this knowledge capture would allow the system to grow into a powerful information asset, thus knowledge management is an on going process that allows continuous interaction of human and knowledge management systems (Al-Karaghouli *et al*, 2005; Allee, 1997). Knowledge and information have a special relationship in that knowledge is an asset as well as capability endowed in human mind, whereas information is a means by which knowledge is realised in reality (Malhotra, 2003; Burton, 2001; Allee, 1997).

3.3.1 Getting to know/understand what is knowledge management

Gottschalk (2005), Jashapara (2004), Hussein and Wahba (2003) and Kazi, Puttonen, Sulkusalmi, Välikangas and Hannus (2002) analysing knowledge management, view knowledge as basically in two ideas. The clarification of these two kinds of knowledge is tacit and explicit knowledge. The view of these two basic ideas about knowledge, is subjective, as it is difficult to place a clearer boundary of the two kinds of knowledge, however they have a relationship in knowledge management. These ideas are:

- 1) Information acquired aligned to how knowledge is generated, captured, stored and retrieved, shared as well as transferred is tacit knowledge. Tacit knowledge is abstract and not tangible. It is ability or potency of knowing or influencing action that is in an individual that cannot be quantified in any numeric terms (Gottschalk, 2005; Jashapara, 2004; Kazi, *et al*, 2002). Gottschalk (2005: 65) views tacit knowledge as being "deeply rooted in individuals' actions and experience as well as in the ideals, values, or emotions he or she embraces". While Jashapara (2004: 299) trying to demystify the vagueness of tacit knowledge says, "One of the key channels for enhancing tacit knowledge sharing in organisations is the promotion of communities of practice". Drawing from foregoing authors' tacit knowledge is a theoretical know-how that can only be shared and can have a positive impact on stakeholders with no formality to be followed to locate it in a specific approach to knowledge management as a mutual benefit to them.
- 2) Experience acquired aligned to the notion of quantifying and evaluating, effective sharing and utilisation and application of the acquired knowledge is explicit

knowledge. Jashapara (2004: 303) expresses that "explicit knowledge is relatively easy to codify and transfer around an organisation using tools such as data warehouses". While Kazi, *et al* (2002) views the explicit knowledge in a similar manner in that it is possible to quantify this kind of knowledge. It is tangible and applicable in various situations. Gottschalk (2005) views explicit knowledge as that knowledge that can be spoken in words and expressed in numbers in form of data, scientific formulae, and specifications as well as transferable for use in different areas. Drawing from Gottschalk (2005), Jashapara (2004) and Kazi, *et al* (2002) then, explicit knowledge is tangible or quite practical and structured making it easy to share among the colleagues and in organisations. It is possible to recognise explicit knowledge in application and make sense out it.

3.3.2 Knowledge as an asset

In this information age and moving into a phase of knowledge "capitalism", knowledge management in combination with information management is playing a fundamental role towards the success of transforming individual knowledge and intellect into organisational knowledge (Lee, 2005; Malhotra, 2003). Chaudhry (2003) argues that knowledge it is a valuable and useful tangible element as well as an intellectual asset and information when it is well managed. The value and usefulness of knowledge is realised when it is transformed into manageable information components (Mitchell 2003). The concept of knowledge as an asset is vital in that it adds value to individual and organisations in the field of management (Lilley et al, 2004; Ipe, 2003).

Pemberton and Stonehouse (2000) assert that organisations in the knowledge business are involved in knowledge creation, capturing, sharing and learning as well as dissemination to the target groups regularly and constantly. The organisations are bound to invest capital in creative activities and new innovation to have competitive advantage. The increasing socioeconomic importance of knowledge, which currently redefines the links among learning organisations, work, learning and development, makes the role of knowledge management in partnership development crucial asset (Pemberton & Stonehouse, 2002).

3.3.3 Conceptualising knowledge management

Coakes *et al* (2002) argue that knowledge management has been visualised in various ways: Knowledge is not tangible; it is not a thing that can be held or when knowledge undergoes transformation process it is turned to information that is useful and available for use by a cross-section of actors. In practice, knowledge management often encompasses (a) identifying and mapping intellectual assets within the organisation, (b) generating new knowledge for competitive advantage within the organisation, (c) making vast amounts of corporate information accessible, and d) sharing of best practices and technology (Gottschalk, 2005; Jashapara, 2004; Hussein & Wahba, 2003; Coakes, 2002).

Drawing from Gottschalk (2005), Jashapara (2004), Hussein & Wahba (2003), Coakes (2002) and Coakes *et al* (2002) view knowledge management as the art of mobilising, aligning and channelling the intangible and tangible knowledge to achieve goals and objectives in an organisation to have impact as intended, presenting an outlay of knowledge management in practice and action that is value packed.

3.3.4 Role of Information and communication technology in knowledge management

Metaxiotis and Psarras (2003) hold that knowledge management systems promote an integrated approach to identifying, capturing, retrieving, sharing, and evaluating an enterprise's information assets. The information and communication technology (ICT) promotes knowledge management in that it is used for advancing and reorganisation of knowledge, transferring and dissemination of knowledge. ICT is useful in creation, processing storage retrieval and transfer of knowledge (Lilley *et al*, 2004). The knowledge and information assets may include databases, documents, policies, procedures, as well as the un-captured tacit expertise and experience stored in individual's heads. Applying and using the knowledge management system as a tool of management, with human element knowledge is synthesized into information that is repackaged as knowledge for use and turning it once again to feedback to the system (Ellis, 2005; Gottschalk, 2005; Milton, 2005).

3.3.5 Knowledge organisation and communication

Transfer of knowledge involves its management and communication. Knowledge Management influences information management and communication and the two improve and enhance sharing of knowledge and information in organisations, involved in various development initiatives whether in partnership relationship or on their own (Rashman & Hartley 2002).

In situations where knowledge is effectively managed in partnerships, there is mutual respect, trust and acknowledgement that, each party has something to offer in terms of expertise, initiatives or skills (Wang & Rubenstein-Montano, 2003). Milton (2005) argues that knowledge management and transfer of knowledge in an organisation is very crucial for the survival of organisations in partnership. Knowledge management and knowledge transfer entail learning and sharing the lessons and results of the accrued knowledge raising key challenges of communication that need to be addressed. Rashman and Hartley (2002) assert that where knowledge management and transfer in learning institutions are revealed continuously, improved governance of services, use of technical and organisational knowledge, advancement in organisational change, and efficient use of knowledge is acquired. Knowledge that is not used is redundant, while the knowledge that is applied appropriately takes a process of initiating issues, collecting supportive information, analysis and reflecting on the experiences, hence improving and promoting service delivery (Garcia & Nelson, 2003; Bate & Robert, 2002; Baradacco, 1991).

3.3.6 Managing knowledge

Garcia and Nelson (2003) and Bate and Robert (2002) assert that management of knowledge and its effective utilisation is an important asset to organisations. It is useful in sharing of knowledge including learning from each other and allowing it to freely flow in and out of respective individual and organisations in form of expertise, initiatives or skills to inform the joint venture for high performance and productivity. Garcia and Nelson (2003), Bate and Robert (2002) and Baradacco (1991) agree that effective management and utilisation of

knowledge in partnership relationships leads to realisation of collective set goals that ensures productivity, effectiveness and innovation. It also increases turnover in service delivery and personal growth and motivation, and enables analysis and synthesis of information since parties involved are able to interact with each other through challenging and innovative dialogues and discussions.

3.3.7 Conclusion

Ellis (2005) submits that knowledge management is crucial for organisations involved in various areas of development to have human resource development and knowledge management interaction concepts clear, as a process of creating, learning and sharing knowledge in those organisations and communities. It is important that organisations in knowledge management business to relate knowledge management, technology, people and the process appropriately to achieve the set goals and objectives of using knowledge management to mobilise and tap human resource appropriately (Jashapara, 2004; Ipe, 2003).

3.4 Information Management in organisations

Information management is the foundation of decision-making in organisations, of which the knowledge of dealing with organisations can be applied to deal with partnership issues. Benyon (1997) argues that accurate, precise and specific information is vital and useful for operations of organisations if it can positively influence management of the organisations. Secondly, information that is timely and correct is a precious asset for learning to change organisations so that they can deal with both short-term and long-term management issues that impact on the effectiveness and efficiency of operations. Similarly Powell (2003) from a global perspective views the world today as store full of data and information of all kinds from different academic fields and disciplines. Yet as much as there is this massive data and information in this very information age it is useless if it is not organised and interpreted to make sense in a way that information meets the needs of the organisation and fits accurately, precisely and particularly for purposeful management. Thornsbury *et al* (2003) also notes that

service providers depend on the information available to them for decision-making and for providing the services appropriately to clients.

From a global perspective the world today, as mentioned earlier, is full of data and information of all kinds gathered by different institutions and organisations involved in various fields and disciplines of studies and surveys. This massive data and information needs transformation so that it is useful whether for managers of institutions and organisations looking for efficiency and effectiveness or for scholars who might sort similar information for academic purposes (Powell, 2003). Powell further argues that in response to this there is a great need for information to be polished to be of help to the users and acquire the intended value.

In addition to the need for information to make sense to all who may need to use it, Powell (2003) highlights the dimensions of acquisition, accessibility and availability of the information, making the whole arena of information and information management even more sensitive to deal with and to handle. Powell raises the question about the digital divide and the role it plays acquisition, accessibility and availability of information. Powell (2003: vii) observes that "terms like 'the digital-divide' have been coined to describe the growing disparity between rich and poor areas of the world in the use of ICT⁵ and access to the information that it provides" in the developed and developing countries.

While information management has been practiced for a long time by various organisations and institutions, it has remained one of the areas in development that is difficult to satisfy. Managers at one stage or the other have felt inadequate to fully address this area due to the fluidity of information. This does not mean that the work stalls, but one may not sit down and say all is well. On the same note information management technology is rapidly changing to cope with the enormous flow information that needs to be managed to suit the information needs of the individual organisations and the institutions. This situation creates a demand that

⁴ 'Digital divide' is a term that has been invented to portray or indicate the widening gap between those who have and do not have access to communication and other electronic technologies facilitating access to the rapidly expanding flow of information.

⁵ Information and communication Technology

requires individual and organisation to continuously keep on learning to embrace the fast changing technology and information to remain in business (Lilley *at el*, 2004; Aina, 1995). Drawing from Aina (1995), Benyon (1997), Powell (2003), Thornsbury *et al* (2003) and Lilley *at el* (2004) arguments on the importance and value of information management, it can be concluded that information management creates a need for a clear approach and definition as well as ways of redefining information management in different institution to meet their general and specific needs and/or external and internal needs to remain in business.

3.4.1 Defining information management

The first step in information management is to define what is meant by information. Laudon and Laudon (2000) noted that different people, for various purposes, have used information and data interchangeably in different fields. They argue that information and data are related and that information has two aspects. First, information is defined as data that has been organised, processed and presented in an acceptable form to meet the set standards (Rice, McCreadie & Chang, 2001). Secondly, information should make sense and should be ready for use in various ways depending on the needs of the organisation and the clients (Powell, 2003). Information that sits isolated is not especially useful to organisations and individuals who may need to use it for various purposes. Kroenke (1989: 16-17) earlier defined information as "a statement about the structure of an entity that enables a person to make a decision or other commitment". Both cases imply that it is important that information should be tailored and managed to meet the standard specification as per the needs of organisation requirements. Therefore that process of transforming data and information to make sense in various ways and to meet specific needs of organisations is the information management (Powell, 2003; Rice *et al*, 2001; Laudon and Laudon, 2000).

3.4.2 Information management in organisations, institutions in partnership

Powell (2003) views information management as an area that has faced challenges and varying demands in the academic as well as the business world. From a project management perspective Powell argues that organisations are characterised by changing demands in

different development spheres and organisational cultures. Powell's view ties up quite well with Lilley *at el* (2004) who argue that information management has come into view because a characteristic of the new information age at the turn of the last century was that people had to develop new methods of information acquisition as well as address issues of the accessibility and availability of information. This came about due to the exponential expansion of the human knowledge, the growing demand for a broad range of multidimensional, sophisticated, customized goods and services orientation and the emergence of worldwide competition for clients (Adimorah, 1995).

Lilley *et al* (2004) contend that the expansive and dynamic changes in the volume of information, and the demand for the accessibility to information has made it difficult to create a definition of information management that encompasses the new information age. They argue that it is inappropriate in practice to try to find a specific definition that is inclusive of all the perceptions and practices of information management by various institutions or disciplines. Notwithstanding this, management of information is currently a very important area in all institutions and organisations in that information is used for decision-making and projecting the future of those institutions and organisations (Lilley *et al*, 2004; Powell, 2003).

Powell (2003) further argues that information is a resource that is powerful and empowering in that creativity and innovation in various institutions and organisations of diverse types in both developed and developing countries depend on the availability of quality information. Powell argues that data and information may not make sense to any one unless there is a purposeful move to make sense out of that data and information. It is necessary that in order to be useful, the data and information gathered from time to time need to be sorted out, organised and stored in a manner that is easily available to the intended users and in a way it make sense for the intended purpose. In this way information provides numerous opportunities in the real world to resolve real-life world problems encountered by various institutions and organisations. Consequently quality information forms an inevitable starting point for initiating and carrying out intervention process for problematic situations (Lilley *et al*, 2004; Thornsbury *et al*, 2003).

3.4.3 Database use in information management

The preceding sections have briefly highlighted the complexity of information and information management in organisations, institutions in partnership. What is clear is that in order for data and information to be useful, it must be gathered, organised, accessible and available. One simple way to begin bringing order to data and information is the creation of a database (Rice, McCreadie & Chang, 2001). Different authors view or define databases differently. Warrender (2003: 2) views "a database as a storage unit where all the acquired information or data is stored either in numerical or textual forms". Benson and Standing (2005:92) view a database as a storage unit that as "a logically related collection of organised data". The stored data can be used in different ways whenever there is need to use the data. A database is designed in a way that makes data easily retrieved and conveniently accessed by end-users (Laudon & Laudon, 2000; Dowling, 1998). Dowling (1998), Laudon and Laudon (2000), Warrender (2003) and Benson and Standing (2005) contend that a database is the component of the data and information storage and retrieval, as well as maintenance of records. Records may be centralised in a single storage unit or spread out in various units, which are linked up and logically correlated. As such, the storage itself marks the beginning of data and information management.

3.4.4 Data and Information storage

Data and information storage is an important aspect that needs consideration in organisations at all levels as a foundation of information management. The notion of storage raises the questions of what needs to be stored and from where data is gathered. To answer these two questions a four-step process is derived from Riccardi (2003) and Dowling (1998).

Table 3. 2: Outline of the four-step process for data storage

Step	Description: Four-step process for data storage
1	Data gathering and collection
2	Organising and reorganizing for storage
3	Analysing or processing data and or the information so that it can have meaning and validity
4	Computerizing reliable information for use by end user in various formats

In this situation a computer acts as the main store for the data, which is stored in various forms in the main processor referred to as memory (Laudon & Laudon, 2000). Doyle (2001:31) stated that "memory (or main store) is the name given to the group of chips inside the processing unit where data is held temporarily whilst processing takes place. The data held in the memory is instantly available to the computer". Computer memory is classified as read only memory (ROM) and random access memory (RAM). These two play a major role in data and information storage and processing of data (Laudon & Laudon, 2000). The ROM holds data in the processor that cannot be changed by the user or in case the there is power failure the data remains intact and is available once the power that is running the processor is restored. On the other hand, RAM holds data temporarily for example in case of power failure the data is lost if it was not saved (Doyle, 2001; Laudon & Laudon, 2000; Kroenke, 1989).

A database is the software for data and information storage. On its own the data in a database remains inaccessible and useless. Managing information requires software for accessing the data and making is useful for management. When combined with appropriate software, the database becomes a database management system (DBMS) (Riccardi, 2003; Dowling, 1998). Viet (1983) views a database management system as a system that is multi-functional. It allows a combination of operations or functions to be carried out simultaneously. A database permits the management of raw data. The raw data acquired from the fieldwork, without having been processed has no meaning to the intended end-user. The raw data is processed by organising and reorganising. The processed data make sense to the intended end-users, turns into information that is useful and informative (Riccardi, 2003; Dowling, 1998). To manage and handle massive information, a DBMS is required to guarantee flexibility and versatility. DBMS's are of various ranges, but they function on the same in principles in terms of storage, organizing, and analysing information for use by end users (Chao, 2006; Benson & Standing, 2005).

3.4.5 Database Management system

Database management systems are "interactive and tutorial" (Veit, 1983: 40), in that their application requires certain sorting criteria for information access and retrieval. For example

the data or information concerning people can be retrieved using names and/or year of birth. An input in the system in a field of names and dates of birth is applied. Further the criteria may be sorted out in alphabetical or chronological order (Veit, 1983). Warrender (2003) asserts that database systems in themselves, though interactive and tutorial in manipulation, do not in any way do the formatting of information or data. The formatting of information or data is possible when the database system is connected to formatting programmes that permit production of information or data in the manner required by the user. In this manner database system is activated to be a database management system (Dowling, 1998).

Veit (1983) draws attention to another aspect of the interactive and tutorial nature of DBMS; that they are capable of initiating massive updating of records, retrieving of information, retrieving records in massive quantities, carrying out complex computations and checking of records across different charts or cross referencing. Other scholars similarly advance this argument and idea that a management database management system is a tool used by many organisations for fast and appropriate decision-making by managers (Warrender, 2003; Doyle, 2001; Dowling, 1998).

3.4.6 Data and information Security

Security of data and information is an area that cannot be compromised. Data and information that is not secure is useless and can be misleading in that it can be changed at any time whether wilfully or accidentally. Out of this challenge, data and information need to be protected and secure to have integrity as required in this computer era where computers are becoming more and more networked. This factor of networking has made data and information very vulnerable to misuse and stealing, creating need to safeguard data and information for use in development spheres (Afyouni, 2006; Warrender, 2003; Doyle, 2001).

The security of data and information starts with "physical security for the computer systems that hosts the DBMS" (Riccardi, 2003: 395). In this way, the reliability of the data and information is intensified, reducing a great deal the probability of data modification and thereby retaining its value. The value of the information is endowed in its accuracy,

accessibility and availability in its original form as it was intended to be for further and future application (Doyle, 2001; Laudon & Laudon, 2000; Kroenke, 1989).

For the database to maintain the integrity and the value of information, the DBMS should have "support for three types of security: Account security for the validation of the user; Access security for the protection of the database objects; and operating system security for database and file protection" (Riccardi, 2003: 395). Laudon and Laudon (2000) argue that for effective and efficient operation of a DBMS in an age of increasing computer vulnerability, controls are needed to ensure that only the intended users can access the valuable information.

Sousa, MacDonald and Fougere (2005) and Afyouni (2006) assert that the major focus of the information security is directed to the user traditionally. Presently with the fast changing computer technology, it has necessitated that the attention be focused on the computer security from outside threats through the Internet (Pearlson & Saunders, 2006). The spread of virus is a major threat to information stored to such enormous magnitude cannot be underestimated the damage it can cause to the stored valuable information. The threat to information security from users and outside needed to be treated equally important to maintain information integrity in an organisation (Laudon & Laudon, 2000).

3.4.6.1 Importance of incorporating a database and Management Information System into an Internet system

The Internet has created tremendous potential for development agents to network for peer, business and development interaction purposes. It is becoming widespread in most areas and it is a comparatively easy way to access information. Because it has been designed and structured to be user friendly with modern information and communication technology applications development Learning to use the Internet to access and retrieve information can be achieved through self-instruction following simple instructions. With the availability of online resources, anyone can search data, ideas and reach people easily. It is also possible to search any area of knowledge deeply and thoroughly through Internet. Finally, organisations can easily publish their work and activities using the Internet. This exposes them to other

development and funding agents locally, nationally and internationally, making networking a reality.

3.4.7 Management Information System

An important element in information management is the concept of Management Information System (MIS). Different authors define MIS in various ways. Kroenke (1989:37) defined MIS as "information system that facilitates management by producing structured, summarised reports on regular and recurring basis". Laudon and Laudon (2000:44) define MIS as an "information system at the management level of an organisation that serves the functions of planning, controlling, and decision making by providing routine summary and exception reports" Laudon and Laudon (2000) and Kroenke (1989) concur in that a MIS is a planned and integrated system for assembling relevant data, translating it to valuable information that is accurate and timely, and makes available the same valuable information to those who are in managerial positions in an organisation to help them make decisions appropriately concerning the operations of the organisation.

