

WE ARE SO POOR

**AN INVESTIGATION INTO THE LIVES OF TEN
WOMEN LIVING IN AN INFORMAL AREA IN THE
DURBAN FUNCTIONAL REGION WITH
PARTICULAR REFERENCE TO THE ROLE OF
DOMESTIC FUELS.**

WENDY JILL ANNECKE

Submitted in partial fulfilment of the requirements for the degree of
Master of Arts (Women's Studies), University of Natal, Durban.

1992

ACKNOWLEDGEMENTS

I thank the women of Canaan who participated in the study and allowed me to publish their confidences.

I wish to thank my supervisor, Dr Ros Posel, for her patience, encouragement and critical appraisal of my work.

I am grateful to RPV for kindling my interest in transition fuels and Jeff Guy for reading and commenting on an earlier draft of this dissertation.

Don Helling, a generous-spirited person, my daughter, Bronwyn, with her bubbles and my son, Terrence, with his computer expertise, lightened my load while I wrote this. I thank them.

I acknowledge the financial assistance of the HSRC and the NEC without which this study could not have been done.

I acknowledge that this dissertation is my own work unless specifically indicated in the text.

ABSTRACT

WE ARE SO POOR

An investigation into the lives of ten women living in an informal area in the Durban Functional Region with particular reference to the role of domestic fuels.

This dissertation explores the texture of women's lives in an urban informal area, with the particular aim of highlighting their use of domestic energies in the absence of their access to electricity. The investigation into domestic fuel usage is situated within the context of other basic needs: shelter, water and food and the acquisition of these. Each is separately explored.

The domestic fuel sources used by the women were primarily paraffin and candles. The dissertation argues that there is no simple equation between household income and fuel purchase but that the acquisition of food and fuel are mutually dependent and contingent upon a complex set of variables which include the perceived physical and emotional well-being of the woman and her household.

Furthermore the dissertation argues that given the extent of informal settlements and poverty nationally, candles and paraffin are likely to continue to be extensively used in the future, despite their disadvantages and the desirability of electricity. The dissertation submits that the reasons for this pertain to the accessibility and relative affordability of paraffin to households whose buying power is constrained as much by the form in which their income is derived as by its inadequacy.

These arguments are elucidated through case studies of ten women who live in non-electrified homes in Canaan. The women concerned monitored their consumption of and expenditure on water, food, and fuel for a month, and met once a week as a group while they were doing so.

Finally the dissertation suggests that national energy planners should take into account the manner in which women perceive and manage their housekeeping roles, particularly cooking, as well as the form in which household income is derived in order to determine strategies and energy policies which would be women-friendly and support the needs of the extensive numbers of impoverished households in South Africa.

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INTRODUCTION

CONTEXTUALISING CANAAN: ONE INFORMAL SETTLEMENT AMONG MANY

This dissertation explores the texture of women's lives in an urban area, with the particular aim of highlighting their use of domestic energy in the absence of their access to electricity. The women lived within the Durban municipal boundaries in an informal settlement ironically (but not cynically) named Canaan. The dissertation refers primarily to ten case studies and a time period from mid-1990 to mid-1991. It is written in the past tense in recognition that conditions at Canaan have changed, and at least two of the women referred to are no longer there. However it is likely, given the proliferation of informal settlements in South Africa, that certain of the conditions described by the ten women are replicated elsewhere. Insecurity and poverty, issues raised in this introduction, would number among these.

While poverty and informal settlement are not necessarily synonymous, and it may be argued that there are some middle class, relatively affluent shack dwellers, the majority, as in Canaan, experience relentless deprivation. According to Sahlins poverty inheres in status rather than possessions¹. Hamburg explains that "poverty is partly a matter of income and partly a matter of human dignity"². The women at Canaan did not lack a sense of dignity, but, particularly the dump-pickers, were frequently treated by others as if they mattered little. Poverty implies more than a lack of material well-being. It involves the physical and emotional effort needed to meet basic daily bodily requirements. This is not just a daily, but a weekly and monthly and yearly grind without an end or even an improvement in sight. The women themselves described poverty as more than a lack of material wealth and personal degradation, it included what one woman called a lack of

"enlightenment"³: a lack of information, not knowing what the alternatives are, or even imagining that there are any. Enlightenment may be a critical concept in an informal settlement. As illegal residents the lives of the people of Canaan were filled with uncertainty. Their basic needs were barely met. They had only tenuous possession of their places of shelter and lived precarious existences in terms of the law. Decisions had to be made and lives forged without adequate information or long term vision. This basic insecurity coloured the perceptions and actions of the people living in Canaan and contributed to complex relations within the community, evident, for example, in the protection of spaza owners described in Chapter 8.