3.4.7.1 Technical and Social aspects of Management Information System

MIS has technical and social aspects to it (Coakes, 2002). The technical aspect is comprised of the hardware and software making up the DBMS (Laudon & Laudon, 2000; Kroenke, 1989). Checkland (1999) views the social aspect as the soft component of the MIS dealing with the people using the MIS. Checkland (1999) further argues that in order for a positive change to be experienced in institutions and organisations there is need to understand the dynamics involved in a process of change. The concept of socio-technical elements that involves handling of MIS and communication is important in linking information and knowledge sharing between participating and partnering organisations as MIS as to be user friendly (Coakes, Willis & Clarkes, 2002).

Clarke, Coakes, Hunter and Wenn (2003) noted that in an MIS situation it is difficult to separate social and technical aspects and to work with them independent of each other. Benson and Standing (2005) view MIS as an interactive unit that is complex and requiring

attention for it to be effective as intended. The social dimension is very delicate to handle, as it is people-associated. Typically it is important to appreciate and embrace both approaches (Social and technical) to optimise on the productivity of the management information system in organisations (Clarke *et al*, 2003).

3.4.7.2 Attributes of an effective and efficient Management Information System

In his discussion on the effectiveness and efficiency of MIS, Newing (1994) discusses two types of databases: relational databases and multi-dimensional databases. A relational database is a more advanced than the traditional hierarchical database. It is an advance on the hierarchical database. It is simple in design and maintenance. It is flexible in regard to new data and records input without interfering with existing programmes and applications already operating in the system. It is further designed and streamlined to do away with redundant data elements and many relationships are eliminated to allow creation of stable data structures from complex groups of data to make data access and retrieval more efficient. Further Benson and Standing (2005: 95) described, the relational database as "more modern and flexible, ... data are organised as a set of relations or tables. Fields in one table can be used to find data in other tables". Simply a relational database is organised in rows and columns of data relating and complementing each other in information and/or data search process (Benson & Standing, 2005; Laudon & Laudon, 2000).

A multi-dimensional database is a type of database that is optimised for data warehouse⁶ and online analytical processing (OLAP)⁷ applications. It holds more data and has more complex relationships than the relational database. It is easy for the end-users to manoeuvre in terms of analysing data. The data is stored is compact and highly organised, eliminating use of other programmes for easy viewing of the data. It as an able to rapidly process data in the database making it have unique interactive nature for analysis of mass data for decision making purpose by organisations (Benson & Standing, 2005; Laudon & Laudon, 2000). Laudon and Laudon, (2000), Rice, McCreadie and Chang (2001) and Newing (1994) asserts that multidimensional

⁶ A data warehouse is a database that can store current data, as well as historical data. The data originates from internal and external sources with tools and/or programmes to harmonize, consolidate analyse the data to support management in planning and decision making (Benson and Standing 2005; Laudon and Laudon 2000).

⁷ Multidimensional database tools that have an ability to aggregate and carry out an analyses of huge amount of data to find overall general trends (Benson and Standing 2005; Laudon and Laudon 2000).

databases are useful and they make the MIS more efficient and effective. MIS that is effective and efficient MIS has two important attributes. These are:

- **Flexibility**: It is flexible enough to accommodate, and to use the past and present data to assist in decision-making. The MIS that is flexible is capable of sorting out complex problems that are experienced as a result of data overload in a system. It also has the ability to link and connect the technical orientation and the managerial functions of MIS in an organisation (Rice, McCreadie & Chang, 2001; Newing, 1994), and
- Responsiveness: It is responsive to the needs of an organisation as information
 processing unit that support planning and control of organisations operations. It adds
 credibility to the organisation service delivery with capacity to handle changing and
 dynamic organisational environment effectively (Laudon & Laudon, 2000; Newing,
 1994).

3.4.7.3 Purpose of Management Information System

Benson and Standing (2005) and Laudon and Laudon (2000) assert that MIS is a unit used in the operations of organisations for interaction purpose. The socio-technical characteristics of MIS serve to define it in its functions. The functions to assist the organisations' management in it operations as planning, controlling device as well as assisting the management in decision making are some important aspects of MIS that are embedded in its definition and social-technical nature. These aspects are its relationship with managing client information and its use for tracking clients' records, which is essential for supporting the client's needs. These aspects are crucial as they lead to fast access and retrieval of clients' records to facilitate an effective and efficient service delivery (Godfredsen & Deveau, 1991). Thus the purpose of MIS is to sort out and reduce mass information to manageable levels for managers and administrators to use without getting mixed up.

3.4.7.4 Functions of a Management Information System in an organisation

The need for MIS arose out of the pressure trend on organisations and institutions that are working in similar areas of development to work together and form partnerships. There is an unquestionable need for them to be electronically linked up for the purpose of sharing

information and knowledge (Powell, 2003; Riccardi, 2003). In these cases, the information available is enormous, and all of it may not be relevant to all organisations in the partnership. Bearing this in mind, the need of an automated system that would take the role of sorting information becomes a priority for the management of data and information (Lilley, *et al*, 2004; Godfredsen & Deveau, 1991). The use of MIS plays a major role in linking up the partnering organisations and carrying information aboard to the target clients. According to Benson and Standing (2005), MIS functions as a link between information and knowledge management. It is an important and a useful tool in support of organisation's management. Benson and Standing (2005:98) assert, "MIS sit on the boundary between information and knowledge management, they are really support tools providing management with the information needed to do the job. In essence, different kinds of information are able to be accessed and analysed, and summarised reports produced".

Benson and Standing (2005), Lilley, *et al* (2004), Powell (2003), Riccardi (2003), Doyle (2001) and Godfredsen and Deveau (1991) assert that for MIS to deliver services as per the requirement of a specific organisation, it has the following functions to perform effectively: Capturing and storing information; Managing the flow of information in and out of the system; Preparing and producing reports and record keeping. These functions are further discussed and expounded on in the text presented next:

- Capturing and storing information: It is information input into a structure for processing to acceptable form for storage is information capturing. Information needs to be captured and stored it in such away that it is easily accessible and for future use and dissemination (Doyle, 2001).
- Managing flow of information in and out of the system: Decisions and protocols need to be established determining who has access to what information. Depending on the information that needs to be passed then there are restriction regulations that are adhered regulating such things as receiving and sending messages to and from a particular database. This may also be subject to formal legislation such as a data protection act (Powell, 2003). Managing the flow of information contributes to managing scarce resources in and out of organisation. It helps the partnering

organisations to maximize on the versatility of the MIS and can be facilitated through linking computers harbouring the MIS to an Internet service provider to allow interaction between users (Riccardi, 2003).

- **Preparing and producing reports:** Prepares and produces reports that are well organized, with summarized information that help management to respond timely and accurately, and make appropriate decisions (Godfredsen & Deveau, 1991). The reports produced can have impact on the operations of organisation if "the information provided by the system the thinking, knowledge and wisdom (the interpretation and decision-making) are provided by the manager" (Benson & Standing, 2005:100), and
- **Keeping records:** Record keeping depends on different organisations. The organisations may keep information in databases and/or in data warehouses. The data warehouses are more sophisticated than databases for storing information. Records of outcomes and performance of the operations of an organisation are kept to enable the management to compare the trends of outcomes and performance on the decision made on organisation operations. The past records analyses facilitate and support decision making by managers in an organisation (Benson & Standing, 2005; Lilley *et al*, 2004).

3.4.8 Summary of information management

The review of information management has highlighted the complexity of differentiating data and information. Whereas the mention of data and information management is in itself intimidating, it has gone way ahead to help organisations to be organised and optimise the use of data and information received. The importance of information management on the global setting in reference to digital divide in the present information era, in rethinking information management and the complexities in sorting out data and/or information for the purpose of harmonising the social-technical nature of MIS to be user friendly is essential for organisation in business and development. Amazing is the review of Management Information System socio and technical aspects and flexibility and responsiveness attributes of MIS in relation to

purpose and the functions of an effective and efficient MIS to enhance and promote service delivery.

3.5 Conclusion

Communication, information and knowledge management are critical factors in partnerships. They influence practical operations and interactions related to achieving institutional goals and objectives. They influence underpinning operations and relationships that impact on service delivery, efficiency and the ability of the partnership to function. At all levels in institutions and organisations they are significant elements of understanding the social needs of the people as well as empowering individuals and organisations. The collective vision, purpose and anticipated outcomes in partnerships are achieved and realised when communication, information and knowledge management are clearly understood by all stakeholders in an interinstitutional collaboration.

Communication, information and knowledge management cannot be random processes and activities. They need to be orchestrated, planned and managed. The rapid expansion of information, data and knowledge and the development of communication technologies further highlight the need for deliberate management to channel their contributions to the benefit of the individual and collective activities, enterprises and objectives within an organisation or partnership. In this regard, it is worth noting the significance of multi-functional nature of databases, database management systems and management information systems in handling of the data overload, access and retrieval, the ability to manage the flow of information in and out of the system while retaining its value and integrity as well as data and information security.

When the role of communication, information and knowledge management is well understood and effectively handled within and between organisations and partnerships, relationships are enhanced and objectives more readily achieved. Conversely, if communication systems are poorly designed and information and knowledge management are poorly handled, they can and will impact negatively on the ability of organisations or partnerships to function and realize their objectives.

CHAPTER FOUR

DESCRIPTION OF STUDY AREA, AND THE AGRICULTURAL/RURAL DEVELOPMENT LANDSCAPE IN KWAZULU-NATAL

Introduction

This chapter describes the area in which the KZN-ADF operates, giving a brief overview of the KZN province location, topography and drainage, and boundaries in relation to other provinces of Republic of South Africa. As KZN has a high agricultural potential, the factors that influence, contribute, as well as having significant impact on agricultural production would be highlighted. These factors are land use and resource utilisation, soil and vegetation, and population and economy and finally agricultural and rural development setting, including the development change agents involved in development in the region. The analyses of the resources and their utilisation reflect the importance of unlocking the agricultural production potential in KZN – the primary concern of the KZN-ADF and the reason it was created.

4.1 Description of the study area

The KZN Province is one of the nine provinces of the Republic of South Africa. The KZN Province borders the Eastern Cape on the south, the Free State and Republic of Lesotho on the west, Mpumalanga, the Republic of Mozambique and Swaziland on the north and the Indian Ocean on the east, (See Appendix 1). The province covers an area of about 92,100 km² of land. It has intricate and steep topography, and can be divided into three geographical zones. These are: "a lowland region along the Indian Ocean coast; rolling plains in the central section of the province and a mountainous area including two ranges, the Drakensberg Mountain in the west and Lembombo Mountains in the far north" (Mtshali, 2002: 61). The bioresources are distributed in these three zones as shown in appendix 3 (Mtshali, 2002; Camp, 1996). Appendices 1, 2 and 3 give an overview of location of study area and the area in which KZN-ADF operates, and KZN bioresources distribution in the region. Appendix 2 shows various KZN Municipalities where the member organisations of forum have projects.

4.1.1 KwaZulu-Natal's geographical background

KwaZulu-Natal is situated in South Eastern part of the Republic of South Africa. It has a height above sea level ranging from 0- 250 metres (m) at the low lands along the Indian Ocean coast (Coastal regions) to 2500 - 3300m at the mountainous areas of Drakensberg Mountains and Lebombo Mountains (Camp, 1999; Quinn & Lewis, 1995; Camp, 1995). The geographic zones include: "Low lands along the Indian Ocean coast, the rolling plains in the central section of the province and mountainous areas of Drakensberg Mountains and Lebombo Mountains" (Mtshali, 2002:61; Quinn & Lewis, 1995). Further KZN is classified in agroecological zones as semi-arid, with coastal areas and parts of the Drakensberg escarpments being dry, sub-humid to humid (Camp, 1999; Quinn & Lewis, 1995).

KwaZulu-Natal has intricate and steep topography resulting in many catchments and rivers systems draining the Province's water resources to the Indian Ocean. The areas along the borders of Drankensberg Mountains are very steep rising on average to attitude of 3000m above sea level (Department of Water Affairs & Forestry (DWAF), 2006; Camp, 1999; Quinn & Lewis, 1995).

4.1.2 KwaZulu-Natal's agro-climate and agricultural potential

The Province is composed of twenty-three (23) bioresource groups and five hundred and ninety (590) bioresource units. Some 590 Bioresource units are not shown on the map because of the scale (See Appendix 3) (Camp, 1996). These bioresource groups are influenced by pysiographic characteristics of the region and they are also indicators of the agricultural potential in KZN (De Villiers, 2005; Camp, 1999, 1996, 1995; Guy & Smith, 1998). Quinn and Lewis (1995), Camp (1996) and Mtshali (2002) classified KwaZulu-Natal by Physiographic regions in broad categories namely: Mountain ranges, Plateau regions, upland regions, basin plains Intermediate regions, Low-lying regions, and coastal regions (Quinn & Lewis, 1995:7). According to Quinn and Lewis (1995: 11) KZN soil has a great potential for agricultural production. The interaction of adiverse and elusive climate with a wide range of parent rocks has resulted in a variety of soils in the area as "26% of the region

has very high agricultural potential soils, 12% high agricultural potential soils, 60% moderate agricultural potential soils and 2% low agricultural potential soils", which reflects the high agricultural production potential of KZN (Quinn and Lewis (1995: 11).

Due to increased population, the soils and vegetations have experienced enormous degradation. The large population has intensified the pressure on agricultural development to feed the large population in the Province in the quest for livelihoods and has also contributed substantially to soil and vegetation degradation in the region (FSG, 2002).

4.1.3 KwaZulu-Natal's rainfall and water resources

The KZN has a complex, elusive and unpredictable weather behaviour that affects hydrological characteristics that influence water quantity and the water quality. There is a relatively high rainfall regime falling mainly in summer months from October to March influencing the catchment area and river systems. There are twelve major catchments and river systems in KZN covering a total catchment area of 90,207 km². The Tugela River flows west to east across the centre of the Province. It is the largest river catchment in KZN covering an area of approximately 29,100 km² making this area 32% of the Province.

The river originates from the Drakensberg Mountains meandering for 520 km through the KwaZulu-Natal midlands to the Indian Ocean (Encyclopaedia the Freedictionary 2004; Schulze & Taylor, 2002; Quinn & Lewis, 1995). There are several rivers originating from Drakensberg Mountain ranges, which are tributaries of the Tugela River. These rivers are Klip, Mooi, Buffalo, and Sundays rivers. The Sundays River originates from northern part of Drakensberg Mountains, Biggarsberg area with Ingagani and Blood Rivers as sub-tributaries. The Tugela river system has a large volume of water that can be harnessed and utilised to boost agricultural production by increasing the hectarage under irrigated agriculture in KZN (DWAF, 2006; Encyclopaedia the Free dictionary, 2004; Schulze & Taylor, 2002; Quinn & Lewis, 1995).

Quinn and Lewis (1995: 23) highlight the importance of water as a natural resource in the province in that "relative to other provinces, KZN has adequate surface water resources and the fact that KZN covers 14% of the South Africa land surface" as indicators of high agricultural production potential. KZN has unique water status where the mean annual runoff from rivers in KZN accounts for 39% of the runoff from all rivers in South Africa further reflecting unique available natural resource appropriately harnessed that can amazingly promote and increase agricultural production (Schulze & Taylor, 2002; Quinn & Lewis, 1995).

4.1.4 KwaZulu-Natal's land use, agriculture production and forestry resources utilisation

Land use that is mainly for rural subsistence and commercial farming activities influence excessive soil erosion, leading to the rivers and other water masses turbidity situation (Schulze & Taylor, 2002). It also affects the rate of soil erosion in the farming and grazing lands in the catchment areas (Quinn & Lewis, 1995).

Generally the Province has a high agricultural production potential. The overall assessment indicates that there is a decrease in the area of land used for both grazing lands and croplands in KZN and an increase in forestry and conservation land. Most of the land in KZN (86%) is dedicated to agricultural use. Hoffman (1998:1) holds "that 58% of land in KwaZulu-Natal is used for stock farming, including beef and dairy cattle, sheep and game". Crops account for a further 17% of land use, include sugarcane, subtropical fruit, maize and potatoes (Hoffman, 1998; KwaZulu-Natal Department of Environmental Affairs and Tourism (KZN-DEAT), 2001).

According to Bourquin, Hughes and Sandwith (1998), forest areas have also shrunken substantially. The inland forest (Karkloof) that was 32,000 hectares in extent in 1800, presently it is less than a tenth of the size (Bourquin et al 1998: 161). Eight (8%) of the province is used for commercial forestry and only three (3%) is set aside for conservation" and

the remaining 14% for urban, peri-urban and infrastructure development (Mtshali, 2002; Hoffman, 1998; Quinn & Lewis, 1995; Data Research Africa, 1995).

4.1.5 KwaZulu-Natal's soil and vegetation degradation

KwaZulu-Natal is the second highest Province in soil and vegetation degradation in South Africa (Hoffman, 1997). The rates of soil degradation are increasing in grazing lands, whereas in communal areas, soils are considerably more degraded than in commercial farming areas. Soils degradation is occurring more severely particularly in the steeply sloping parts along the areas around Drakensberg and Lebombo Mountain ranges. Gully and sheet erosion affect croplands, grazing lands, commercial forestry and settlement areas (Hoffman, 1997; Quinn & Lewis, 1995).

On the whole, the natural vegetation of the coastal region of KZN is savannah, with the inland region being grassland. To curtail loss of vegetation cover and change in plant species composition there is need to address issues of related to land use and resources utilisation (KZN-DAEA, 2005b; FSG, 2002; Data Research Africa, 1995).

4.1.6 KwaZulu-Natal's population pressure and economic implication to agricultural development

KwaZulu-Natal also has a relatively dense population compared to other provinces of the Republic of South Africa, 9.924 Million people living in an area of 92,180 kilometre square (km²) (SSA, 2006; SSA, 2005; SSA, 2004). According to Statistics South Africa (SSA) (2006: 9) "mid year population estimates, 2006 by age and sex is 9,924,000 Million" and has a large share of the population (20.9 %) (SSA, 2006; SSA, 2005; SSA, 2004; KZN-DEAT, 2001;). According to Mtshali (2002:62), "the region has 23% of the adults in the Province who have not received any education, hence an estimated 45% unemployment rate which is highest among the Africans in the rural areas and 33% in urban areas". The high rates of illiteracy and unemployment that characterise the province have a bearing on general economy and agricultural production. They have created an unavoidable challenge to KwaZulu-Natal

Departments of Agriculture and environmental Affairs (KZN-DAEA) to collaborate with other agricultural development agencies to face the challenge in agricultural production sector. The KZN-DAEA development policies seek to unlock the agricultural potential of the Province through the cooperation of KZN-ADF as an agricultural development coordination organ that would oversee, mobilise and reorient agricultural development to optimise agricultural potential. A similar objective is embedded as the primary aim of the KZN-ADF, which is to promote partnership in service delivery to facilitate unlocking the agricultural potential of the province to help build sustainable urban and rural livelihoods. The majority of the people (56.9%) are living in rural areas, where the economy is primarily agricultural and 43.1% of the population occupy urban and semi-urban areas (Salomon & Van Rooyen, 2004; Mtshali, 2002; KZN-DAEA, 2002, 2005b).

Population densities are low in the commercial farming districts of the midlands. Population densities are high along the coast, in metropolitan areas and in some of the communal areas with approximately more than 100 people/km², whereas the rate of growth of settlement areas is increasing rapidly (Mtshali, 2002). According to Mtshali (2002: 62) "Fifty-seven (57%) of the households in KZN are living in poverty ranking third out of the nine provinces with regard to poverty level". SSA (2006) established that KZN has 22% poverty share by province in South Africa. Involving the increasing population in productive activities to optimise the use of the natural and agricultural resources found in KZN can reverse this situation.

Table 4.1 gives the details of population of South Africa (SA) according to the Provinces from year 2001 to 2006. The population indicated in the year 2006 is according the new Provincial boundaries of Republic of South Africa (See table 4.1). It shows that KZN has the highest share of population in SA, which has a great impact on agricultural production potential and general fragile agricultural economy experiencing the tore of the population pressure.

Table 4. 1: Provincial Share of the Population by percentage in South Africa

Percentage distribution of the projected provincial share of the total population, 2001–2006

Province	2001	2002	2003	2004	2005	2006	2006 (New boundaries)
Eastern Cape	15,5	15,4	15,2	15,1	15,0	14,9	14,6
Free State	6,5	6,4	6,4	6,3	6,3	6,2	6,2
Gauteng	18,5	18,7	18,9	19,0	19,2	19,4	20,1
Kwazulu-Natal	20,7	20,7	20,7	20,6	20,6	20,5	20,9
Limpopo	12,3	12,2	12,1	12,1	12,0	12,0	11,3
Mpumalanga	6,9	6,9	6,9	6,9	6,9	6,9	7,4
Northern Cape	1,9	1,9	1,9	1,9	1,9	1,9	2,3
North West	8,2	8,2	8,2	8,2	8,2	8,1	7,1
Western Cape	9,4	9,5	9,7	9,8	9,9	10,0	10,0
Total	100	100	100	100	100	100	100

Sources: Statistics South Africa (SSA) (2006:8)

4.2 Organisations and agencies in development in KwaZulu-Natal (The Development Setting in KwaZulu-Natal)

The landscape in KwaZulu-Natal re: agricultural/rural development needs redress in that KZN has a high population which impacts on agricultural production. With the factual reality that the population of KZN is the highest in the Republic of South Africa with 20.9 percent living in an area of 92,000km² (SSA, 2006) (See Table 4.1). These people need to eat to live a healthy life and be assured of food security.

Whereas for generations KZN has suffered fragmented agricultural and rural development due to apartheid policies that discouraged the rural majority by displacing them from the high potential agricultural lands (Vaughan, 1997). Huge majorities of these people in the rural areas with high potential for agricultural development were displaced as well as lacked in basic knowledge of agricultural production and the opportunity to learn. Those who were lucky, have a fairly meagre knowledge and simple technical skills to help them face reality of technological advancement in agricultural development. This could take them towards food, health and economic security as well as social-economic well being (Vaughan, 1997). Based on the facts of high population and development fragmentation due to the previous, this

section explains the prevailing need for an integrated agricultural and rural development sector and a good network of development agencies involved in agricultural and rural development in KZN.

4.2.1 Agricultural and rural development

The present socio-economic development trends demand agricultural and rural development needs to be consolidated to have impact and redress the status for a majority of the population in rural areas. The greatest percentage of the population virtually depends on agriculture for livelihood (KZN-DAEA, 2002, 2005b). This population should support agro-economic development in the Province offering a concrete reason of integrated agricultural and rural development (Mtshali, 1998; Vaughan, 1997).

The first step to advance towards the reality of agricultural and rural development is to help the people in the rural areas to acquire knowledge and skills to handle agricultural production on their own. This is feasible through the tools of education and communication available. With the advancement of ICT, closing of the knowledge gap in agricultural development can be facilitated fast enough to effect the change in agriculture and rural development. While the scenario of closing the knowledge gap in agricultural and rural development may not seem feasible, hope of changing the trend is becoming a reality in that agricultural and rural development is part of a critical development international agenda with various packages for development in these areas (Ruben & Kuyvenhoven, 2005).

Development of the rural areas calls for awareness to empower the population living in the rural areas to get involved in a development agenda. This agenda may stimulate an organisation such as KZN-ADF and other organisations involved in various areas of empowering the rural population to act towards achieving the vision of KZN-DAEA for agricultural development in the region. With diversity in membership, leadership and expertise endowed in these organisations, they have the ability and capacity to push for effective policies and actions that can lead to support of the government envisaged formula of achieving the agricultural development vision for 2030 (Singh, 2002). The opportunity for

KZN-ADF to capture practical aspects of implementing agricultural and rural development poses a challenge on how to approach it. It is then individually as members of KZN-ADF as well as corporately to advance development approaches that are appropriate for integrated agricultural and rural development. This is possible by involving and incorporating all stakeholders in the decision making process for development strategies in the rural areas. This is possible by advocating and forming development fronts. These fronts would develop a master plan for agricultural and rural development as well as planning and implementing projects and programmes that are appropriate to empower and lead the rural majority to shared vision of KZN-ADF and KZN-DAEA to unlock agricultural potential in KZN (KZN-DAEA, 2005a, 2005b, 2005c; Mander, 2004; KZN-DAEA, 2002; Singh, 2002).

4.2.2 Development Agents in agriculture and rural development

To facilitate the agricultural and rural development agenda, a feasible approach is the organisation of this particular sector to have community development workers who are ready to settle and work with the rural communities. A worker who is able to adapt easily to the rural conditions, as well as:

- Win community acceptance and trust;
- Respect the cultural diversity and the indigenous knowledge; and
- Has the ability and ready to learn to serve as an effective bridge between the rural communities, and the scientific and technological jargon.

To push forward the agenda of agricultural and rural development that it may prove useful and beneficial for various organisations to be involved in rural development activities: These include Institution of higher learning, Tertiary training Institutes; Government departments; Independent Consultants; NGOs; CBOs; PDCs and Volunteer organisations need to be involved in steering and streamlining agricultural sector reconstruction and development in the rural areas guided by partnership values and principles of operation (KZN-DAEA, 2005c; SANGOnet, 2005). Across the agriculture and rural development spectrum in KZN, there are more than twenty development agencies including NGOs and CBOs registered with SANGOnet involved in agricultural and rural development in KZN (Agricultural Digest, 2006; SANGOnet, 2005).

4.3 Conclusion

KZN has a diversity of bioresources that forms the core of high agricultural production potential reinforced by relatively high precipitation or rainfall in the region. The rains normally fall in the summer months. KZN has 39% of annual mean runoff of all rivers in South Africa providing great potential for rain-fed agriculture production. The irrigated agriculture production is viable; due to massive runoff that can be harnessed for utilisation during a dry spell. The unique water status in the region could be utilised for irrigated agriculture, to increase agricultural production and yields substantially (Schulze & Taylor, 2002; Camp, 1999; Guy & Smith, 1998; Quinn & Lewis, 1995).

KZN has also a high population and the majority of them live in the rural areas. Development in these rural areas were neglected and fragmented due to the past history of development guided by apartheid policies. This situation lead the government of National unity to sort ways of redressing the situation to involve many agricultural development agencies in improving and advocating for integrated development projects in the region. This is expected to redress and integrate all development agencies to be involved in livelihood management in view of the high population in the region that need to be fed as well as depend on agriculture for livelihood (KZN-DAEA, 2005b; KZN-DAEA, 2002; Mtshali, 2002; Mtshali, 1998; Vaughan, 1997).

CHAPTER FIVE

RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter describes the design and methodology of the research and gives an explanation of the context within which it was executed and outlines how the research progressed. It highlights the onset and overview of the research process, including the pilot research from the beginning point of encounter with the problem situation to the rigorous field research study using a contextual participatory action research methodology developed by Research Facilitator. Research Facilitator guided by problem situation in chapter one, designed a contextual partnership development analysis methodology (CPDAM), which cut across two research paradigms, grounded theory and knowledge systems perspectives. This chapter finally provides a description of the methods and techniques employed for data collection, data treatment and analysis, including a conclusion of the chapter.

5.1. Background of the research study

The journey started at beginning of this research degree in January 2004, and fieldwork in May 2004 and a reflection of the past experience in the workplace. This process began with three questions in mind. These were:

- (1) What are the problematic issues that entangle people when they are working together?
- (2) What makes people and organisations to think of working in partnerships?
- (3) What research methodologies are congruent with partnership development process?

To answer the three questions the Research Facilitator first consulted with secondary sources of information covered in the literature review guided by the Research Supervisor to try to think of a real-world situation to develop a researchable problem situation. The literature that informed the choice of methodology was a major part of the discussion and formulation process of the research problem, question, and research design and methodology development.

Before commencing a description of the research study it is important that the two major decisions that Research Facilitator made before entering the research process are acknowledged. These are:

- Having an organisation to work with.
- To purpose to be in touch with the real world for data collection from research participants.

5.1.1 Onset of the research Process

The interest of participatory engagement with KZN-ADF arose out of a case study presented to the class in April 2004 by Farmers Support Group, Director and an Executive Committee member of KZN-ADF while facilitating a course on Stakeholder Analysis and Partnership Development to Masters Students. The Course Facilitator gave a case study of KZN-ADF organisation for stakeholder analysis and partnership development for analysis by students. The case study triggered a special interest to work with this Organisation. The Research Facilitator requested the Course Facilitator who as well was an Executive Committee member of KZN-ADF organisation a possibility of working with them, as it was a requirement for students to have an organisation to engage with, in partial fulfilment of the course. The participatory engagement involving the Research Facilitator and KZN-ADF organisation began.

The Research Facilitator following procedures and processes required to engage with the organisation, he was granted a go-ahead to start to engage with KZN-ADF. The first engagement was to find a way of partnering members to have an access of the other members' contact details for contacting each other in case opportunities arise of service delivery to the clients that require a combined effort from members who are able to link and network easily; thus seeking to have a database or a management system mechanism where members could easily network to share information, knowledge and challenges in their development practices and service delivery. This kind of arrangement would improve communication and the access of information and knowledge that is vital for effective service delivery.

5.2 Locating the study perspective: Research Paradigm and methodology

This section will explain the rationale and theories behind the methodologies used in this research. It will cover the research paradigm, grounded theory and research methodology. It will also provide an explanation of the intervention process. It is crucial that Research Facilitators are conscious that there is a way individuals (Research Participants) perceive and act on situations in the real world; this statement includes the Research Facilitator. When the Research Facilitator is aware of the existing positions that are explicitly taken by the Research Participants including him/herself, it is easier to guide the research process to a successful ending. Consequently the realisation of truths, reality and norms in the research process is a social construct that influences the research process; the Research Facilitator must remain impartial. In appreciating the context of paradigms, a situation may offer different meanings due to perceptions, assumptions made, attached values and reference practices that comprise ways of constructing reality in a particular community. These social constructs are the paradigms (Durant-Law, 2005; Groot, 2002; Prozesky & Mouton, 2001; Watkins & Mohr, 2001; Terre-Blanche & Durrheim, 1999b).

5.2.1 Research paradigm

This section provides the theoretical background and perspective that gave rise to the methodology used in this study, including techniques, methods and tools applied for data collection and analysis.

Watkins and Mohr (2001: 2) citing Capra (1996) defined social paradigm as "a constellation of concepts, values, perceptions, and practices shared by a community, which forms a particular vision of reality that is the basis of the way that the community organises itself". Further, according to Terre-Blanche and Durrheim (1999a: 6) a paradigm is an "all encompassing systems of interrelated practice and thinking that define for researchers the nature of their enquiry". Wilson and Morren (1990:357) perceived and defined a paradigm as "the explanatory and meaningful body of knowledge existing at a given time that scientist use to explain their observations".

Durant-Law, (2005) agree with Wilson and Morren (1990) that by all means paradigms add to the body of knowledge, and means of generating and creating knowledge for use in solving complex problems. These are social constructs, the patterns or models of conceptualising and bringing about reality in that particular context in that given specific community. In retrospect Midgley (2000) asserts that Kuhn in early 1960's introduced the concept of paradigm to explain the scientific revolution theories and scientific knowledge that do not occur in parts but as an active whole interaction of realities, and experiences over a period of time. The interaction of realities can be inquired into to make sense of it. Terre-Blanche and Durrheim (1999a: 6) assert that paradigm as a nature of inquiry into a situation can be viewed along three dimensions; "ontology; epistemology and methodology." They explain that "Ontology specifies the nature of reality that is to be studied; Epistemology specifies the nature of relationship between the researcher and what can be known. Methodology specifies how the researcher may go about practically studying " (Terre-Blanche & Durrheim, 1999a: 6). The same view is held by Röling (2002) while putting forward the argument on paradigms for dealing with interactive processes for tackling natural resources management problems. He agrees that paradigm has the same three components of inquiry (Ontology, epistemology and methodology). While others are equally important this research would be explored using constructivist epistemology. Epistemology establishes the facts of already acquired knowledge from experiences with time, through observations to affirm the consistency and coherency of the reality in a real world situation. The establishment of facts and opinions is a process of construction to confirm the reality (Durant-Law, 2005; Pidgeon & Henwood, 2004; Groot, 2002; Watkins & Mohr, 2001).

The continuous reflection on the experiences generates new ideas and approaches empowering both the Research Facilitator and the Research Participants. The Research Facilitator using constructivist epistemology encourages the Research Participants to continuously reflect on and learn from the process, the associated experiences and the new insights acquired through the process (Groot, 2002; Terre-Blanche & Durrheim, 1999b). Stating a principle of constructivist epistemology, Watkins and Mohr (2001: 37) argue "knowledge of organisations and the destiny of organisations are interwoven. To be effective leaders in any situation, we must be skilled in the art of understanding, reading and analysing organisations as living,

human constructions". In this study the principle is applicable as it forms the basis of applying both grounded theory and soft knowledge systems perspective as methodological approaches to the study.

These approaches to paradigms are all important to understand as this research study as earlier noted that the study applied a developed contextual methodology which borrows tools, techniques and methods from various methodologies that either use or apply the understandings of aforementioned authors logics specifically, The logics are to be appropriately applied for specific issues in this study (Pidgeon & Henwood, 2004).

5.2.2 Grounded Theory

There are three schools of thought about the Research Facilitator relationship with research subjects. These schools are based on positions held by an individual researcher concerning the perceived reality about the context of the research. These are "idealist, empiricists, or realists" (Durant-Law, 2005:5). These schools of thought lead to the development of grounded theory depending on individual inclination to these schools. For the purpose of this research study we would pursue the realists stance. According to Groot (2002:43) grounded theory is "a qualitative research methodology". It is informed by findings and analysis of the findings. It is rather demanding to come up with a grounded theory, as it is a process that takes time, based on the cyclical process of learning presented in the constructivist epistemology (Durantlaw, 2005; Prozesky & Mouton, 2001). Grounded theory makes use of the concepts that revitalise knowledge seeking and knowledge sharing. These concepts are constructed, reflective, collaborative, inquiry-based and continuously evolving (Röling, 2002; Prozesky & Mouton, 2001; Kelly, 1999a; Kelly, 1999b; Terre-Blanche & Durrheim, 1999a; Terre-Blanche & Durrheim, 1999b). Groot (2002) views grounded theory as a general methodology of auditing empirical data being gathered logically make sense from analysing massive data and information, until a point of 'saturation'8 is reached where no more tangible sense can be derived from gathering and analysing the data. The author further noted that "the starting

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⁸ Point of 'saturation' is used here in sense that the Research Facilitator and Research Participants felt that they cannot have new insights and ideas on the area of concern after several runs of trying to synthesise the data and information gathered while subjecting to a critical analysis.

point is not so much an existing theory ... but the gathered data itself is used to develop new theory", new insights as well as generating and creating new knowledge (Groot 2002: 43).

5.2.3 Soft knowledge systems perspective methodology

Engel (1997, 1995) contends that the social organisation of innovation is a social process and so its management is complex to handle. The complexity happens when there is demand for intervention in a social process and its management. The intervention requires use of multiple and a combination of research paradigms chosen as the most appropriate for use. Engel (1997, 1995) argues that there is strong link between grounded theory and soft knowledge systems perspective methodology as research paradigms that can appropriately be used for intervention in organisational situations that are complex to handle. The soft knowledge systems perspective methodology as in soft systems methodology recognises the complexities of management of institutions. For the analysis of problem situations the involvement of both owners and victims of the problem in the conceptualisation of the problem situation and the development of solution is vital as an overarching approach for analysis and action (Checkland, 1999; Engel, 1997, 1995; Checkland & Scholes, 1990).

Thus from Engel (1997, 1995) use of soft knowledge perspective methodology is applicable in complex problem solving situations. The 'soft' knowledge systems perspective methodology has a practical value in its application for intervention. It is action oriented and a powerful practical approach in exploration of the human learning process and provides a motivation for sharing knowledge among the relevant stakeholders. The 'soft' knowledge systems perspective has the practical value of:

- (1) Facilitating rather than controlling;
- (2) Many actors at many levels making decisions at different levels;
- (3) A powerful practical intervention approach, which absorbs arbitrariness and takes care of uncertainty;
- (4) Takes into account structural forms that may emerge and evolve in a complex situation; and

(5) As a grounded theory, applying soft systems thinking as a methodological approach for intervention takes into account the essence of management in terms of time and participation by participants.

In itself, soft knowledge systems perspective methodology may not be complete but has borrowed a methodological approach for intervention found in soft systems thinking and soft systems methodology (Engel & Salomon, 2002; Checkland, 1999; Engel, 1997; Engel, (1997, 1995); Checkland and Scholes, 1990; Checkland, 1981).

Röling and Wagemakers (1998) appreciate that Soft Systems thinking and soft systems methodology are holistic approaches to complex issues management and sustainability of systems. To understand a system, "the issues may not be understood by examining neither the parts in isolation, nor the wholes as mere aggregation of parts" (Röling & Wagemakers 1998:16). They further noted that how parts of the system fit and relates to each other, and how they relate to the environment and other systems in that environment, thus assessing effectiveness and efficiency of a system, judge the performance of a system. The realisation and actualisation of the reality can be experienced in soft knowledge systems thinking perspective. (Röling & Wagemakers, 1998; Checkland & Scholes, 1990).

5.2.4 Prerequisites of methodological approach to partnership development

Methodological approaches that can easily absorb and takes into account that the partnership as a process and it complexities of activities requires a desirable intervention. Visualising partnership development as a process, then intervention approaches that are potentially able to probe into the new insights, new definitions and new adaptations with use of existing knowledge and information is required to be designed for application, where partnering and partnership development are interaction with the real issues are considered as a system in a real-world. A grounded theory, soft systems thinking and soft systems methodology provide methodological approaches, which are action oriented (Durant-Law, 2005; Salomon, 2004; Groot, 2002; Checkland, 1999; Röling & Wagemakers, 1998; Checkland & Scholes, 1990).

5.3 Research methodology: Participatory Action Research

Prozesky and Mouton (2001) conceptualise participatory action research (PAR) in two research traditions, these are southern and northern traditions (Prozesky & Mouton, 2001). Both traditions embrace participation of stakeholders as a common orientation. The stakeholders participate as partners and equals in the situation in which they are getting involved in to change (Melkote & Steeves, 2001; Prozesky & Mouton, 2001). However there are also differences where the southern tradition is inclined and committed to social equity and work with the poor to concientise them about their situation (Melkote & Steeves 2001). While the northern tradition is inclined to organisational problem solving to improve on performance and decision making in organisations, basically on agreed terms of reference and within the boundaries stipulated by the organisational participants and Research Facilitator (Prozesky & Mouton, 2001). Prozesky and Mouton (2001) assert that PAR in both traditions have unifying common characteristics of generating new theories, knowledge and practical problem solving approaches in context of the prevailing environment.

Bhana (1999) draws attention to PAR using the research approaches, in reference to research values and ideologies. Participatory action research crosses between science and practice in application. While the traditional research approaches basically based on predetermined assumptions and research hypothesis, PAR is grounded in outcomes of the research as it proceeds and the interpretations as perceived by those involved as equal partners (Research Facilitator and Participants). This research study would draw some its applications from Bhana (1999) and Prozesky and Mouton's (2001) conceptualisation of PAR.

Using PAR in a multi-stakeholder situation, it is emphasised that Research Facilitators, social researchers and the community of interest (Stakeholders) should be considered as equal partners in a research process. Thus planning and implementation process of new innovation that are deemed necessary for the changes to occur in a project should be undertaken when there is consensus and clear understanding of the individual role each party has to play and contributions to be made in various stages of implementation of a project to succeed, thus

enriching the principles of the partnering (Hemmati, 2002a, 2002b; Prozesky & Mouton, 2001; Bhana, 1999).

The dynamic learning process between the Research Facilitator and the stakeholders' involved is influenced by interaction of the research and action that is simultaneous. Bhana (1999) argues that there is no designed framework of analysis that can describe how the participatory action-oriented research should proceed. However a contextual methodology should be designed to achieve the research purpose and objectives. According to Bhana (1999) a contextual methodology empowers the stakeholders to realise their own potential and ability to make the decisions, which are appropriate and conducive for the environment in which they are operating. It is practical, accommodates flexibility embodying diverse values and intentions of the stakeholders as they interact, learning from each other as they participate in the process of project implementation (Prozesky & Mouton 2001).