In concrete terms, a substantial measure of the insecurity in the women's lives was a result of their lack of permanent shelter. The justification for this introduction dwelling on housing was the ten women's own perception of their insecurity, and particularly their lack of housing, as being a source of their misery. They believed that they themselves could begin to address the conditions of their poverty, including a lack of food and fuel, if they had permanent shelter. The importance attached to, and the impossibility of acquiring, a place to stay where they and their households would be legal and secure was frequently emphasised. Without this base the women could not begin to improve their positions.

Internationally shack settlements have become a feature of rapidly expanding urban populations and as phenomena have been documented in most developing countries⁴. Where local governments have responded with growth-orientated strategies, as in Singapore and Seoul, urbanisation has been beneficial on a macro-economic scale⁵. Where local governments have lacked the foresight and/or the resources to manage and plan for spawning populations - for example in Bombay, Calcutta, Lagos and Durban - urbanisation has produced a proliferation of miseries both social and economic⁶.

A difference is that in South Africa informal settlements inhere race as well as class dimensions since South African cities have been structured in accordance with apartheid legislation which attempted to inhibit large scale black urbanisation. One of the consequences of this is the under-provision of housing in urban areas for africans and the development of informal settlements on the peripheries of all the major cities. In several instances these shack suburbs are beginning to dwarf the core city⁷. It is widely accepted that approximately one quarter of South Africans have inadequate shelter and live in appalling conditions of un-hygienic squalor, over-crowding and insecurity. The word 'accepted' is used deliberately. The housing shortage is neither new nor contingent. Land, housing, access to basic facilities and policy determining control of these are profoundly political issues which, despite a plethora of published material, public and state awareness, have not yet been addressed. Forced removals continue despite pronouncements on a new dispensation⁸.

The historical, material and ideological conditions in South Africa which have contributed to and resulted in the under-supply of housing are well documented. The complex issues around the supply of housing have been thoroughly researched and well understood, and possibilities and scenarios for the future have been described by a range of state, business and Non - Government Organisations (NGOs)⁹. Between 1970 and 1984 the government itself authorised at least fourteen commissions and committees of enquiry on housing issues none of which have been implemented in their entirety¹⁰, while recently, yet another, the report of the De Loor Task Group was tabled¹¹. Failure to address the land and housing shortage has led to it being labelled a 'crisis'¹², but the 'crisis' should relate to the paralysis of the government, the lack of management and decision making rather than the phenomenon of 'squatters'.

In summary the historic causes of the under-supply of housing can be traced

back to:

- ❑ the Land Acts of 1913 and 1936 and the Group Areas Act of 1950 as amended in 1966;
- ❑ the socio-economic and political constraints on access to land and the failure by the central state as well as local and homeland authorities to allocate significant amounts of land for black urban development;
- ❑ the neglect of the state of the housing needs of the black people of South Africa;
- ❑ the denial of full political rights to the majority of people rendering them impotent to address their conditions through political channels¹³;
- ❑ the apartheid system of government which has led to the multiplicity of controlling bureaucracies, confusion around who owns what land and the "administrative chaos" surrounding property transactions¹⁴.

Suffice it to say here that it is not a coincidence that most people in South Africa without adequate housing are black and disenfranchised. As a result of their access to formal housing being constrained, millions of people have turned increasingly to inventive ways of constructing, and in the face of continued forced removals, re-constructing their own so-called informal shelters or shacks on unserviced sites. The magnitude of the problem arising from the state dragging its feet - its ankles bound in red tape - over land and housing issues, is briefly explicated for the Durban Functional Region (DFR) only. This is done in order to make evident the improbability of the ten women escaping their conditions in the foreseeable future, despite their aspirations to do so. Thus there is a need take cognizance of women's current positions, particularly their domestic responsibilities such as water, food and fuel, and to adopt strategies directed towards ameliorating these.