Engel and Salomon (2002), Röling (2002) assert that action-oriented research approaches the area of concern rooted in a framework of ideas and the designed methodology for intervention. The process of intervention can be changed depending on the increased new insights and gained knowledge through interaction process of the research facilitator and the stakeholders as conceptualised in a specific research environment. Basically CPDAM draw some strength in terms of tools and techniques, from the soft knowledge systems perspective, soft systems thinking and soft systems methodology as the methodological approaches for intervention and analysis (Checkland, 1999; Engel, 1997, 1995; Checkland and Scholes, 1990).

5.3.1 Participatory action research methodology design and intervention

Research methodology and intervention design should value the Research Participants and Research Facilitator as research subjects, where both are key contributors in regard to research methodology design and intervention. In a multi-stakeholder situation, where various organisations are affected, it is imperative that a Research Facilitator should work with a diverse representation of organisations involved in different service delivery settings (Hemmati, 2002b; Engel, 1997; Bless & Higson-smith, 1995). The Research Facilitator

believed this approach would encourage a wider perspective of partnership development and promote a more challenging debate among the stakeholders. In order to make the project attractive to this wider group of representatives from various partnering organisations, research facilitator developed a framework for the research that is participatory in nature in consideration of stakeholders' diversity (Salomon, 2004; Bhana, 1999; Engel, 1997; 1995).

5.3.1.1 Clarifying Participatory action research methodology design

Participatory action research as a process needs to be open-ended (Bhana, 1999). The Research Facilitator has an obligation to have an open mindset to accommodate emerging issues, concerns and ideas from research participants. Research facilitator decisions were based on commitment, as a value to be available and to appreciate research participants' insights, ideas and opinions. Participatory action research requires that the Research Facilitator provide feedback to the Research Participants for comments, observations and corrections to allow the alignment of new insights to the research focus. Consequently participatory research process has it own challenges. These are:

- To truly reflect the ideas and practices of all the participants in order to meet the participatory research requirements.
- To harmonise all new insights, ideas and practices for analysis.
- To have support system that would allow cyclic process and concrete support of research team and research participants.
- To design appropriate framework of analysis and intervention approaches to achieve the purpose and objective of the research.
- To keep the journal of the process from the beginning to the end.

Participatory approaches and PAR methodology have been applied in starting projects through implementation stage to empower stakeholders to appreciate and own the project (Fournier, Mill, Kipp & Walusimbi, 2007; Melkote & Steeve, 2002; Healy, 2001). The participatory inquiry exercised in PAR facilitates in strengthening the stakeholders to collaborate, share and exchange information and knowledge, and communication, among stakeholders as well as providing opportunities for collective learning and capacity building for those who are directly involved and the wider community (Fournier, *et al*, 2007; Mirata, 2005). For instance in many

government and non-government institutions extractive research is being superseded by investigation and analysis by role players or the actors in the perceived problem situation. Participatory methods are being used not just for role players to inform outsiders (researchers), but also the role players to have responsibility to own analysis of their own conditions as well as appreciating the problem situation for their empowerment. This is particularly important in research and extension linkage or liaison approaches to livelihood improvement, natural resource management and partnership development (Fournier, *et al*, 2007; Bhana, 1999; Healy, 2001).

5.3.1.2 Participatory action research Intervention Process

Somekh (2006), Prozesky and Mouton (2001), Bhana (1999) and Bouma (1996), argue that participatory action research intervention process should allow flexibility to accommodate the real world situation. The authors assert that there are three phases in a research process that should be considered without jeopardising the intention of the research or the research focus. These phases are:

- Clarification of the issues: It is important to classify and clarify issues to be researched on, to enable Research Facilitator to select tools and techniques, and develop contextual research methodology to be used;
- **Data collection:** The Research Facilitator requires the support of the data collected for analysis to backup the research question and sub-questions;
- Analysis and interpretation: Correlation of the data collected with research questions and sub-questions to allow drawing of conclusions and recommendations as well as appreciating the limitations of the whole research process as very important.

The Research Facilitator formulates research question and sub-questions. These are discussed from time to time to counter check whether the research question and sub-questions remain relevant through the intervention process. An intervention flow chart that underpins the participatory action oriented approaches was drawn for the purpose of guiding the research activities with its limits. Finally Research Facilitator draws together all the themes and issues to be explored. Research Participants and Research Facilitator in intervention process experiences, which are within the limit of the research, are considered as they enrich the

intervention outcome. The Research Facilitator and Research supervisor reviewed intervention flow chart in relation to issues to check on the connections and linkages between all the aspects of research process (See figure 5.1).

The combined tools (methods and techniques) of data collection that are suitable for exploration of research question and sub research questions (See Chapter 1) were used. The participatory action research tools and techniques, and methods that were congruent and taking into account the understanding of the meaning of the stakeholders everyday realities from their own point of view were considered important for this engagement. Wetmore and Theron (1997: 95) noted that PAR "while emphasising a rigorous search for knowledge, is an open ended process of life and work, a progressive evolution toward an overall structural transformation" of organisational problem solving approaches by Research Participants and Research Facilitator. The Researcher Facilitator realised that the methodology is able to gather as much information as possible within the specified time frame of the research period.

INTERVENTION FLOW CHART

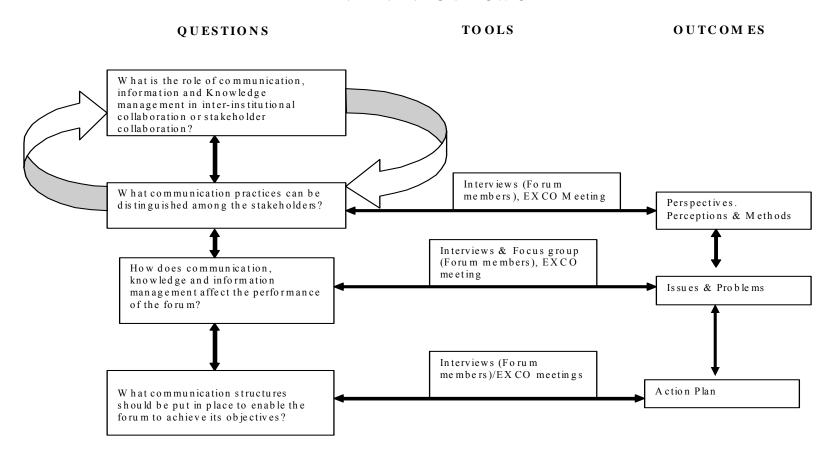


Figure 5. 1: Intervention flow chart

5.4 A brief overview of the research process

The Research Facilitator reflected on the problem situation causing KZN-ADF to face management difficulties resulting in dwindling activities and declining performance. This situation caused the Research Facilitator to search for a researchable problem. The Research Facilitator guided by the research problem statement, question and sub-questions in chapter one, began the research work. A brief summary of research problem statement and question is as follows: (1) Investigating the role of communication, information and knowledge management and management of conflicts in inter-institutional collaboration, and (2) what is the role of communication, information and knowledge management and management of conflicts in inter-institutional collaboration or stakeholders collaboration? The fieldwork was centred on a participatory inquiry involving the Research Participants and Facilitator. The results of consultation provided basic understanding of developing a contextual methodology that would be academically sound, appropriate both for stakeholder analysis and a partnership development process and networking of the partnering organisations.

The members of the KZN-ADF were involved in identifying and developing solutions to problems facing them in the forum. The research facilitator employed the participatory action research (PAR) methodology. The PAR theoretical approach goes beyond those approaches that are inclined to personal development of individuals, which characteristically promote perspective transformation and self-directed learning. Instead it will focus on learning that is directed towards an organisational as well as social interaction changes in the forum and among the forum members (Salomon & Van Rooyen, 2004).

The research is grounded in Groot (2002), Prozesky and Mouton (2001) and Bhana (1999) arguments on participatory research paradigm and Röling (2002), Engel and Salomon (2002), Röling and Wagemakers (1998), and Engel (1997, 1995) application of soft knowledge systems perspective and Checkland (1999), Checkland and Scholes (1990) soft systems thinking methodological approaches, where Research Participants have special knowledge of their environment as discussed earlier in this chapter. The Research Participants are aware of the constraints and the possible solutions or directions that can be

taken to deal with the problematic issues in their own environment. The Research Participants were invited to interpret their problem situation critically, especially with regard to communication, information and knowledge, and managing conflict within the forum and along membership continuum. These involved analysing modes of communication with the aim of determining the methods, which were used to communicate to the members of the forum the most recent developments in the forum that requires their attention. The range of potential communication methods included email, telephone, fax, newsletters, and mass media by advertisements over the radio and TV, educational columns in newspapers, spoken word from other forum members and the Internet. In so doing, the Research Participants would then constructively critique expressions relevant to their professionalism and to the needs and concerns of the members and other stakeholders of interest to the forum.

Using PAR skills and reflection methodologies, the forgoing led to the development of a Contextual Partnership Development Analysis Methodology (CPDAM). As explained in greater detail in the following section, the CPDAM research methods, tools and techniques were borrowed from various methodologies and approaches but uniquely combined and applied in the research process to gather data and for analysis. The attention was focused on PAR principles. The research facilitator and all research participants were part of the learning process in conducting PAR engagements, which had started by engaging in a pilot research to brainstorm issues on the problem situation.

5.4.1 Pilot Research

Pilot research was carried out at the beginning of the year 2004. There were actions and steps taken to accomplish this part of the study, as students were required to identify a group or organisation to work with, in anticipation of practicing the knowledge and skills acquired in Research methods course. The actions and steps are as follows:

- 1) Sourcing and contacting the organisation of choice;
- 2) Arranging an initial meeting with a representative of the management to present the idea, Research Method, Course requirements and the specific needs of students; and

3) Discussing the approach with the organisation representative as well as Research Supervisor.

Figure 5.2 gives a brief process of the pilot research in a schematic representation.

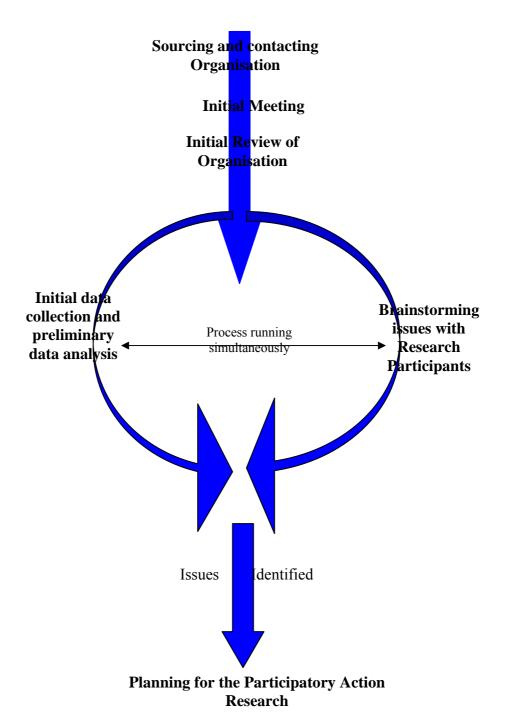


Figure 5. 2: Pilot research process diagrammatic representation

- 4) Agreeing with the Research Supervisor and the KZN-ADF that the Research Facilitator will carry on with the next course on Stakeholder Analysis and Partnership Development in the same organisation forming the concrete base of the pilot research in KZN-ADF. The pilot research endeavoured to brainstorm on issues in the organisation that required attention as identified by the management and those, which surfaced in the pilot research process. The issues identified were:
 - i. The composition, recruiting and registration of members,
 - ii. Management difficulties that resulted in dwindling activities and declining performance of the forum,
 - iii. The role that could be played by communication, information and knowledge management, and managing of the conflicts in the forum and among members in improving the situation,
 - iv. To improve the situation a proposal was put forward to develop a monitoring mechanism to assist the forum Executive Committee as management tool for the forum, and
 - v. the approach to deal with these issues that was agreed on was to carry out a detailed research to establish clear and the intensity of these issues.
- 5) These issues were formulated into probable Research problems, statements, question and sub questions. The Research Facilitator discussed them with research Supervisor. These were scrutinised until the research problem, statement and question presented in Chapter One were agreed on, as the most appropriate for the research study.
- 6) Finally Research Facilitator Equipped with number five (No.5) had starting point for PAR in the organisation.

5.5 Applying the Contextual Partnership Development Analysis Methodology

Contextual Partnership Development Analysis Methodology (CPDAM) draws tools (methods and techniques) of data collection and analysis from different methodologies and approaches namely: Action research, Rapid Appraisal of Agricultural Knowledge Systems (RAAKS), Interactive Learning and Action (ILA), Participatory Rural Appraisal (PRA), Soft Systems Methodology (SSM), Soft knowledge systems perspectives and Partnership

Development. From the combination of tools (methods and techniques) of data collection applied in these different methodologies and approaches, a Contextual Partnership Development Analysis Methodology (CPDAM) emerged (Fournier *et al*, 2007; Somekh, 2006; Mirata, 2005; Zweekhorst, Broerse & Burders, 2002; Prozesky & Mouton, 2001; Groot, 2000; Nchabeleng, 2000; Woodhill & Robbins, 1998; Checkland & Scholes, 1999; Bhana 1999; Engel, 1997, 1995; Salomon & Engel, 1997; Bouma, 1996; Bergdall, 1993).

The methodological approach developed is flexible enough to accommodate various methods and techniques so that it can be applicable to diverse situations based on creative and innovative principles. It is empowering social learning methodology that helped the partnering individuals and organisations to engage with each other actively to contribute individual resources towards a common pool to achieve common goals. The detailed account of methods and techniques of data collection are presented next.

5.5.1 Methods and techniques of data collection

Durrheim and Wassenaar (1999) argue that in every study the Research Facilitator should be conversant with tools and techniques as well as detailed methodology of data collection that are suitable for that particular study. This is to define and defend their use and application in the study.

In this study data was collected from primary and secondary sources. Secondary data (information) sources included literature, documented information on KZN-ADF, research reports and publications. The primary data was collected using the participatory tools (methods and techniques) including:

- In-depth interviews guided by a semi-structured questionnaire;
- Focus group discussions;
- Communication analysis exercise;
- Rich picturing;
- Interrogating the database and management information system (MIS) design;
- Personal and participants' observations

5.5.1.1 In-depth interviews guided by a semi-structured questionnaire

In-depth interviews were conducted using semi-structured questions or semi-structured interview guided discussions. Broad leading questions were asked with an intention of getting in-depth information. New questions arise to probe into the answers from the discussion (Woodhill & Robbins 1998; Pretty, Guijt, Thompson & Scoones 1995). In semi-structured interviews, the interviewer presents the context of study. The aim and objectives of the study are also explained carefully to the interviewees. The interviewees are encouraged to participate openly and express their views and opinions freely. This creates the opportunity of attaining personal details of the individuals like the names, the roles they play and their intended goals and objectives of the individuals in the interinstitutional collaboration set-up. Worth noting however, is the fact that those being interviewed are not coerced to provide the information.

In this research project, the option for anonymity was given to the interviewees; the option for anonymity was openly discussed. Also discussed was the importance of the personal and individual detailed information collection for the purpose of having their records in the database to be able to analyse responses and learn from the participants. Where there was need, the privacy of the client was honoured and personal information was treated with confidentiality. The technique was used because, it has a multiple perspectives embedded in it to handle different situations and individuals. Semi-structured questionnaires were developed for each of the three different categories of research participants: the KZN-ADF Executive Members; Information Technology Department Staff; and Key Informants for the KZN-ADF web page. (See Appendices 4, 5, 6 and 7).

5.5.1.2 Focus group discussions

The Researcher Facilitator used focus group discussions with the Executive Committee because characteristically they involve "persons selected due to their particular interest, expertise or position" (Sarantakos 1998:180). Focus group discussions offer insights of the problem situation and the alternative solution proposals that can be tried and be verified for adoption as the best alternative. The tool was chosen for two reasons:

- It encourages debate on the problem situation and it is geared to motivate research participants to brainstorm on solutions and to act to improve the situation.
- The participants learn from information shared in the group setting.

Further, the focus group discussions with Executive Committee members helped to collect vast information within a short time and at the same time brainstormed for the solutions. Because of their expertise and interest in the forum, the researcher facilitator involved the Executive Committee members of the forum to establish a basic understanding of the issues at hand and to develop focus of the forum. The process yielded, very original information which was used to address the core issues of the forum's fundamental concern.

5.5.1.3 Rich picturing

Rich picturing is a participatory technique which helps actors in a system to perceive, link, understand all the connections and the interactions among the actors and between the actors and the issues in a given problem situation (Checkland & Scholes 1990). Through the process of drawing the rich picture, strengths and weakness are identified in the problem situation in question and depicted visually in the final drawing (rich picture). The effectiveness of the technique depends on the Research Facilitator's ability to analyse the prevailing conditions and circumstances to make some sense out of the situation and to translate that into images in the rich picture. The analysis is subjective, and to minimise the subjectivity the rich picture is normally presented to the actors to approve whether the presentation of the rich picture is a true reflection of the situation or to make changes and additions. Further Checkland and Scholes (1990), Engel (1997) and Checkland (1999) assert that appling Soft Systems Methodology and Soft Knowledge Systems Methodology approach and interviewing simultaneously helps develop a rich picture of the problem situation and an increasingly clearer expression of the situation. Using a Soft knowledge systems approach helps to develop conceptual models for social innovation that form the basis for future action.

Based on the reasoning presented by Checkland and Scholes (1990), rich picturing was chosen for the following reasons:

- It is a simple way of taking notes and script composition.
- It is a better way of describing and recording prevailing conditions and circumstances in a problem situation.
- Perceived problem situation is presented, indicating the connections, linkages and relationships therein.

- It forms better impression of the real world situation.
- It forms a powerful image expressing human complexities

As noted above, the rich picture of the problem situation drawn by the Research Facilitator is presented to the actors for verification that it represents the true situation on the ground. The actors are encouraged and expected to respond freely and present adjustments if it is necessary to do so. After the presentation of the rich picture and the input of the participants, the Research Facilitator is in a position to facilitate the research process to the stage of visioning and planning for a way forward to address the problem situation which in this case would address communication and the development of an action plan.

5.5.1.4 Communication analysis exercise

Engel (1997) and Salomon and Engel (1997) assert that communication analysis exercise is a powerful tool to encourage and facilitate the Research Participants to interact to unearth issues that are of concern. Through keen observation the research facilitator develops insights on "cultural barriers standing in the way of effective communication for innovation" (Engel, 1997: 168). The technique focuses attention on cultural communication barriers that often impede understanding among the actors in a system and their ability to communicate effectively (Salomon & Engel, 1997). This tool served to expose the Research Facilitator and Participants to a range of constraints in communication that they may experience in the research process.

In this research the communication analysis exercise was intended to expose situations of various perception, and interpretations of a situation by individuals depending on the point of view and the past experience. The other situation is the exposition of a situation on a teamwork approach, which forms the basis of partnership development. Presented next is a contextualized communication exercise analysis application of communication analysis exercise (Engel and Salomon 1997).

5.5.1.4.1 A brief description of communication analysis exercise

The Researcher Facilitator engaged the Research Participants in sessions of the communication analysis exercise on the description of a small plastic ball that was displayed on a screen using an overhead projector. The Research Participants were provided with markers pens and a flip chart pages to describe the displayed ball on the

board. The description was to be done in two ways by writing words describing the item and by drawing the item displayed on the board, as they perceive it. The exercise of describing was carried out on an individual basis and then in a group setting. The participants were asked to respond individually and then as a group. The Research Participants were also to respond by discussing their individual results as a group and presenting the outcomes in the plenary the lessons learnt individually and as a group from the communication analysis exercise.

This exercise is to show various ways that individuals can perceive and interpret a situation, in an individual and in a group set-up. This serves to show how organisations that are members of forum are bound to have diverse perceptions and interpretations of issues that influence situations especially communication within the forum and among them. The group description and drawing served to show that when organisations share ideas and information that the same situation can be perceived differently to serve the group needs and the shared purpose. This is important because it demonstrates how people of diverse backgrounds and intellectual competences may approach issues, communicate, share knowledge and information in a variety of ways that may be convenient and suits them. The outcome of the communication analysis exercise exposed the factors that can impede communication process. These include people's culture, level of education and general exposure to environment that surrounds an individual.

5.5.1.5 Interrogating the database and Management Information System design

Preparing and planning the database and the Management Information System (MIS) for the KZNADF was informed by three sources: Review of all the Research Participants' (registered forum members) information and records; the review of all the relevant documents of KZN-ADF; the interviews conducted; and the assessment of the real-world situation of the KZNADF. The process led to a consolidated document giving details of what should be included in the database and the MIS. The process led ultimately to the design of a database, the development of an MIS and launching of a website accessible by registered forum members. The steps in the process were as follows:

Step 1: The Research Facilitator reviewed all the interview documentation of the database development. This was done in consultation of the database task team. The research

facilitator was given a mandate to do further research on the issues of the database and MIS design and to develop mechanisms that would assist the forum executive to administer the forum effectively and efficiently.

Step 2: The Research Facilitator had a focus discussion with the executive and further interviewed all the available research participants to find out the needs to take into consideration in preparing and planning the development of the mechanism to assist the administration of the day-to-day activities of the forum.

Step 3: The Research Facilitator the summarised the findings into headings to capture the required data or information as demanded in such a diverse situation of inter-institutional collaboration, as is the case of KZN-ADF (See figure 6.12 and 6.13).

Step 4: The Research Facilitator in consultation with the KZNADF executive committee, the database team facilitator and the research supervisor reviewed the summarised information that was cutting across the diverse membership of the KZNADF. The technical website designer was given a mandate to design and construct a website⁹ that would capture the information as laid down in consultation with the research facilitator and the Executive Committee representative who was also the research supervisor.

Step 5: The web designer worked in consultation with the research facilitator in counter checking the progress of the website and whether it would have the capacity to accommodate the members' information, as the final aim was to have a database and website that could serve as a mechanism to monitor and organise the forum in its inherent diversity.

Step 6: The essential operational procedures of the website were checked and confirmed. The trial website was launched and key research participants were alerted for verification of coverage of essential information needed for database design were wholly included in the web pages, identifying specific areas or sections in navigating web pages process that are not clear or difficult to follow, checking the general features of the web pages that may need to be improved, accuracy of information and finally comment on user-friendliness of

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⁹ Website address < http://www.ukzn.ac.za/fsg/kznadf/index.asp>

navigating web pages from the beginning to the end. They gave feedback and the areas that were found needing change were adjusted accordingly to accommodate recommendations made.

5.5.1.6 Personal and participants observations

The Research Facilitator keenly engaged the faculty of observation to validate verbal information during interviews, discussions and other research activities undertaken. The observations from Research Participants were noted for further assessment. The observation method was used during the occasions when the research facilitator attended the scheduled meetings and functions. The Research Facilitator engaged with the Research Participants in their real life situations and picked out the necessary information, which is not easily obtained through formal interview sessions. For participatory engagement, the Research Facilitator attended Executive Committee meetings and other KZNADF activities to observe the functioning of the forum and to interact freely with the Research Participants. The observations during informal discussions were taken in form of field notes for further compilation and reflection. The observations of the Research Participants and those of Research Facilitator were important in that they exposed various perspectives of the research.

5.5.2 Data treatment and analysis

The Researcher Facilitator organised the acquired data (primary and secondary information) for analysis. Both qualitative and quantitative analyses were conducted with the data. A qualitative data analysis was done by manual inspection of data captured. Interview documents were reviewed to identify common themes and issues. The quantitative analysis was done using MicroSoft Excel. Quantitative data was extracted from the interview notes and entered into a spreadsheet. To do simple quantitative analyses resulting in tables, pie charts and bar charts. The findings will be discussed in Chapter six (Lee & Fielding, 2004; Hardy & Bryman, 2004).

5.6 Conclusions

Chapter Five describes and shows the onset of the research process paying attention to pilot research as the base of research study. The participatory research paradigm is located in the constructivist/realist epistemological school of thought (Durant–Law 2005) and soft systems methodology (Checkland 1999) and soft knowledge systems perspective (Engel 1997) and grounded theory (Durrant-Law, 2005; Pidgeon and Henwood, 2004); Groot 2003) were adopted as the research paradigms as well as methodological approaches of data gathering and analysis in the research study. The research study was conducted using a Participatory Action-Oriented Methodology developed (Contextual partnership development analysis methodology (CPDAM). The methodology is a powerful research tool to explore into detailed relationships, concerns and interaction among the forum members and between KZN-ADF Executive Committee. In-depth semi-structured interviews, communication analysis exercises, personal and participants observations methods, focus group discussion were applied to collect the information and finally the interrogating the database and MIS design to develop a website of KZN-ADF members to use for their information input and updates.

¹⁰ Website address < http://www.ukzn.ac.za/fsg/kznadf/index.asp>

CHAPTER SIX

FINDINGS: ANALYSIS AND DISCUSSION OF RESULTS

Introduction

This chapter describes the findings of the research conducted on the KZN-ADF. It presents the overall process followed, an analysis and discussion of results, and finally, conclusions. The research process began with mind provocation to get an area of interest to research, followed by conducting literature review, developing a research design and developing a contextual research methodology. Included in the methodology were methods and tools of data collection, and setting the field activities to focus on presented in chapter five.

Two major pathways were used in the study in the application of the CPDAM. One was the journey through the research cycle, which investigated along an established path of investigation through interviews and discussions. As issues emerged they were identified and recorded. The second pathway was the process of engaging the Research Participants with the issues as they arose to confirm the data, to use the data for identifying action, and to probe beyond the surface of the data generated from the investigation. This second pathway provided a base for rapport and for exploring partnering, organisational and institutional issues among the Research Participants. In order to address both pathways simultaneously, four areas were focused on, these include:

- (1) An overview of the research process from a partnership development point of view;
- (2) The research process keeping an account of research data and the management of the fieldwork task and process;
- (3) Return to the data to highlight and discuss with the Research Participants the issues that emerged;
- (4) Reflect on the particular issues and critical events that placed pressure on the role of facilitator and influenced the research process.

As explained in Chapter Five, the research was conducted using a CPDAM, which was developed as the research proceeded. In applying the CPDAM and in considering the

issues that usually arise as research progressed and moves through the various steps, the Research Facilitator made a note of some aspects that might prevent the process from progressing. The Research Facilitator decided to carry these concerns through the cycle of research and give himself a space at the end of each session to reflect on the process and outcome. The intention was to assess the degree to which the research process was able to maintain research focus and value. This was made possible by:

- (1) Maintaining the balance between task and process;
- (2) Bringing into shared consciousness with the Research Participants the tools of action and reflection;
- (3) Managing the issues of conflict, leadership, gender, trust, power and boundaries in the research process;
- (4) Establishing a pattern of working together with the Research Participants on issues as they emerged; and
- (5) Appreciating the contributions by all Research Participants.

6.1 A brief summary of Participatory Action Research insights developed after fieldwork

Pilot research was carried out at the beginning of the year 2004. Research Facilitator initiated the pilot research process as part of a course in Research Methods (Chapter five). There were issues raised during the pilot research that needed further research to develop new insights and understanding. The issues identified were:

- (1) The composition of forum membership
- (2) Criteria used for recruiting and registration of forum members
- (3) Management difficulties that resulted in dwindling activities and declining performance of the forum,
- (4) To establish the position of the forum in relation to the role played by communication, information and knowledge management, and managing of the conflicts in the forum and among members in improving the situation in the forum.
- (5) To improve the situation, a proposal was put forward to develop a monitoring mechanism to assist the forum's Executive Committee as a management tool.
- (6) And the approach to deal with the issues that were agreed on was to carry out detailed research to establish clear and the intensity of these issues,

(7) These issues were formulated into the most probable Research problem, statement, question and sub questions (See Chapter one).

The Research Facilitator equipped with these seven issues had a starting point for PAR in the KZN-ADF organisation. The Research Facilitator reflected on the problem situation and the research problem and literature review to locate the study questions. The research questions and sub research questions in relation to research problem are outlined in Chapter One. These are the research study controls to adhere to in order to remain in the research focus and objectives. In this process, communication, knowledge and information management and conflict management issues were given significant attention because they were the core issues identified in the literature review.

The Research Facilitator further reflected on the literature review and the actual events in the research process. With these bits and pieces of information to hand, the Research Facilitator had to think critically about the data management and the research methods, which could be used, to organise and utilise to make sense to the stakeholders without causing conflict. This raised issues of the research question that needed to be answered which demanded that communication, information and knowledge management, and managing of conflicts issues be discussed from time to time as the research progressed. Correlating of conflicting issues with underlying causes proved to the very useful to help the Research Participants to face the reality of their forum.

As the research progressed the idea of a database that was the original objective of the forum members' emerged strongly. According to the interviews and the feedback on rich picture, the Research Participants were of the opinion that the database was still not making much sense to them. Critically the Research Facilitator further refined the data. Upon reflection, the Research Facilitator realised that KZNADF needed a simple Management Information Systems (MIS). When the MIS concept emerged as a key aspect in the second stage of participatory research process of the research cycle, then several sets of ideas emerged on the probable impact of the MIS on the performance of interinstitutional collaboration. The Research Facilitator deemed that the contextual methodology CPDAM developed had incorporated all issues, which had been floated during the pilot research.

Finally, because PAR is so complex, during supervisory meetings, the Research Facilitator discussed with the Research Supervisor the data collection methods and techniques, results and findings obtained in the process of the research. Similar discussions were held with the Research Participants, so as to stay on track and avoid getting lost in between the stages. The findings from results analysis and discussion were subjected to discussions and scrutiny to eliminate contra-interpretations, since social science research findings, analysis and conclusions can be very subjective, losing the research objective and perspective. Skewing of the research objective and perspective ends up in making conclusions that are biased based on perceptions and opinions instead of grounded facts from the research findings (Kelly, 1999).

The Research Facilitator remained impartial in all the observations and analysis according to a rule of research ethics. Whilst the Research Facilitator acknowledges the fundamental pull to personal judgement strict academic criticism was followed to eliminate subjectivity, as far as possible in analysis, interpretation and presentation of the findings. In keeping with Frost (2001), this was guided by the study purpose, objectives and the ethics, and at the same time being observant about the volatile environment in which the research was being conducted.

6.2 The profile of the Research Participants

There were twenty-five (25) participants in the study; twenty-four (24) were the registered members of the KZNADF. The twenty-fifth (25th) was the Administrative Coordinator manning the KZNADF office housed at the Institute of Natural Resources (INR). While not a member of the forum, the Coordinator was able to provide information and insight about the practical working of forum in terms of communications, information management and forum dynamics. He served as both an administrator and a representative of the forum. Table 6.1 presents a complete list of the Research Participants organised by the nature of their work and showing their core business and their role in the forum.

Table 6. 1: The profile of the Research Participants (n = 25)

	Participant	Nature of work and Core business	Role or Participation in KZN-ADF
		Development Organisations	1121
1	INR	Develop project using Natural resources	Coordinating office and logistics (Chair)
2	FSG	Farmer outreach and Extension and communities	Member of executive; Finance management (Treasurer) and hosting Forum website
3	LIMA	Community outreach and project development	Member of Executive committee
	•	Institutions of Higher Learning	
4	CERDES- UKZN	Academic training and outreach in extension	Secretariat and member of Executive committee (Secretary)
5	University of Zululand	Research and community outreach	Member of executive committee
6	Mangosuthu Technikon	Academic training and community outreach	Member
		Independent Consultants	1
7	Dr. T Modi of UKZN Crop Science	Research, consultancy, training and community outreach	Member of executive committee
8	A Buthelezi	Horticultural crops production and Livestock production	Member
9	J Chijta of CR - UKZN	Research and training at UKZN	Member
10	Stewart, D	Agricultural Engineering Services and project management	Member
11	S. Hendricks - UKZN	Research, Facilitation and training	Member
12	N Swan	Agricultural Development: Consultancy & Services	Member
13	S Radebe (IC)	Extension and training, Project Management	Member of executive committee
		Tertiary Training Institutes	
14	Zakhe Training Institute	Academic training and farmers outreach	Member and member of the executive committee
15	Unique Training Solutions	Marketing and Training	Member
	•	Government	
16	KZN-DAEA	Agricultural Extension and Supportive Services	Member of KZN-ADF database task team
		Non-Governmental Organisations	
17	Mvelo Development	Project Management	Member
18	Isineke Development	Farmers outreach and project development and management	Member of executive committee
19	Heifer International	Community Outreach	Member
		Private Development Companies	
20	David Ashton	Land use planning and project planning	Member
21	Peter Hittersay & Associates	Consultancy and farmers outreach	Member
22	Golder Associates Africa	Consultancy and farmers outreach	Member
23	Welisa & Associates	Community outreach and financial management	Member
24	Vuna Associates	Marketing, Agricultural and business consultancy	Member
		Forum Coordination	
25	Sipho Cele	Office and meetings logistics	Office administration and coordination

As the research proceeded, the Research Facilitator reflected on information gained from compiling the Research Participants' profiles in the light of aim and strategic objectives of

the KZNADF. The forum's primary aim and goal is to promote partnerships in service delivery to facilitate unlocking the agricultural potential of the province to help build sustainable livelihoods (Mander 2004). The strategic objectives of KZN-ADF outlined by Salomon and Van Rooyen 2004) and Mander (2004) are listed below as:

- 1 Good practice, professionalism and skills development;
- 2 Effective delivery to and sharing of information with farmers;
- 3 Effective linkage between NGO's, Agricultural consultants, KZN-DAEA and other stakeholders;
- 4 Create a spirit of cooperation and effective delivery; and
- 5 Researching key issues in agricultural development.

The correlation between membership profiles and the aims of the forum indicated some common interests among the Research Participants. This enlightenment enhanced the scope of the research. The Research Facilitator had the view that the best results in understanding the organisational dynamics of the forum would be obtained through an indepth analysis of the forum and the willing participation of the forum's stakeholders or actors (referred to as Research Participants in this study). Analysis of the inherent diversity of the membership presented in Table 6.1, especially in trying to investigate the role of communication and information and knowledge management in inter-institutional collaboration, was useful and empowering. The Research Facilitator employed various data collection methods and techniques. These included formal interviews with the use of semi-structured questionnaires, informal contacts, participants' observations, personal observations, and communication analysis exercises.

6.3 Collecting and sharing information

Classical researchers are extractive in nature whereby they are trained in data collection at the beginning of the research initiative. The data and the information collected is managed to fit into the designed project (Bhana, 1999). In this case, an environment that was conducive for the Research Facilitator to undertake the research study which has participatory action orientation, especially for capturing participants' observations and personal observations, was provided by being permitted to attend executive committee meetings and all functions of the KZNADF during the research period from February to September 2004. The executive meetings and functions provided a setting in which to

observe the interaction of all the role-players, as well as providing opportunities to appreciate and capture the views of the forum members in regard to their roles as forum members and the influence on the activities of the forum for the long term achievement of the set goal and objectives of KZNADF.

The Research Facilitator working with a participatory action research designed a contextual methodology that was convenient for collecting the data and information as well as sharing the same data and information with the stakeholders referred to in this research as Research Participants. In this way the shared information and the feedback informed and enriched the research process. This orientation of the research study helped the Research Facilitator in involving the stakeholders (Research Participants) in the identification of the problematic situation, the common goal or objective, the analysis of the causes of the problem, and the decision-making on an initiative to be carried out to resolve the problem experienced. The discourse was further strengthened by use of email and telephonic conversations to strengthen the research study in terms of information gathering and deepening understanding through continuous information sharing by Research Facilitator and Participants. In addition to contributing to the research, the information sharing aspect strengthened communication among forum members (Research Participants) who might not have been well informed of emerging situations and issues. The Research Participants applauded the research approach as good as they had a practical opportunity to use email and telephonic conversations.

6.4 Results from the semi-structured interviews

Formal interviews were conducted with individual registered members and organisations' representatives. In addition to those who are members of the forum (See Table 6.1), the other key informants contacted and interviewed were ITD staff of UKZN and the website designer. The interaction with these role-players or the actors involved with KZN-ADF enriched interviewing outcomes and provided more insights into the research process. The Research Facilitator supplemented formal interviews by informal contacts in form of telephone calls and general discussions with role-players, whenever an opportunity presented itself, to verify information and data collected. This was made possible by the

executive committee giving a mandate to the forum office manager to assist in all possible ways to achieve the best results from the research.

Semi-structured group or individual interviews were also employed to gather the information using a semi-structured questionnaire (see appendices 4, 5, 6 and 7). It was open-ended with a constructivist setting in mind to enable the Research Facilitator to probe further on various issues (Communication, information and knowledge management and conflicts of interest among forum members) affecting the functions of the forum in the process of interviewing. This is particularly important in participatory action oriented research as it is meant to encourage and empower the Research Participants. The Research Participants in this case are free to raise issues, which can further be researched. The Research Facilitator has an obligation to help the partnering organisations understand the issues surrounding them; then they (organisations) can have a plan of action together (Groot, 2002; Bhana, 1999; Guba & Lincoln 1989). The plan of action is supposed to emanate from issues that affect the stakeholders here referred to as Research Participants. The range of results from the formal interaction, informal interactions and semi structured group interviews were as follows:

- (1) The problem situation in the form of a rich picture acquired from group interviews and individual interviews;
- (2) Forum membership from the forum's member registration records;

The next information was provided by the Research Participants individual interviews

- (3) The target groups;
- (4) Reasons for joining the forum or the expected benefits;
- (5) Membership benefits status;
- (6) Areas of capacity building; and
- (7) The database components.

6.4.1 Problem situation in the form of a rich picture

The issues that further informed the research were realized in the process of interaction during the discussions with five forum executive committee members and the interviews with other Research Participants. The issues were developed in the form of a rich picture. The rich picture was presented to the executive and modified by them in keeping with rich picture methodology (Checkland & Scholes, 1990; Engel, 1995, 1997; Checkland, 1999).

The final rich picture approved by the executive committee members, shown in Figure 6.1, adequately expresses the real situation for ease of visualising issues of concern in the forum. Below is the description of the symbols and relationships in the rich picture (Figure 6.1).

- 1. **Symbol No. 1:** It depicts the executive committee members of the forum in the meeting. The broken line indicates weak communication and information sharing and the full line indicates strong communication and information sharing between some the executive committee members.
- 2. **Symbol No. 2**: It depicts the office of the forum secretariat. The broken line indicates weak communication between the executive committee and members.
- 3. **Symbol No. 3**: It depicts some organisations and individuals waiting for information from the forum. The broken line indicates a weak two-way communication among the stakeholder.
- 4. **Symbol No. 4**: It depicts some of the organisations and individuals are very busy. The broken line depicts two-way communication that is weak between the organisations.
- 5. **Symbol No. 5**: It depicts a group of stakeholders who have no communication at all from the forum secretariat.
- 6. **Symbol No. 6**: It depicts some of the stakeholders who have had some form of communication in one way or another but still waiting for further communication from the forum.
- 7. **Symbol No. 7**: It shows that there is limited letters or hardcopy as a form of communication and information exchange

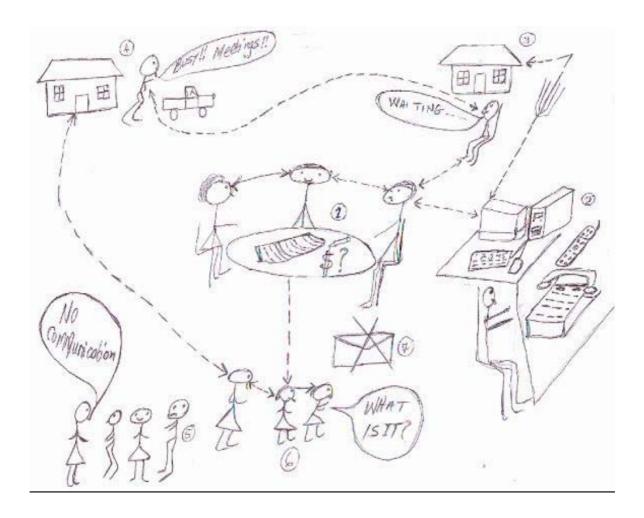


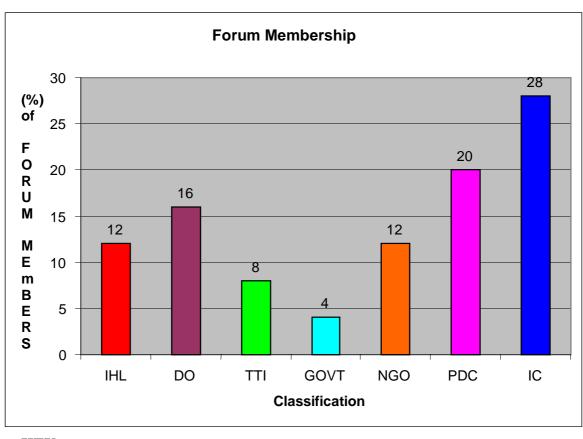
Figure 6. 1: Rich picture of the communication issues

6.4.2 Forum membership from the forum's member registration records

Figure 6.2 shows the forum membership as percentages across the various membership categories. Based on interviews held, the Research Participants were aware who could be members of the forum and of the conditions of membership. The respondents said that the forum had not taken the shape they had wished and needed publicity to place the forum in the rightful position to be known, like similar organisations in the field, as a development-oriented organisation that is people-centred in achieving its set objectives.