The DFR is the area bounded by the Indian Ocean, stretching northwards as far as Salt Rock, westwards to Cato Ridge and southwards to the Umkomaas River. The DFR denotes the metropolitan core, and the fringe of informal

settlements. The inner core city is well provided with a variety of sophisticated facilities and functions on behalf of the middle class, predominantly white, elite. The outer informal suburbs lack infrastructure and are under-supplied with facilities. The population of the DFR is approximately 3.375 million, of whom some 1.8 million live in informal settlements¹⁵: that is over half of the population of the DFR lives without legal tenure and without basic facilities. The number is increasing. McCarthy predicted that by the year 2010, 75% of the DFR's population will be housed in informal settlement areas; his estimation is based on the burgeoning population and the decreasing provision of housing¹⁶.

Yet if these conditions plus the social distress created by the racial division of land, restrictions on urban rights and access, economic exploitation and the consequences of apartheid's discrimination were not sufficiently depressing, the people of Natal have, for the past five years, suffered an appalling cycle of violence. The war has its roots in these factors, to which political ambition and struggle have been added¹⁷. But not even the exigencies of the war have prompted pro-active measures on the part of the authorities. With reference to the new legislation and as far as the Prevention of Illegal Squatting Act was concerned, Mr R Raubenheimer, from the Land Usage and Control and General Services Directorate in the Natal Provincial Administration's warned:

It will not avail in courts of law to point out that one is squatting with the permission of the owner of the property. Indeed that owner will then run a greater chance of prosecution himself than has hitherto been the case¹⁸.

While each informal settlement has been established within a specific set of circumstances and has its own particular history, almost all have the following in common:

- ❑ a lack of basic services such as clean water, sanitation, refuse removal and access roads;
- ❑ a lack of electricity;

- ❑ high population densities, for example in Lindelani there are approximately 300 people per hectare¹⁹;
- ❑ high levels of unemployment, often 40% but in some areas as high as 60%²⁰;
- ❑ ongoing violence related to political differences and power struggles;
- ❑ striking socio-economic and infrastructural differences between formal and informal areas, particularly with regard to educational and health facilities;
- ❑ high levels of crime and gang warfare²¹;
- ❑ the lack of security of tenure;
- ❑ the possibility of forced removal;
- ❑ no political representation.

In the light of the available information and the visible proliferation of shacks, the women of Canaan's desperation for permanance is understandable. Yet the possiblity remains remote since even land such as Cato Manor, which has been ear-marked for low-cost housing, remains undeveloped, entangled in a web of bureaucratic reluctance²².

Informal housing being the norm rather than the exception in Durban, it could be said that Canaan offers a microcosmic view of the problems typical to the DFR and characteristic of the rest of South Africa. The national housing shortage, the continuing implications of the Group Areas Act, the lack of schooling for african youth and the current levels of unemployment, with all their ramifications are reflected in the settlement which calls itself Canaan. It is the extent of the land and housing shortage as well as the chronic recalcitrance and ineptitude on the part of the authorities which makes it unlikely that the women of Canaan, or others in similar positions will able to effect significant changes in their living patterns in the short to medium term future.

It is against this background of poverty and the perpetual threat of forced

removal that the women in this study managed their households' daily survival routines. The textures and patterns of these routines - the acquisition of water, food and fuel, balancing the household budget and grasping at opportunities to keep the household together and alleviate the grimness - are the subject of the dissertation. Although the quantitative data is an important part of the study, the purpose of this dissertation is not simply to elucidate on the 'we are so poor ...' theme in quantitative terms. The purpose is also to document and clarify:

- a) how particular women perceived and articulated their poverty and position at Canaan, and how they dealt with it, i.e. their day-to-day strategies for survival;
- b) with reference to the above, to ascertain the particular subjective role of domestic energy and the patterns of fuel use in the lives of women who do not have access to electricity.

In order to do this it was necessary

- a) to explore the circumstances of the women's lives in Canaan, understanding how they as competent women perceived their roles as housewives²³ and managed their households;
- b) albeit it briefly, to notice the effects of the state agencies on these women's lives with special reference to housing, water, and domestic energy.

The importance of this analysis is

- a) to identify issues and suggest areas of the women's lives around which they have or could be mobilised to their advantage;
- b) to obtain quantitative and qualitative data with regard to women's perceptions of fuels, with reference to cost, convenience, preferences and selection, so that the priorities of women, as the key consumers of domestic energy, may begin to be known.

The study is divided into eight chapters. Chapter 1 provides the context for the

study. It offers a broad overview of the establishment of Canaan, including a brief history of the settlers, a general socio-economic description of its residents, the events leading to my involvement with Canaan, and in particular, with a small group of women. Chapter 2 elucidates the extent of this involvement and the formation of the women's group. The decision of ten women from the group to monitor their daily consumption of, and expenditure on water, food and fuel, is described in the context of the phrase "we are so poor...".

Chapters 3, 4 and 5 investigate housing, water and food respectively as the basic needs identified by the women and described in the order that they were (relatively) fulfilled. Chapter 3 considers shelter, which was the women's priority when they arrived at Canaan, and discusses how, despite their lack of materials, the women re-established their homes at Canaan. Once the women had shelters their next responsibility was the provision of water for household consumption, and this is the subject of Chapter 4. Chapter 5 explores the importance of food in the women's lives, and how they provided for their households.

Obtaining food was the initial step; it then had to be cooked. Chapter 6 begins the focus on domestic energy with the results of the quantitative study of forty household's fuel usage and the ten case studies daily monitoring. Chapter 7 examines the qualitative responses to domestic fuel selection and expenditure. Chapter 8 reflects on the relations between fuel, appliances and food, and raises questions with regard to the affordability of preferred energies. The final chapter assesses the significance of the women's group and what its findings may imply for further research.

Endnotes

1. M. Sahlins, Stone Age Economics, 1974, p 14.
2. D. Hamburg in F. Wilson and M. Ramphela, Uprooting Poverty: The South African Challenge, 1989, p 5.
3. Gretta Ndukwane, Canaan, 27 May 1991.
4. L. Abrahamse, 'Getting it Right', Leadership, vol 9, June 1990, p 28.
5. Ibid p 28.
6. Ibid p 30.
7. P. Joubert, 'Encirclement', Leadership, vol 9, June 1990, p 62.
8. Daily News 22 February 1992.
9. Examples: J. Adler, 'Housing the Homeless', Sash, vol 33, no 3, January 1991, p 35; E. Crosser (ed), Homes for All: The Challenge of Homelessness, CREID (Christian Research, Education, and Information for Democracy), Cape Town, 1990; J. Dunstan, 'A Brick in the Wall', Work in Progress, vol 72, January/February 1991, p 31; M. George, 'Black Urbanisation Trends in the Durban Functional Region, 1990', Inkatha Institute for South Africa, Durban, May 1990; M. Sutcliffe, 'Informal Settlements in Natal-KwaZulu: A Research Register', University of Natal, Durban, 1989; M. Swilling, 'Planning a Democratic Urban Policy', Work in Progress, vol 67, June 1990, p 27; ten titles in the 'Policies for a New Urban Future' series, The Urban Foundation, Johannesburg, 1990; 'Opening the Cities: Comparative Perspectives on Desegregation', An Indicator SA Issue Focus, September 1990; E. Haarhoff, 'A Spatial Analysis of African Urbanization and Informal Settlements in Natal/KwaZulu', unpublished PhD thesis, University of Natal, 1984.
10. 'Housing for All: Proposals for a New National Urban Housing Policy', Policies for a New Urban Future, no 9, The Urban Foundation, Johannesburg, 1990, p 60.
11. Daily News 14 May 1992
12. M. Maughan-Brown, 'Demystifying the Problem' NU Focus, vol 2, no 1, 1991, p 5.
13. The Urbanisation Group of the Natal Coastal Region of the Black Sash, 'The Urbanisation Crisis', paper presented at the National Conference of the Black Sash, Grahamstown 1990.
14. M. Maughan-Brown, op cit p 3.
15. A. Bernstein, 'Signposts', Leadership, vol 9, June 1990, p 18.
16. J. McCarthy, 'Factual Background to the Durban Functional Region: Past, Present and Future', paper presented at the Seminar on Informal Settlements and the Core City, University of Natal, 10 June 1988.
17. Sunday Tribune 16 June 1991.
18. R. Raubenheimer, 'The Process of Disorderly Urbanisation and Related Administrative Responsibility' paper presented at the Seminar on Informal Settlements and the Core City, University of Natal, 10 June 1988.
19. H. Botha, 'Durban Now and in the Year 2000', The Condenser, Tongaat Hulett Group, 1989, p 12.
20. Natal Mercury 8 November 1992.
21. For example the Sinyoras were a well publicised gang who terrorised KwaMashu from 1989 - 1991.
22. Daily News 4 April 1991.
23. M. Mies, Women: The Last Colony, 1988, p 9.