For the forum to thrive, draw on and add to its strengths and have the desired impact on its target groups, the participants identified two factors: increased participation from current membership; and additional members. Additional members should be drawn from Non-Governmental Organisations (NGOs), Development organisations (DO), Institutions

Higher learning (IHL), Tertiary Training Institutes (TTI), Government departments (GOVT), Private development companies (PDC) and Independent Consultants (IC). The forum secretariat has a responsibility to go out to seek the opportunities to publicise and recruit members from around the Province. This would place KZN-ADF on a par with sister development forums in the province in other development sectors.



KEY:

ICIndependent ConsultantIHLInstitution of Higher LearningDONGONon-Governmental OrganisationPDCTTITertiary Training InstituteGOV

DO Development Organisation
PDC Private Development Company
GOVT Government Department

Figure 6. 2: Forum membership (n = 24)

6.4.3 Target groups of Forum members

During the interviews there were four targets groups' mentioned that the stakeholders are targeting in their operations to get involved with in offering services. These included resource poor farmers, rural households, small-scale commercial farmers and large-scale commercial farmers. As the research progressed and there were more informal meetings

with the Research Participants, further insights were gained as to the intentions of the forum members in engaging with its identified stakeholders. Within the stakeholder groupings, forum members expressed interest in focussing on: people with various physical and mental challenges; HIV/AIDS infected and affected people in rural households; and youth groups in rural households and areas. There was further mention of targeting primary and secondary schools in rural areas and in formerly disadvantaged communities, as well as large commercial farms. All of these additional groupings have either direct or indirect impact on development in an area. They call attention to the contribution that can be made to holistic development by harnessing the unexploited potential latent in these often overlooked sub-groups.

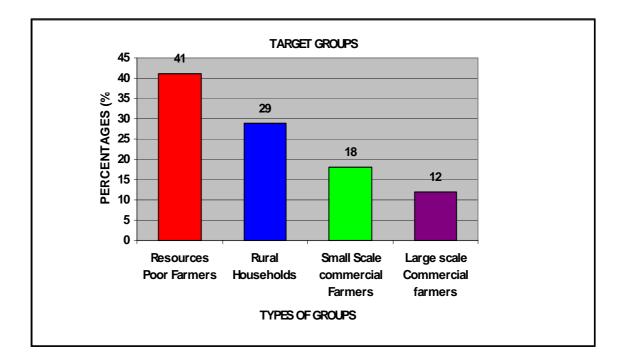


Figure 6. 3: Target Groups (n = 24)

Figure 6.3 shows the breakdown of beneficiaries engaged by forum members. The majority of the forum members' 41% target primarily resource-poor farmers; 29% target rural households, 18% target small-scale commercial farmers and 12% target large-scale commercial farmers. The least targeted are large commercial farmers. The small-scale commercial farmers lie in between the rural households and large commercial farmers. The target groups referred to in Figure 6.3 are the beneficiaries denoting those social groups within whose domain the impacts of operations of various members of KZN-ADF

are intended for service delivery to take place. The improved service delivery was expected to impact positive changes on the target groups socially, economically and politically, enabling and empowering them to participate in 'Unlocking agricultural potential' development agenda as equal partners.

6.4.4 Reasons for joining the forum: the expected benefits

The Research Participants mentioned that driving force for joining the forum is the expected shared benefits. The Research Participants identified the following key benefits and ranked them in the following order:

- (1) Networking in communities of interest;
- (2) Learning and growth that is capacity building of the partnering individuals and organisations;
- (3) Have joint ventures and collaborative ventures; and
- (4) Act as a sourcing agent for contracts, (This featured mainly with the private development companies).

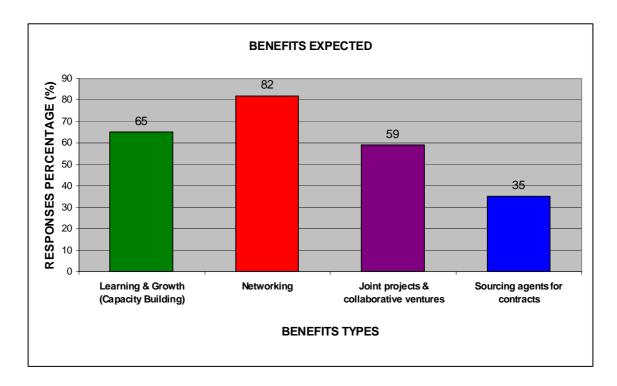


Figure 6. 4: Expected Benefits (n = 24)

Figure 6.4 gives the details of the range and ranking of expected benefits, effectively why they joined the forum. Forum members most valued networking (82%) followed by capacity building (65%), joint ventures (59%) and contracts (35%). It was anticipated that the joint approach would offer each member benefits in the form of harnessing common resources that could help all the members tap into exciting research programmes or initiatives, explore new ideas, create new strategies, and network with peer service providers and clients. Sharing experiences and successes motivates and promotes learning and growth of individuals as well as organisations, especially in the communities of practice. The forum was also a vehicle to discuss fundamental issues and to define topics across the talent management continuum from planning joint programmes or ventures to implementation. It afforded the possibility of creating dialogue across the forum members' diversity to achieve growth, competitive advantage and success through intelligent, effective and efficient strategic planning and optimisation of available resources.

The Research Participants noted, however, that while the anticipation of the shared benefits was the driving force for joining the forum, at the time of the research they felt that realising these benefits was quite remote. It was observed that the expected benefits were yet to be realized as the forum was undergoing transformation for it to be fully operational. The operations of the forum wholly depended on the members' initiative to keep on motivating the activities that they needed to undertake throughout the year. In the process of active participation by all members the emergent ideal would be networking, capacity building, and joint projects and collaborative ventures for members and the least is as source of contracts.

6.4.4 Membership benefits status

The Research Participants expressed that there are many potential stakeholders to join the forum. These potential stakeholders are carrying out their various projects and initiatives or programmes located over the whole the Province. The limiting situation is that they may not be aware of forum's functions and the expected benefits of an informed decision to join and participate in the forum's activities. One probable issue mentioned by Research Participants hindering potential stakeholders from joining the forum is that potential

benefits are not clear and not understood. On that note the Research Participants classified the benefits into two strata as:

- (1) Unclear benefits status
- (2) Clear benefit status

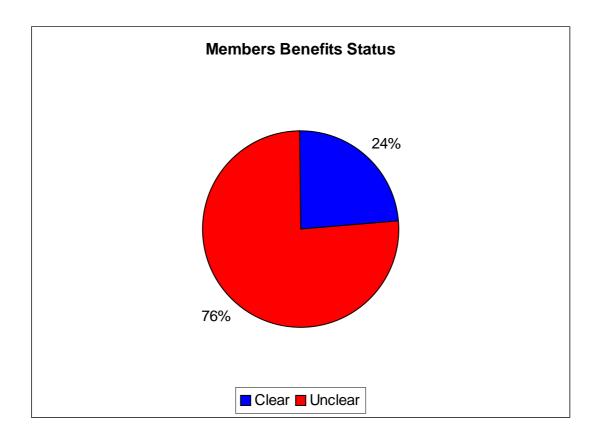


Figure 6. 5: Members Benefits Status

Figure 6.5 shows members benefits strata as perceived by Research Participants as 76% unclear and 24% as clear. The Research Participants expressed the urgent need of KZN-ADF to conduct an awareness campaign to promote its presence and functions in KZN Province. The campaign would create awareness of the forum development agenda of 'Unlocking agricultural potential in the Province' and interest among potential stakeholders to join the forum. The Research Participants mentioned that high membership might go a long way to help the forum at least break-even on its cost of operations. This would trickle down to reduce individual members' financial burden to maintain the operations of the forum. It would also contribute to maintaining high level of moral, esteem and professional service delivery to the clients as one of the core values of

the forum. The Research Participants expressed concerns and observations about an awareness campaign to promote forum. They suggested some ways to conduct such a campaign including 'road shows', participating in the Royal Agricultural Show; and mass-media adverts in the different radio and TV channels to popularise the forum's activities and achievements.

The Research Participants further identified the need to have an annual tentative programme for the activities and meetings to profile forum functions and activities. They suggested that the Executive Committee would refine the programme and forward it to the forum members to encourage attendance and allow members time to prepare for and to incorporate forum activities into their packed programmes. A calendar of activities and events together with attendance records can be used as an indicator to evaluate functions of the forum and the probable membership benefit status. The annual calendar of activities and events coupled with the evaluation can be used as tangible benchmarks to improve on activities and events as well as approaches to various situations affecting the forum progress towards achieve the goals and objectives.

Referring to the expected benefits and membership benefit status (shown in Figures 6.4 and 6.5), the Research Participants were of the opinion that membership in the forum would prove to be beneficial and worthwhile if the following practices and initiatives were implemented to motivate the potential members though the forum:

- 1) Building a relationship in mutual support of forum members by networking;
- 2) Sharing projects or research management best practices and lessons learned;
- 3) Cultivating a community of reflective professional practitioners;
- 4) Developing leadership expertise and capacity within the forum and among the emerging professional agricultural services delivery practitioners to increase credibility and overcome doubts raised by potential clients; and
- 5) Attracting contracts and funding locally, nationally and internationally in recognition of joint project initiatives.

6.4.5 Responding to expected benefits

The preceding sections outlined the four expected benefits of joining the KZN-ADF: capacity building; networking, joint ventures; and sourcing contracts. This section will discuss these in greater detail, reflecting on their significance in organisations such as the forum and its members

6.4.5.1 Areas of building capacity

The Research Participants emphasised that KZN-ADF has a responsibility of initiating and creating capacity building programmes that empower inter-institutional collaboration. In recognizing that the environment is strongly influenced by actions of individual organisations in the process of service delivery to the target groups, the Research Participants mentioned five areas of capacity building namely: (1) Partnership development; (2) Financial management; (3) Research process and management; (4) Project management; and (5) Facilitation skills among the members of the forum. While most the Research Participants reported having had an opportunity to practice and handle most these areas of capacity building, they felt that there was need for regular updates. The reason put forward is that due to fast changing technological approaches, the ways of practice and handling these specific areas are changing rapidly, prompting regular and continuous updating.

Consequently the Research Facilitator reflecting on the Research Participant observations and argument concluded that firstly building capacity in an organisation is much more than merely ensuring it has resources and inputs to use in putting the physical structure in place. It calls for strategically managing available resources (physical, human, financial, natural and social) to have a positive impact on the capacity of the organisation to deliver on its objectives. Secondly capacity building may be undertaken as a process of enabling the stakeholders either as individuals or in organisations to realise their potential and the ability to optimise the utilisation of the scarce resources to enhance social-economic advancement as well as adding value to the life of individuals and organisations.

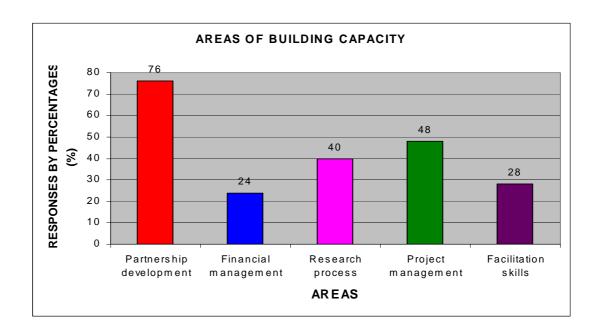


Figure 6. 6: Areas of capacity building

6.4.5.2 Networking

Many of the forums' member organisations were in the process of developing development strategies, environmental action plans, multi-sectoral, natural resource management master plans, and other policy initiatives promoting the sustainable use of natural resources. In analysing the input of respondents, it was discovered that in order to update their development policies and strategies, it would be necessary for the organisations to monitor the trends in development among their stakeholders. This could be achieved through encouraging feedback from their target groups and, in keeping with the capacity of the specific organisation, incorporating such up-to-date information into management and policy decisions on the development and utilisation of natural resources

6.4.5.3 Joint ventures

In reacting to the issue of building capacity, the Research Participants noted and observed that they needed to initiate a joint venture or initiative. They proposed that the beginning point would be to have a joint project proposal that addressed an area of development to which a number of members could contribute. Such a joint venture would have sub-units or programmes related to individual forum's member organisations' areas of expertise. To promote a joint venture would require narrowing down a proposal to specific areas of

focus that could draw on the expertise of the forum's members. The relevant member(s), answering some key questions that can direct them in drafting a specific sub-proposal of the overall project proposal, would explore these areas of focus in detail. These questions could address:

- 1) Specific areas that would attend to the needs of the target groups of the specific forum member
- 2) The skills, knowledge and resources required for undertaking a specific action, and
- 3) Training needs of individuals or organisations required at specific levels.

The sub-proposals with sub-themes covering the needs and interest of individual members, and contributing to the main theme would be combined to make joint proposal that focuses on the forum's objectives that need to achieve using the joint proposal.

6.4.5.4 Sourcing contracts

The PDC and NGO members of the forum generate income primarily through obtaining development contracts, most of which are with the State. However several of these members were relatively unknown to potential contract providers. Working with the forum could increase their visibility and recognisability and facilitate sourcing contracts.

Reflecting on Research Participants' observations and comments and the literature review on Public-Private-Partnerships, particularly Wettenhall and Thynne (1999), Bennett *et al* (1999) and Plummer (2000), it noted that forum members could benefit from PPP. The government encourages PPP to assist in delivery of services to the public. This is especially true in areas, which are under public domain for service delivery, and yet the government cannot be effective on these services. The PDC and NGO members of the forum are well suited for the PPP strategy.

6.4.6 Conclusion from interviews

"Partnership" as visualised in the rich picture, shows a web of interaction and interlinkages of action of stakeholders portraying a functioning system. For stakeholders to join this system (become a partner) they need a clear motivation. This research shows the main motivation as the expected shared benefits, further influenced by individual or group interpretation of the possibility of achieving the expected shared benefits. In this research networking in communities of interest or practice topped in ranking among the Research Participants as the driving force of joining KZN-ADF and influenced mainly by clarity of achieving the expected shared benefits as critical factor in decision-making whether to or not to join the partnership. Forum members need to network amongst themselves to strengthen and promote inter-institutional collaboration. It would cultivate and enhance transparency and accountability among members towards improving effective policies implementation and management for agricultural development. There is strength in numbers. But there is greater strength in coordinated numbers.

Drawing from the Research Participants' observations and comments two observations are made: Firstly the clarity with which the issues are handled indicates the possibility of implementing a joint project or initiative successfully. Secondly the expected shared benefits play a major role in development of partnerships, at various levels, whether at community or management levels.

6.5 Results from the Communication Analysis Exercise

The communication analysis exercise involved all the Research Participants to objectively understand partnership development dynamics in problem solving and decision-making, understanding the values held by forums' members, understanding that the networking dynamics are influenced by communication and group performance, and appreciating the KZN-ADF in context of a learning organisation. A sample group of five executive committee members and two other groups composed of each ten forum's members were used. The communication analysis shows that while communication among the forum members occurs, the effectiveness of that communication was critical to and questioned by the members. A key element that featured among the Research Participants was an appreciation of the forum as a learning organisation with an ability to analyse and manage a situation incorporating the unique and common experiences of the members and inherent diversity in which the forum operates. The communication analysis showed the potential of utilising their inherent diversity for their individual and collective benefit as strength of long-term value. The practical impact was being able to utilise the skills and knowledge laying untapped among the forum members to advance the cause of the forum and to increase its sustainability. The stakeholders appreciated the effects of diverse membership

and diverse societal expectations from a partnership dynamics perspective. The following areas were quite distinct during the communication analysis exercise as the main areas needing immediate attention, these are:

- 1) Communication methods used for interaction;
- 2) Quality of communication within the forum; and
- 3) Communication impact on the performance.

6.5.1 Methods of communication

The Research Participants expressed their concern about communication among the forum members and between them and the Executive Committee. Communication is a process that stakeholders can use to share their ideas, information, opinions and feelings to enhance networking bond as well as encouraging teamwork approach to problem solving. For communication to be effective there should be interaction between individuals and parties that is realised when there is mutual feedback from the two parties involved in the process. The responses from the Research Participant placed communication as one of the key issues that need to be given attention in the forum for it to progress. Out of the responses from Research Participants, various modes of communication emerged as ones commonly used for communication by forum. These are: (1) Electronic mail; (2) Telephone calls; (3) Fax message; (4) Meetings and (5) Letters or newsletter.

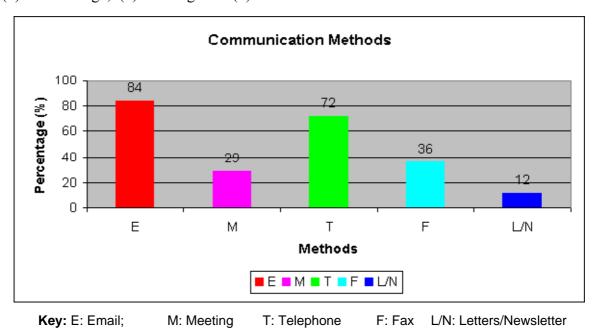
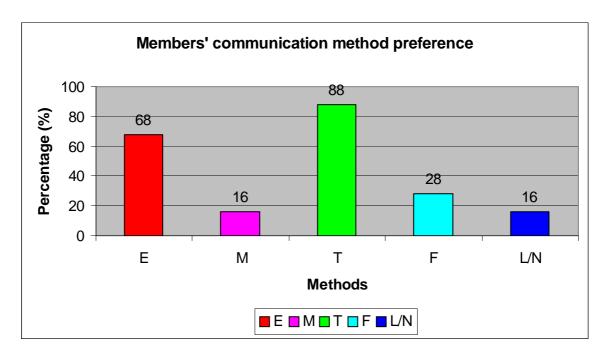


Figure 6. 7: Communication methods used for interaction

Figure 6.7 gives the details and of the methods of communication used by the forum secretariat to interact with forum members The majority (84%) of the Research Participants responses said they were contacted through electronic mails followed by telephoning (72%), faxing (36%), meeting (29%), and letters or newsletter (12%). The findings show the variety of communication methods that are applicable to enhance interaction among the forum members as well as advancement in ICT applications that promote effective communication.

6.5.2 KwaZulu-Natal Agricultural Development Forum Members' communication method preference

On the further probing on the communication methods, the Research Participants' identified their preferred modes of communication. Research findings show it is necessary to find out from the members their preferred methods of communication for functions, official matters and participating in a democratic vote or a consensus formula to act on issues that pertain to progress of the forum by the Executive Committee



Key: E: Email; M: Meeting T: Telephone F: Fax L/N: Letters/Newsletter

Figure 6. 8: Forum members' communication method preference

Figure 6.8 gives the details of communication preferences as per the responses of the Research Participants as telephonic communication, 88%; electronic mails, 68%; fax messages, 28%; meetings, 16%; and letters or newsletter, 16% respectively. The responses indicate that the forum members' best way of being communicated to is telephonic, the reason being that they can have the first hand information that needs attention fast enough and conveniently as they are busy and are not in one place. They attend to the electronic mail messages only when they are in the office. For recording purposes, they said that they prefer electronic mails, fax and letter so that they can be stored as hard copies for future reference.

6.5.3 Quality of Communication within the forum

The research reviewed the need to improve communication within the forum and among the forum members. The situation of communication required attention to attract stakeholders to register as members of the forum. The improvements on communication suggested by Research Participants were:

- 1) Commitment to respond to message as quickly as possible or a note as a response or feedback that the message or information as been received and will be attended to as soon as possible as individual obligation,
- 2) Maintain open communication lines through various mode of communication, and
- 3) Encouraging members of the forum to share skills, knowledge and information frequently to cultivate among themselves a culture of mutual trust and commitment.

On interrogating the situation of communication in KZN-ADF, the Research Participants categorised communication in the following fields: excellent, good, fair, poor and very poor. (See figure 6.9).