CHAPTER 1

CANAAN: A BRIEF HISTORY AND A SOCIO-ECONOMIC OVERVIEW OF THE RESIDENTS

I came because of the violence. They burnt my shack at Siyanda and we ran away. It is far better than Siyanda here. At night we sleep peacefully. There is no violence, no noise. Most of these people are very quiet, not like those at Siyanda.... When I came here it was very cold. I don't remember the month, maybe May or June. There were many people then but not like this now. A lot of people came in August.... We pray for a better place and cheaper houses. If there is proper planning, we will need things like schools and clinics.... I am not working. My husband is dead. I go to my son-in-law and he gives me money. My son-in-law sells ice cream in Umgeni Road¹.

This chapter offers a brief history of the establishment of the settlement known as Canaan, and a socio-economic overview of the residents. For the latter it draws on a survey co-ordinated and analysed by Elizabeth Ardington². The chapter provides the context for the ten case studies which constitute the bulk of the dissertation.

At the beginning of 1990 there was approximately three and a half hectares (nine acres) of what appeared to be vacant land on the western side of the N2 highway at the Inanda / Quarry Road turn-off some ten kilometres from the centre of Durban (Appendix 1); the area fell within the Indian Group Area of Clare Estate and the Durban municipality. The site sloped steeply and was bought by South African Roads Board when it was found to be unstable and

possibly hazardous to the adjoining N2 highway. In an attempt to stabilise the land it was planted with rapidly growing eucalyptus trees which is why it was also referred to as "the forest" or "a good place to hide" by the people who began to move onto it.

This occurred from early 1990 onwards. One resident, Johnny Lantern, claimed to have been there for several years but three quarters of the remainder of the inhabitants settled there during 1990 with 50% arriving during the first six months of the year. Nearly 60% of the residents gave their reason for coming to Canaan as having had their houses burned in 'the violence'³. They came to find sanctuary from the conflict and to "hide in the forest". Respondents reported that they had come to Canaan without possessions, some said their jobs had been disrupted or their premises destroyed⁴. In addition some had lost relatives. Many had previously been subjected to forced removals. It was this physical process of building and re-building; starting from scratch each time, which the women perceived to be primary cause of their poverty rather than the social structures which resulted in their being more vulnerable than other groups.

A priest, who too had fled the township war, built his shack among the others in the bush and named the area Canaan. The appellation stuck; an indication of the inhabitants' relief at having escaped alive (which is evident in the interview at the beginning of the chapter), but also of their desperation that this site should have been considered the promised land. It had no potable water, no sanitation, no refuge removal nor drainage and little hope of these being forthcoming.

Those who were not refugees from the violence, had come to seek work (25%) or for job-related reasons. Buyise Ndlovu was typical of this category, she said:

Canaan is nearer to town. I used to walk to look for a job. It's only 60c to go to town and come back⁵.

There has been no accurate head count done at Canaan, but the average household size of four members and the count of 429 dwellings implied a population of approximately 1 500⁶. Of the surveyed population there was a relatively consistent sex ratio over all age groups of 48 men : 52 women. The population of Canaan was relatively young, 44.5% were under the age of twenty and 40% were between the ages of twenty and forty. Household sizes ranged from one to thirteen with an average of four members. The household structure at Canaan was predominantly nuclear: 65.2% of the households in which there were children consisted of a head and a spouse or co-habitor.

Most of the women heads had not relocated out of choice but had fled with their kin. This implied that they had few if any alternatives but to try and re-establish their households wherever they could find a safe place. The impossibility of returning to their previous locations was emphasised on several occasions. Beatrice Memela was one of many who reported such an experience:

I have five children. I arrived here on 6 April 1990. I am from Siyanda. They burned our houses and then we ran away. **We can never go back there.** They burned everything, all my belongings⁷.

The majority, 93%, of heads of households had relocated from within the DFR. This was contrary to official assumptions which persistently maintained that the shack dwellers were migrants from rural areas, and belied the spurious argument that the informal settlements are not the responsibility of local authorities⁸. The heads of households at Canaan had been in the DFR for between one and fifty-six years, the average length of time was fifteen years. Some 66% still had homes in the rural areas - an indication of, among other factors, the need to keep housing and schooling options open in the face of the going insecurity of urban dwellers.

The people of Canaan were poor but not uniformly so. They shared the

oppression of race suffered by all black people in South Africa and this commonality often obscures the different experiences of gender and class. Per capita incomes ranged from R2 to R1 500 a month with 60% of per capita incomes below R150 per month. The lowest 10% of households recorded incomes of less than R30 per month while the top 10% of households reported incomes of above R260 per capita per month. On average women heads earned R260 per month which was significantly less than the R489 recorded by salaried male heads. On average, women headed households reported a lower per capita income than male: R118 in comparison with R201. Thus the majority of the inhabitants lived below the Household Subsistence Level for Blacks in Durban⁹. The thesis is concerned with ten households which fell within this category.

That most people relocated on account of the violence and were already established in the DFR probably accounts for the relatively low unemployment rate. Only 20.3% of the respondents reported that they were unemployed. Significantly more women than men said that they were unemployed and actively seeking employment. This was so despite the fact that the women had on average seven years of schooling in comparison with the average of six recorded for men. For the 20.3% of respondents who were unemployed the prospects are bleak. Bidla Dlamini expressed the desperation of the unemployed:

There's one more thing we are all pleading about here. We've got no jobs. Our belongings have been lost and whatever we had has disappeared. We are pleading to the government as we are here being poor, just poverty, we would like the government to assist us while we are here with things that can keep us busy. Like for our wives they can do some hand work, sew. With men provide us with machines to make blocks. So that we can be doing something ... something that's going to prospect us in life ... because most of us we've got no jobs we've got nothing¹⁰.

Disregarding for the moment Dlamini's stereotypical view on work suitable for

women and men, one may assume that his despondency was shared by the unemployed women at Canaan, particularly by those 28.9% of women-headed households where there was higher unemployment than in male headed households. The tendency towards larger household sizes among women headed households and their lower incomes, implied increased dependency on women heads and intensified responsibility and pressure to provide for dependents. Although poverty is not gender specific, women are more likely to be poor than men¹¹ and this was reflected at Canaan.

There were two further features salient to the economic lives of many of the inhabitants of Canaan and relevant to this study which warrant brief description: the dump and the spazas. Firstly the municipal dump, which was located some twenty minutes walk from Canaan, played a central role particularly in the lives of the impoverished residents. Most of the materials from which the shacks were built were collected from the dump. In addition discarded tinned and frozen food, fruit and vegetables, clothes and furniture were retrieved from the dump to feed, clothe and furnish Canaan. Wood and cartons were collected, chopped up and used for domestic fuel when paraffin was too expensive to buy (this is referred to later). The dump was the lifeline of six of the ten women in this study.

Secondly, operating within Canaan at the time of the study, were at least five shack shops or spazas. The spaza is usually an extension of the shack-dwelling with a built-in counter and shelves and from which a variety of domestic commodities (from soap to kJuba) are sold - usually in small quantities and at prices determined by the owner. Spazas generally keep long hours and serve the needs of local households, particularly those for whom transport or buying in relatively large quantities is not feasible. Paraffin, candles and batteries, which are relevant to the focus on domestic energy in this study, were sold by all five spazas at Canaan¹². It was the apparently unexpected and unnecessarily large increase in the price of paraffin by one

spaza owner at Canaan that prompted the study. But this lies three chapters ahead.

Thus it was that by the middle of 1990 the previously unoccupied, treed hillside alongside the N2 highway had been transformed into a distinctive social entity which included some four hundred and twenty-nine shacks, three small churches, as many spazas and several shebeens.

Unbeknown to the people who had re-established themselves on the hillside, the Department of Transport was in the process of selling the land to a private property developer (represented by Dr L J Dobrovolsky) who intended spending over a million rand stabilising the area and thereafter building houses for people in the middle income bracket. The private developers did not wish to take transfer of the land while there were 'squatters' on it: in terms of the legislation (referred to in the Introduction), it would then become their responsibility to remove the people. This would be bound to draw unwelcome and unfavourable attention from the media, particularly since the developer had international links¹³. Warning notices, issued in the names of the South African Roads Board, the Department of Transport, the City Council of Durban, Dr L J Dobrovolsky and Siloette Investments (Pty) Ltd, were served on the residents of Canaan on 8 August 1990 requiring them to vacate the land by 14 October 1990 (Appendix 2).