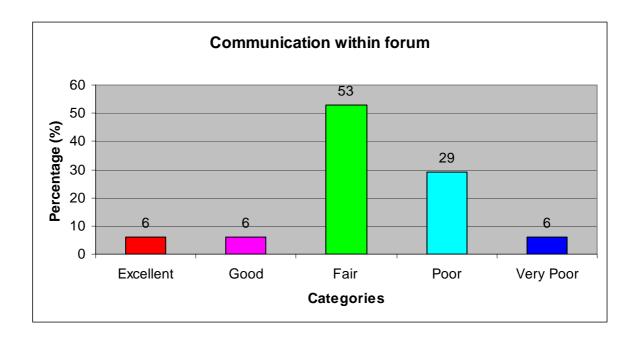


Figure 6. 9: Quality of communication within the forum

Figure 6.9 gives details of the quality of communication within the forum and among the members of the forum as ranked and categorised by the Research Participants as fair (53%), followed by poor (29%) categories and the other categories excellent, good and very poor stood at 6% respectively. Improvement of communication practices taking into account open and effective communication in the fair category, serves as a clear signal of a need to improve communication within the forum and among forum members.

Reflecting on the forums' inherent diversity in its membership and formation, it was concluded that within the key factor of communication it remains a task of forum members to develop a culture of self-responsibility, transparency, accountability, mutual trust and commitment. This will contribute significantly to remaining cohesive, their effort to push and advocate for a coordinated development agenda that is sustainable and to achieve their common vision. Successful communication and dissemination of information in the kind of formation the forum is goes beyond the use of traditional methods of communication and information dispatch such as publications in academic journal and newsletters. It must embrace the modern ICT methods of communication and information dissemination in the present information age to improve on the quality of communication to boost interaction among members.

6.5.4 Communication impact on the performance of the forum

The Research Participants expressed their fears on communication performance and in response, they suggested that conducting quarterly workshops as a possible remedy to improve performance. They observed that it is cost effective for improving communication performance and to evade the possibility of negative credibility, which might have far reaching effects and impacts on the general performance, progress and continuity of the forum. Research Participants were of the opinion that in the workshop members would share their new-found skills, knowledge and information as well as predicaments in their operations with other forum members. This would open and create opportunities to perfect and strengthen networks along the lines of interest or practice as well as improve on communication performance creating a solid bond among members and within forum. The responses from Research Participants pointed out that the prevailing communication might downplay credibility of the forum. For the purpose of clarity they grouped credibility into two zones namely negative and positive creditability. (See figure 6.10).

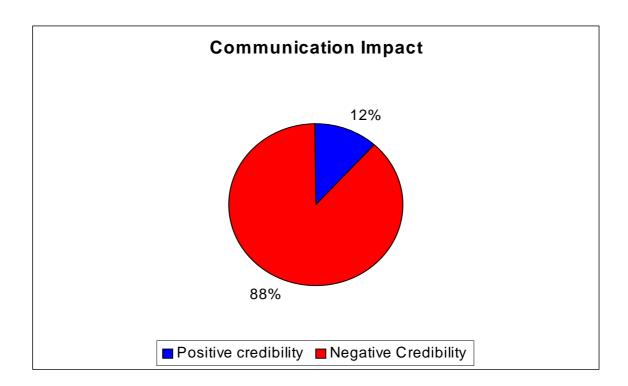


Figure 6. 10: Communication impact on the performance of the forum

Figure 6.10 presents details and zoning of credibility by Research Participants as negative credibility 88%, while the positive credibility takes a small portion of only 12%. This serves as pointer to the situation of communication performance in the forum, implying that there is need for activities that promote two-way dialogue, not one-way flow of information among members, within the executive, and with clients and other stakeholders. They suggested that face-to-face meetings and briefings are among the most effective ways of promoting an open communication structure that can enhance and promote better performance. This can be experienced in a workshop set-up without members feeling intimidated.

6.5.5 Conclusion from communication analysis exercise

The forum used electronic mail as the primary method of communication. However, the majority of the members (88%) expressed a preference was telephonic communication for both routine and urgent matters. Research Participants said electronic mail and hard copy letters should follow telephonic communication for record and reference purposes. The responses from the Research Participants were that the written communication has the advantage that it can be studied and reflected on to develop new insights on the progress of the forum. Written communication can be used for tracking and monitoring communication situation and progress within the forum and among forum members.

6.6 Developing the Management Information System website

The first idea that emerged from the Research Participants in the quest of improving communication and the general management of the forum was to have a simple interaction and monitoring mechanism in the form of a database. This would assist the KZN-ADF Executive Committee to interact more effectively with the forum members and to prepare management reports. The database would serve as a clearinghouse where members input their information for forward transmission to a main database linked with the individual members' sub-databases online in the Internet. In this way the information could easily be extracted by the forum secretariat to assist in propagating financial, managerial and consultancy reports. The databases were also to serve the purpose of allowing forum members and Executive Committee to monitor their own progress and allowing potential

donors and funding agents to study the reports to enable them to make informed decisions on whether it is worthwhile to assist or finance activities of the forum as well as noting areas that have gaps so that they are addressed in their specific context.

Further, the Research Participants noted that for the forum to achieve its goals and objectives, communication is paramount and plays an important role in inter-institution collaboration. This involves networking to share information and knowledge as a mutual expression of trust amongst members. The MIS incorporated in the Internet as a website would ease the communication problems as well as the cost of using telephonic communication and interaction which by comparison seems costly to use. Research Participants advocated for a MIS to be put in place in order to assist forum's interaction process among members and with the Executive committee, to speed up monitoring and to enable members to interact effectively in this era of ICT advancement.

The findings from the field research identified database components for inclusion in the construction of the website. The website would act as a MIS supporting the Executive Committee in carrying out it managerial functions, especially monitoring. It can also serve as an interaction mechanism for both the Executive and the forum members respectively. The MIS would enable members to interact freely in their communities of interests and to develop team synergism to work out their needs and those of target groups to achieve individual and the forum goals and objectives respectively.

6.6.1 Database components

Research Participants expressed a need for a database that is accessible by the registered forum members. The Research Participants proposed the fields that should form the components of the database as:

- 1) Forum members' profile;
- 2) Members' areas of expertise;
- 3) Services offered by members;
- 4) Contracts awarded in the past, and
- 5) Members' consortium fonts.

The forum database task team discussed these fields. The Executive Committee further discussed them. It was agreed to form the basic constituents of database design. The database designer confirmed that these fields could be prepared and incorporated in the Internet system to allow members to input and update their information, as well as access and retrieve information that is open to the registered members. The registered members of the forum would need to have Internet online to be able to access the database.

Reflecting on the field research and works of Kroenke (1989, 1995) and of Loudon and Loudon (2000), with the assistance of Research Supervisor and forum Executive Committee and with the advice of the database designer, the forum accepted the prospect of having a database design that as managerial functions in form of Management Information systems (MIS) for implementation. The managerial functions would enable the Executive Committee to receive the updates from stakeholders regarding their profile. Equally it would assist Executive Committee to communicate with greater ease and to administer the forum with clear information on members' status, expertise and performance. This would pave the way for concrete networking, sharing of skills, knowledge and information either as communities of practices or communities of interest.

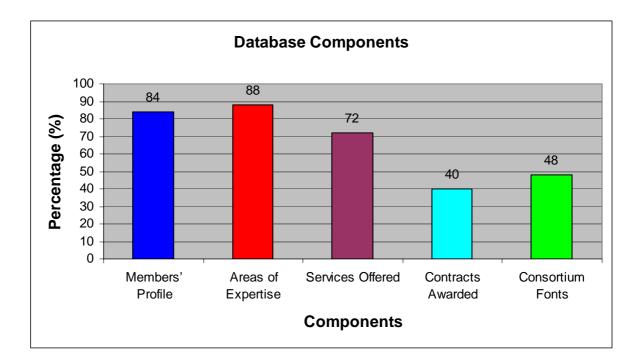


Figure 6. 11: Database components

Figure 6.11 gives the details and responses by Research Participants of the database components that needed to be given priority, and to be incorporated in the MIS as a starting point for developing a MIS: members areas of expertise (88%), members profile 84%, services offered by members (72%), members consortium fonts (48%) and contracts awarded (40%). These results shows that the stakeholders areas of expertise are most important for them to be able to network in either the communities of practice or interests and it is in their interest they team up when they have knowledge of each other, this can be assessed from the members profile and is crucial to the members.

6.6.2 Use and purpose of website

The forum decided to develop and launch a website as a part of its communication and information management system. This decision was informed by the responses and contributions from Research Participants, UKZN ITD Staff and a consultant Web Designer on the technical and social approaches to the task of designing and constructing a website. An intervention action plan to develop a database and design a website for the KZN-ADF was agreed upon by the Executive Committee, the Website Designer and Research Facilitator. The website design and construction contract was agreed and signed after consultative discussions between the Research Facilitator, Research Supervisor and Website Designer with the mandate of the Executive Committee. Thereafter there were continuous consultations between Research Facilitator and Website Designer to verify the information input and progress on design, construction and launching of the website as KZN-ADF website: http://www.ukzn.ac.za/fsg/kznadf/index-accessible-only-by-registered-members-of-the-forum

The Research Participants observed that the website would be used for various purposes. These purposes included:

- 1) A mechanism to enable the members to interact more freely in their communities of interest;
- 2) Communication tool for members and the forum Executive Committee or secretariat to exchange information;
- 3) Networking to share information and knowledge with other organisations, in communities of interest or practice conveniently; and

- 4) To assist in monitoring and management of the activities of the forum by the Executive Committee, and
- 5) Improving interaction among members and Executive Committee to develop a common vision to implement the forum development agenda.

These purposes could be released through the process of interaction in the Internet as displayed parts of the Web pages 1 and 2 presented in Figure 6.12 and 6.13. Within each of these fields: Profile, Work, Services, Training, Expertise, Region and Details outlined in figure 6.13, when members input their information and update regularly, website would serve as a gateway to institutional and organisational success of KZN-ADF.

KZN-ADF Web page1 Top of Form E-mail Address: Submit Password: Submit Forgot your password? Welcome to the KwaZulu-Natal Agricultural Development Forum Introduction This site is intended to promote and develop partnerships amongst government, non-governmental organisations, the private sector and educational institutions within KwaZulu-Natal. "Unlock the agricultural potential of the province..." Members of KZNADF will use this site to publish their organisations profile and refer to member profiles to establish synergetic partnerships. KwaZulu Natal Agricultural Development Forum | Last Updated 25 Nov 2004

Figure 6. 12: Management Information System (MIS) web page 1

KZN-ADF Web Page 2

• 1 Profile >	
• 2 Work >	
• 3 Services >	
• 4 Training	
• 5 Expertise >	
• 6 Region >	
• 7 Details	
Step 1 Profile	
Tell us about you.	
Stop Iname:	
Email address:	
<u>S</u> tep 2 >>	

Figure 6. 13: Management Information System (MIS) web page 2

Research Participants noted that networking in agricultural development projects and natural resources management sector is a common phenomenon among the development agents, which in a broader perspective could be described as an inter-institutional collaboration and co-operation management of the resources. The organisations in this kind of set-up are able to share knowledge, skills and practices, exchange information, and resources leading to mutual benefit of all parties concerned. This kind of collaboration calls for an initial understanding through a memorandum of understanding being clearly explored, to give way to mutual understanding, trust and commitment among those involved in the bilateral collaboration. The bilateral collaboration could effectively be achieved by appropriate use of a website launched for their use.

Research Facilitator reflecting on the Research Participants responses and observations, concluded that:

- 1 Typically decisions informed by understanding and clearly explored goals to be achieved strengthen person-to-person and organisation-to-organisation, networking leading to shared-collective action.
- 2 Networking can effectively and efficiently be achieved using modern ICT to link registered forum member organisations and allow them to work together on common objectives.

6.6.3 Conclusion from developing a website

A Website was established and developed that could be used as database and MIS by the forum members, the Forum Coordinator and the forum Executives Committee. Design and construction of the website for management purposes as a strategy to achieve the desired goals and objectives of the forum was implemented achieving one of the research objectives and finally KZN-ADF plan for the structuring and constructing a functioning, dynamic and effective MIS was achieved by launching of Forum website.

6.7 Conclusion

This chapter has presented in details the findings of the research conducted into communication and information management in KZN-ADF. It has highlighted a number of key issues: Participatory action research, research participants profile, information collecting and sharing, results of semi-structured interviews, results of communication analysis exercise, developing MIS website including: database, networking and joint ventures. A few of the findings summarised and discussed next.

1) Communication

The forum members communicate frequently among one another and between the Executive and the general members. The quality and effectiveness of that communication is doubtful. Members felt that there was a need to focus less on the amount of communication and more on the results of communication. Face-to-face communication and telephonic communication were identified as the most effective means for achieving the aims of the forum. The research indicated that communication could also be enhanced

through the development, implementation and management of an Internet-based database and website.

2) Management Information System

The research indicated that MIS could also be enhanced through the development, implementation and management of an Internet-based database and website.

3) Developing MIS Website

The research indicated that for members to interact effectively it calls for commitment to use website effectively by updating he required information regularly to effectively assist the Executive Committee to interact and monitor the progress of forum members. The forum members would use the website for networking in communities of practice conveniently and this will increase the possibility to embark and invest in joint ventures. The implications of these findings will be discussed in Chapter 7.

CHAPTER SEVEN

SUMMARY, CONCLUSION AND RECOMMENDATION

Introduction

This study has explored communication and information management within the KZN-ADF. This Chapter will summarise the study and will critically engage with the research problem, research question, research findings, and results to review the outcomes of the study, to draw conclusions about the research question and the implication of the research. It will discuss shortcomings of the study and recommend issues for further research.

7.1 Summary

While there are wide ranges of issues that need attention in this kind of study, the Researcher Facilitator choose to focus on the role of communication, information and knowledge management, and managing conflicts in an inter-institutional collaboration. The aim of focusing on the foregoing issues is that they are key factors in an inter-institutional situation (Salomon, 2004; Jashaspara, 2004; Cheldelin & Lucas, 2004; Powell 2003; Salomon & Engel 1997). The approach to the study itself was a challenge in that there are varieties of research approaches that could be applied. The challenging issues were the effectives of getting results that are relevant to the situation in focus and the application of the outcomes as a feedback to the system. The system in consideration is KZN-ADF.

7.2 Participatory Action Research

The profile of the problem situation prompted the use of participatory action research (PAR). The study has shown that applying PAR is a valid method to investigate the role of communication, information and knowledge management, and managing conflicts, as a unique process of interaction for sharing and exchanging information and knowledge that causes a unique transformation within the individuals and groups. The transformed

individuals equipped with new skills, information and knowledge make a difference in real-world situations.

The study embraced constructivist epistemology as the research paradigm, and grounded and soft knowledge systems perspectives as the methodological approaches. These were powerful tools of a learning community to seek new skills, knowledge and information. In reference to works of Checkland and Scholes (1990), Engel (1995, 1997), Salomon and Engel (1997), Bhana (1999), Prozesky and Mouton (2001) and Melkote and Steeves (2001) applying PAR would further the knowledge base of KZN-ADF as an organisation by networking to share acquired skills, knowledge and information, and a special competence of managing of conflicts respectively among the stakeholders on completion of the research study. The conflicts managing competence acquired can be applied in other development inter-institution collaborations of multi-stakeholders.

7.3 Stakeholder analysis and partnership development

Stakeholder analysis is a key process for partnering organisations. It is an important and critical stage in partnership development. It was reviewed to inform and conscientise the Research Facilitator and Research Participants to be aware of the situation in which they would be acting and operating. Stakeholder analysis is a powerful tool that can reveal stakeholders' problematic issues and the situations facing them, both of which play key roles in the sustainability of partnerships (Alexander, 2003; Grimble & Wellard, 1997).

Across KZN-ADF membership, between and among them, they practice various types of partnerships at different levels operations, identified as:

- Developmental partnerships
- Public-private partnerships, and
- Communities of practices.

7.4 Managing conflicts

Managing conflicts is quite a broad aspect to deal with in organisations. Managing conflicts would embrace external as well as internal issues within the forum. Managing

conflicts would embrace the conflict managing approaches, namely conflicts settlement, conflicts management, conflicts resolution conflicts transformation and conflicts prevention to address conflicting situations. To develop an understanding that the partnering organisations and institutions should establish a benchmark for resolving their differences in terms of sharing the resources as well as benefits, including losses that may occur out of the decisions made by them or on their behalf by the Executive Committee.

7.5 Communication

Various communication methods were in use between KZN-ADF office and the forum members. These were identified during the study as:

- Electronic mailing,
- Telephoning,
- Faxing, and
- Meetings,
- Letters and/or newsletter. The details of these communication methods are found in Chapter Six.

7.6 Knowledge management

In this information age, KZN-ADF, like other organisations in development arena has to embrace knowledge management as a key asset. It is important for organisations in the agricultural and rural development arena to network to be more productive as well as to improve performance in their operations. The methods forum members use to access information and knowledge as well as understanding deeply their areas of expertise are:

- Attending workshops and seminars;
- Internet browsing and self reading;
- The field studies and
- From actual practical work.

7.7 Information management and Management Information System

The MIS is a designed mechanism or a tool for information and knowledge management, storing and delivery of information to the forum members and their clients. It is here also viewed as a formalised mechanism to provide adequate and appropriate information from different sources, internal and external to enable timely and effective decision making by forum management. The management would fundamentally improve on strategic planning, directing and controlling activities of the partnering organisations and institutions. For any MIS to be useful it should be able to inform the organisation (KZN-ADF) of the trends of events after information processing for the purpose of achieving the interventional objective (Leedy & Ormrod, 2005).

7.8 Important findings

The important findings are put forward to tie up sub-questions in relation to main research question to action as an intervention action, which was an exciting result of going through the research process in the study (See figure 5.1).

7.8.1 The communication practices

The communication practices that were distinguishable in the forum and among the forum members were person-to-person, individual-to-individual organisations, attending seminars and workshops and Internet browsing. This situation created a need for networking between or among forum members (Independent consultants, Private development consultants and Development organisations) operating in KZN. Secondly the communication methods mainly used are electronic mailing, telephoning, and letters and/or newsletter. The members of the forum, they have a preference of telephoning and then followed up by electronic mailing for record purposes.

7.8.2 Performance of the forum

Communication, information and knowledge management, and managing conflicts affect on the performance of the forum at the time of study formed a benchmark for future evaluation research studies on the forum, as it had the negative credibility. Specifically communication was found to be main contributor to the performance of the form, which found to be fair and on a downward trend to being poor.

7.8.3 Communication structures

As a result of the study, a Management Information System (MIS) was put in place to enable the forum to achieve its objectives. This was achieve through a rigorous exercise of consultations between Research Facilitator, Web designer¹¹ and Research Supervisor and crossing the stakeholders (referred to as Research Participants) needs. The consultation process resulted in designing, constructing and launching a KZN-ADF Website¹² to serve as communication as well as a monitoring and management mechanism for the forum. A database was established where the massive data from registered members can stored, organized, processed and synthesized for the consumption by the partnering institutions through a Management Information System (MIS) via website where members of KZN-ADF can update their information regularly as situations and circumstances of their operations change to enhance communication in the forum.

7.8.4 The role of communication, information and knowledge management in interinstitutional collaboration or stakeholder collaboration

This query was central towards achieving intervention objective regarding communication, information and knowledge management as well as managing conflicts was the creation of effective website as a monitoring and an interaction mechanism for KZN-ADF. The great achievement of the study was that website designed, constructed and launched in the Internet system as it was the reality the Research Participants needed to experience and see it in reality working and being used by members' of the forum. The forum members would update information regularly through the website saving on time and finances that are needed by partnering organisations to undertake other desired activities of the forum.

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¹¹Web designer Mr. Derek Moore of web Learning at http://www.weblearning.co.za and currently a member of staff of Centre for Environment, Agriculture and Development (CEAD).

¹² http://www.ukzn.ac.za/fsg/kznadf/index.asp

For management of the forum it would translate into reducing regular meetings for the Executive Committee to compile management reports, as Management Information System (MIS) would easily generate the reports. KZN-ADF project's focus on the need for developing a database in form of Management Information System (MIS) to act as monitoring and management mechanism and empowerment strategies was significant, as it would determine how effective the forum would be to achieve its set goals and objectives. The goals and objectives of "Unlocking the agricultural potential of KwaZulu-Natal Province as well as having strategic plans and a well set system for managing and resolving conflicts with the forum.

The Executive Committee was committed to the cause of improving the performance of KZN-ADF to improve communication within the forum, between and among forum members', which research findings showed that it needed redress and attention to influence and improve forum's communication status.

Lack of commitment and trust among some forum members limited investment on values and principles of partnership and remained holding strongly on their individual positions and interests. This situation led to poor financial commitments to the cause of the forum.

Hidden or unspoken voices were quite evident during the PAR process; it is difficult to access these voices.

Networking is a great partnership booster and as potency of developing new insights and skills and creating new contextual knowledge that is useful to a particular situation. The experience acquired can be utilised and applied to problem-solving situations in similar situations as well as differing problem situation and locality. The important idea is the contextual application of the research process in similar or differing problem situations.

7.9 Lessons Learnt

Introducing the importance of lessons learnt is unique in that there is many a time when research is conducted and the same mistake are carried out over and over again. Thus there are no concrete insights developed or learnt at the end of the research period. These

points noted would assist in making appropriate and thoroughly search decisions before starting a research study. In reference to KZN-ADF the discussion on the lessons learnt would be based on the following a summary of five points:

- 1) For a partnership to be successful, teamwork and partnership development skills are important skills to be mastered by the partnerships' development facilitator to guide partnering process in consideration of inherent diversity of stakeholders and/or role players with differing values and principles of operation to lead the formed partnership to sustainability.
- 2) Ownership of partnering process is a crucial process for the stakeholders to synergise and to have shared vision.
- 3) Research Facilitator has a responsibility to learn skills and develop a capacity to sense and/or recognise the **unspoken** or **hidden voices** in the Research participants' observations and comments. The unspoken or hidden voices have significant impacts on any teamwork, which could be detrimental to an organisation and/or partnership.
- 4) There is a challenge of aligning the registered individual members' needs, objectives, goals and vision with the forum's joint needs, objectives, goals and shared vision, while maintaining their focus to achieve and to excel in individual organisation's set goals and objectives as well as vision.
- 5) The formation of networking institutions in a real-world situation with the regional, national as well as international recognition requires a real commitment and sacrifice in terms of financial and other resources towards achieving a shared vision.

To be able to understand and facilitate partnerships within a structure that is a diverse as KZN-ADF is particularly challenging. Although all the members of the forum worked in the same general sphere with the same general frame of reference about development of the province, it was found that there was wide divergence as to the motivation for being a member of the forum. Some were members almost altruistic in that they were supporters of collective development initiatives that benefited many. Some were members in hopes of financial gain through obtaining contracts. Some were members to augment their limited resources and to widen their exposure in the playing field. And others were members with a view to taking a leadership role in development practice and coordination of service delivery.

Networking and information sharing became key processes for the forum to develop. This is what gave rise to the development of a website. It was also seen as a way to build confidence and a sense of identity among members of the forum. Members, who were reluctant to complete paper-based profiles, were more willing to complete electronic profiles, as they were able to express themselves more fully.

Connected to the website was the database. The intention was for a member to be able to input data about itself and to retrieve data about itself and other members of the forum. The purpose was to promote collaboration and sharing of the work; to gain synergy from the collective.

The discussions about networking, information sharing and tools for collaboration as vehicles for making the forum more effective appear to have been masking bigger issues. While it was known prior to going into the research that the forum had a number of problems and challenges, the extent of those problems was underestimated. Further the cause of those problems was not simply poor communication, poor information management or poor conflict management.

For example, while communication was a key issue for all the Research Participants, most of whom rated it as fair to poor, on reflection it was more an issue of trust, insecurity and inner-conflict on the part of members, particularly those with financial interest. Even when communication was improved technically, there was still ambivalence of commitment to the good of the whole. Members were cautious in sharing information lest their financial or other status be negatively affected. It was a conflict between being part of a collective and being independent service providers in competition with other members.

Another example was the reluctance of the members to honour financial commitments to provide operational funding for the forum, largely through membership fees. While the requirement was there, as a part of membership, members held back and potential members hovered on the sidelines not willing to commit the funds for membership.

The issues raised in this study are consistent with Korten's (1990) assessment of the generations of development among volunteer organization. He argues that once passed the relief stage (first generation), the project stage (second generation), and the institutional and policy reform stage (third generation), volunteer organizations will have to arrive at the stage of an integrated movement which is driven by a mobilizing vision. While Korten's construct refers to a global network of agencies, the principles hold for something as small as the KZN-ADF. Without the mobilizing vision and without the clear leadership around that vision, the collective cannot be galvanized.

Korten (1990) argues that with such a vision, the collective can be a loosely defined network of organizations and people in which the role of the NGO is one of an activist and educator. The management approach is one of bringing together and providing energy and inspiration for self-managing partners. This study highlights the need for such an approach to enable a forum comprised of such diverse elements as KZN-ADF to fulfil its intention.

In brief, to establish such a forum is very different from establishing a business. A business would have effectively authority to demand compliance and delivery from its owned or employed resources. But a forum, which is an organisation in which membership is voluntary, requires a different approach. This study led to the following four broad points for establishing and maintaining a forum such as the KZN-ADF (Refer to Partnership: definition of terms in Chapter One):

- 1. One needs to start with a clean sheet, putting aside other considerations such as current financial commitments; to build from scratch.
- 2. There needs to be a clear collective and shared vision on what they want to do to which all members can commit themselves.
- 3. From the vision would come strategies and plans to accomplish the vision. These would include specific assignments to members to utilize the capacities and expertise of each of the members, so that they can be channelled to the common purpose.
- 4. Underpinning this would be a code of conduct or a constitution that would address the issue of a member's commitment to the whole while retaining a reasonable level of independence and identity separate from the collective.

Beyond these four steps would come the more technical elements of governance, management, communication, and the like. But without these four steps, there is little chance of such a collection of disparate partners to succeed.

7.10 Shortcomings of the study

Learning to access hidden voices from the Research Participants was a real challenge compounded by the limited time to conduct the research study. More quality time of interaction with the Research Participant would have sorted out the challenge.

There were also the financial challenges that did not allow Research Facilitator to organise interaction forums with KZN-ADF members' diverse target groups to make inquiry on the effectiveness and efficiency of service delivery by the registered members' of the forum.

Research Facilitator had no prior training in website design and management that limited the facilitating the design database and website as well as the construction and launching of the website in the Internet system. A training would have possibly made the Research Facilitator to be more creative and logical in interrogating the website design and construction.

7.11 Recommendations for further research

To improve the visibility of KZN-ADF as an organisation that is capable of coordinating, managing and organising affiliate independent consultants and organisations in agricultural and rural development in KZN region there is a need to carry out further research on appropriate and sustainable ways of raising funds to run the forum. This would assist the forum to seek new and authentic ways of maintaining and supporting KZN-ADF operations from being dependent on donor funds to being a self-sustaining institution. It would create confidence as an organisation to coordinate agricultural and rural development agencies in KZN.

Further, the research conducted has found out that establishing the website as an intervention measure was thought to improve the forum communication status and restore

the forum's dwindling activities and declining performance and that the use of the website would assist to stabilise forum in its operations to achieve the aims and objectives of "unlocking the agricultural potential of KZN". However there was MIS was not actuated to assist the forum's managerial task and to members as a interaction mechanism. This would have formed the benchmark for the follow-up or the evaluation study of the MIS system.

Therefore on the strength of the analysis made earlier in the study and summarised in the paragraph above a follow-up or a evaluation study on the functioning of the forum use of the website effectiveness and efficiency as a monitoring and management tool for the Executive Committee and as an interaction tool between Executive Committee and among the forum members to seek new knowledge, update information and sourcing for contracts regionally, nationally and internationally is recommended.

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APPENDICES

Appendix 1: The map of KZN and bordering Provinces and countries

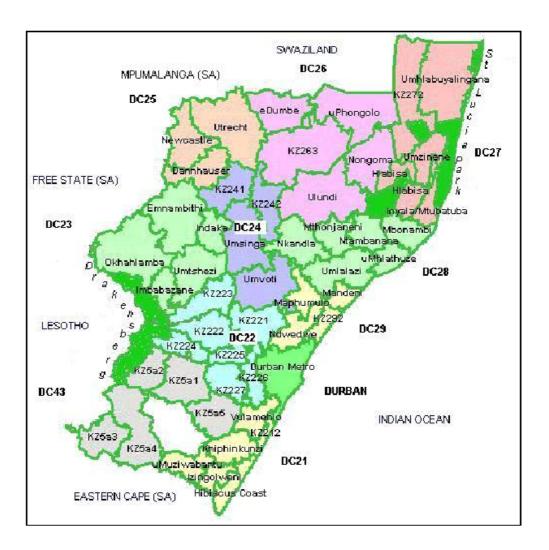


Source: Encyclopaedia the Free dictionary (2004)

Appendix 2: KZN District and Local Municipalities

Annexure A: KwaZulu-Natal District and Local Municipalities

The following map shows district and local municipalities in Kwazulu-Natal along with the names of surrounding South African provinces (SA) or countries.



Source: KZN-DTLGA (2005)

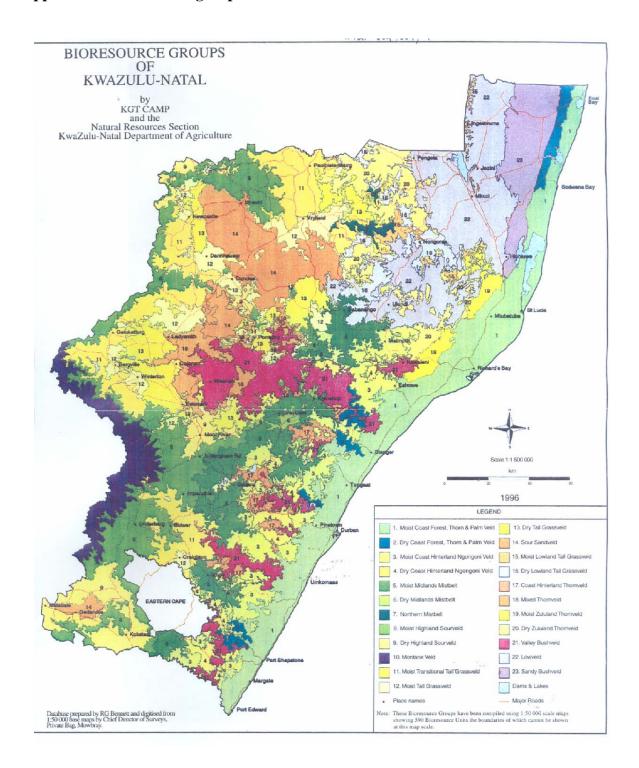
Annexure C: KwaZulu-Natal District and Local Municipalities

Annexure B: KwaZulu-Natal District and Local Municipalities

	301 1 1 51 11 1
DC27	uMkhanyakude District
KZ271	Umhlabuyalingana
KZ272	Jozini
KZ273	The Big Five False Bay
KZ274	Hlabisa
KZ275	Mtubatuba
DC28	uThungulu District
KZ281	Mbonambi
KZ282	uMhlathuze
KZ283	Ntambanana
KZ284	Umlalazi
KZ285	Mthonjaneni
KZ286	Nkandla
DC29	King Shaka District
KZ291	eNdondakusuka
KZ292	KwaDukuza
KZ293	Ndwedwe
KZ294	Maphumulo
DC43	Sisonke District
KZ5a1	Ingwe
KZ5a2	Kwa Sani
KZ5a3	Matatiele
KZ5a4	Greater Kokstad
KZ5a5	uBuhlebezwe
Durban	eThekwini
KZ263	Abaqulusi
KZ265	Nongoma
KZ266	Ulundi

Source: KZN-DTLGA (2005)

Appendix 3: Bioresource groups of KZN



Source: Camp (1996)

Appendix 4: Semi-structured Questionnaire for KZN-ADF Members (INTERVIEWEES)

Name of Interviewer:	Time start:	End:
(Please fill in the appropriate details)		
a. Date of Interview		
b. Type of membership: () Individual, or ()	_ Organisational (Tick	where appropriate)
c. Name of Individual/organisation:		mpp-op-om/
d. Name of contact person (If organisation):		
e. Postal address:		
f Physical address:		
f. Physical address:	(Cell):	
h Fax:	_ (0011).	
h. Fax:i. Email:	_	
j. Website:	_	
<u></u>	-	
Questions to the KZN-ADF Executive Members/I	ndividuals/Organisati	ion
1. Who are the members of the forum?	C	
2. How is communication within the forum?		
3. How does communication impact on the performance of the performance	nance of the forum?	
4. How is the information organised by forum?		
5. Are you aware that KZN-ADF need a database's	Yes ()/ No ()	
If yes why do you need the database?		
If no what are your suggestions?		
6. What can you tell me about how you share you	ar experiences and ka	nowledge, since you have
various backgrounds?	1	2 , 3
7. Do you experience difficulties or conflicts in th	e forum?	
If yes how do you resolve them?		
If no are there strategies that have been laid	d out in case they har	ppen in future?
8. Any suggestions that may be considered by force	5 1	1
	<i>5</i>	
Thank you		

Contact

Name: Francis M. Riungu

Cell: 0828682260

Appendix 5: Database information - To be filled by Registered Members of KwaZulu-Natal Agricultural Development Forum (Individuals and Organisations)

1.	Basic	contact	details	(For	administration,	please	fill in	the a	ppropria	ite d	deta	ils)

Type of membership: () Individual, or () Organisational				
(2) Name of Individual/organisation:				
(3) Name of contact person (If organisation):				
(4) Postal address:				
(5) Physical address:				
(6) Telephone: (W):	(Cell):			
(7) Fax:				
(8) Email:				
(9) Website:	_			
(10) Type of Organisation				
11) Registration No(If applicable)				
(12) Tax Registration(If applicable)			

2. Fields of expertise (Tick where appropriate

- 1. Project Management (FE01) ()
- 2. Farm Business Management & Marketing (FE02) ()
- 3. Agriculture & Natural Resources Management (FE03) ()
- 4. Agricultural Extension (FE04) ()
- 5. Non-Agriculture (FE05) ()

1. PROJECT MAN	1. PROJECT MANAGEMENT (FE01)					
Specific Project	Project Id/No	No Of Experts	No Of Projects	Location (District Municipalities)	Remarks	
Project development & facilitation	01					
Management & organisational development	02					
Watershed Management	03					
Proposal development and fundraising	04					
Agricultural Mechanisation	05					
Irrigation and Drainage	06					

2. FARM BUSINESS M	IANAGE	EMENT &	MARKE	TING	
	Project	No of	No of	Location	
Specific Project	Id/No	Experts		(District Municipalities)	Remarks
Farm business management	01				
Processing/value-adding	02				
Marketing	03				
Supply Chain management	04				
Other natural resource based	05				
enterprises (e.g. Tourism,					
craft, muthi)					
Rural Enterprise	06				
Development					
Financial Management	07				
3. AGRICULTURE &	NATUR A	AL RESO		<u>IANAGEMENT</u>	
Specific Project	Project Id/No	No Of Experts	No Of Projects	Location - District Municipalities	Remarks
Horticulture	01				
Agronomy	02				
Livestock	03				
Natural Resources Management	04				
Crop protection	05				
Aqua culture	06				
Apiculture	07				
Viti-culture	08				
Floriculture	09				
Organic farming	10		-		
Perm culture	11				
Indigenous knowledge utilisation	12				
4. AGRICULTURAL F	VTENC	ION .			
4. AGRICULTURAL F		No Of	No Of	T =	1
Specific Project	Project Id/No	Experts	Projects	Location - District Municipalities	Remarks
Extension Training	01				
Legislation impacting on agriculture	02				
Land reform	03				
Land care	04				
5. NON-AGRICULTUI	RE				
	Project	No Of	No Of	Location	
Specific Project	Id/No	Experts	Projects	(District Municipalities)	Remarks
ABET (Adult Basic Education	01				
Training)					
HIV/AIDS	02				
Environmental education	03				
Youth development	04				
Leadership					

Women development leadership	05		
Life skills	06		

3. Services offered (SO)

- 1. Formal Education (SO01) ()
- 2. Impact Assessment (SO02) ()
 3. Project Planning (SO03) ()

1. Formal Education (SO	01)()				
Specific Project	Project Id/No	No Of Experts	No Of Projects	Location (District Municipalities)	Remarks
Training (theory & practice)	01				
Capacity building	02				
Mentoring	03				
Infrastructure development	04				
HIV/AIDS Counselling	05				
Monitoring & evaluation	06				
Proposal Writing	07				
Project Management	08				
Awareness raising	09				
2. Impact Assessment (SO	002)()				
Specific Project	Project Id/No	No Of Experts	No Of Projects	Location (District Municipalities)	Remarks
Pre-feasibility	01				
Feasibility	02				
Environmental Impact Assessment	03				
Social impact assessment	04				
Poverty alleviation management	05				
3. Project Planning (SO03	B) ()				
Specific Project	Project Id/No	No Of Experts	No Of Projects	Location (District Municipalities)	Remarks
Project facilitation	01				
Applied research	02				
Technology development	03				
Farmer experimentation	04				

4. Field of operation /Geographical area

	GEOGRAPHICAL AREA OF OPERATION	NO. OF PROJECTS	REMARKS
	(MUNICIPALITIES)	TROJECIS	
1	<u>Umzinyathi</u>		
2	<u>Uthukela</u>		
3	<u>Ilembe</u>		
4	<u>uMgungundlovu</u>		
5	<u>Ethekwini</u>		

6	<u>Ugu</u>	
7	<u>Umkhanyakude</u>	
8	Zululand	
9	<u>Amajuba</u>	
10	<u>uThungulu</u>	
11	Sisonke	

5. Target Groups

	TARGET GROUPS	NO.	REMARKS
1	Resource poor farmers		
2	Rural households		
3	Smallholder commercial farmers		
4	Large-scale commercial farmers		
5	Youth		
6	Women		
7	Institutions (Universities)		
8	Institutions (Secondary Schools)		
9	Institutions (Primary Schools)		
10	Disabled		
11	HIV/AIDS positive		

6. Track Record

	Contracts completed during the last five years	Value (ZAR)		Contracts at present being undertaken	Value (ZAR)
1			1		
2			2		

$7. \ \ Capacity\ to\ implement\ (Offer\ provision\ as\ indicated\ in\ term\ 1\ section\ a\ (Type\ of\ membership\ Individual\ or\ Organisation)$

	SIZE OF		REMARKS
	ORGANISATION		
	Staff category	No	
1	Administration		
2	Field Staff		
3	Professionals		
	Scale of Operation	(Tick where a	
	(ZAR)	appropriate)	
1	< 50,000		
2	50,000 - 100,000		
3	101,000 - 500,000		
4	501,000 - 1,000,000		
5	>1,000,000		
	STAFF	PERIOD (FROM – TO)	
	AVAILABILITY		
	(Fill for each staff		
	this section if an		

	organisation)		
1	Administration/Practice		
2	Qualifications		
3	Expertise		
	WORKING	QUANTIFY/CAPACITY	
	FACILITIES		
1	Vehicles		
2	Training venue		
3	Accommodation		

8. Accreditation: (Training modules that are accredited & have preference)

	MODULES	QUALIFICATION (Certificate/Diploma/Degree/Post graduate)	STATUS (Submitted/Registered)
1			
2			
3			

Appendix 6. Interrogating database and Management Information Systems

- 1. What are your perspectives of the Management Information Systems?
- 2. Are the problems that you experience in management of a MIS? If there are what are the problems and how do you solve them or minimize the occurrences?
- 3. What is the relationship between a database and MIS?
- 4. If they have a relationship how do you integrate the two to give you the results you need or to be used by your clients/users?
- 5. How do you manage the MIS to be user-friendly?
- 6. Could there be something else that you would like me to note about MIS?

Thank you **Contact**

Name: Francis M. Riungu

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Appendix 7: Semi-structured questionnaire on KwaZulu-Natal Agricultural Development Forum web page navigation

- 1. Coverage of the essentials of your organisations/Individual data for the purpose of meeting the KZNADF Database Initiative's goals and aims?
- 2. Comment on the navigation of the web pages
- 3. Highlight Items/ideas, which are clear and not clear to you on the web pages
- 4. Any other observation: **On the features of the website:** http://www.ukzn.ac.za/fsg/kznadf/profile/add.asp

Make your comments on above to Francis or You can post/send your comments to Francis M. Riungu: riungu04@yahoo.com

Thank you, Francis Riungu Cell: 0828682260