Several of the inhabitants of Canaan had had previous experience of warning and eviction notices. A small group of residents responded by going to the Legal Resource Centre (LRC) in Durban for assistance. Peter Rutch of the LRC had suggested that the first step should be to stall the threatened eviction pending the election of a committee and a community decision on a strategy to be pursued. He instructed the group from Canaan to enlist the assistance of the Black Sash in order to organise democratic structures among their fellow residents. The establishment of these structures would provide the residents

with the necessary channels of communication through which strategies could be debated and determined and through which the residents could convey their decisions to the LRC. The LRC agreed to act for the residents of Canaan and to be instructed by a representative committee. On 20 August 1990 six hesitant men, led by Johnny Lantern, arrived at the Black Sash Advice Office in central Durban. They sought advice on how to establish democratic structures in Canaan.

The men who came to the Black Sash Advice Office seeking assistance were an 'advance party' from Canaan and not an elected committee. There were no women among the group, and although there were younger and older men (of about twenty-five and fifty-five years of age respectively) it was not clear whether 'the youth' - an important category in current political forums - was represented. After lengthy discussions, the group undertook to call a meeting at a time when as many residents as possible could attend, to report on their visit to the LRC and the Black Sash Advice Office and to find out whether this assistance was generally desired by people living at Canaan. If so, the group understood that a committee should be elected to represent the needs and decisions of the whole community - including the women and youth.

The first community meeting to which the LRC and the Black Sash were invited to took place on 4 November 1990. At least six women held places on the committee, Florence Dlamini, Zuziwe Gcaleke, Maria Mbuli, Thandekile Memela, Sizakele Mkhize and Thembakazi Mnisi. This represented about a third of the total number of committee members (which was then nineteen but this fluctuated according to need) ¹⁴ and corresponded with the proportion of women who were visible and audible; ie about a third of the adults present were women and about a third of the people who addressed the meeting were women.

Although this was an improvement on the initial all-male delegation who visited the Advice Office purporting to represent Canaan, women, who

constituted a higher proportion of the residents of Canaan than men did,¹⁵, were still under-represented and in the background. When asked how the Canaan Committee had been constituted, committee member Steven Joseph replied:

We held a meeting ... At first we asked for people that were voluntary, who were prepared to stand by with us because, one, we didn't want people that was going to be working when we were going for meetings to the office, two, we wanted people that had time and were capable of constructing such things¹⁶.

The implications of this interview were that the committee was not an elected but a voluntary body constituted to resist eviction and negotiate for alternative land.

Since the Committee had the support of the residents who were present at the meeting, there was little the Black Sash could do at this stage to effect a more representative or democratic structure. It could only keep in mind the groupings who may have been excluded by the criterion and particularly women. The criterion functioned both to the advantage and disadvantage of women at Canaan who may have wanted to serve on the Committee. On the one hand there were almost twice as many women as men who were unemployed¹⁷ and therefore, theoretically, twice as many women able to volunteer for the committee and attend meetings during the day. On the other hand the request for volunteers would appear to act to women's disadvantage since women are less likely than men to speak in public and offer themselves for public positions¹⁸. Secondly unwaged women were more likely than unwaged men to have child minding responsibilities which kept them at home and inhibited their attendance at meetings; either a substitute child minder had to be found or the child had to be taken to meetings.

Men's participation in negotiations was not hindered by child minding considerations. In addition men spoke more freely to the video camera and continued to be over-represented at meetings. Visitors to the settlement spoke first, as was correct procedure, to the Chairman¹⁹ who was constantly

accompanied by two or three other men. Apart from Sizakele Mkhize, who was regularly requested to translate for visitors, the women committee members remained largely invisible, they went about their tasks as individuals and did not appear to know each other at residents' meetings as men did, nor were they organised in any way.

Members of the Black Sash perceived their intervention primarily in terms of support and resources: (a) gathering and providing information for the inhabitants of Canaan in order that (b) informed decisions could be made and (c) providing the state, local officials and the wider public with information about the people and conditions at Canaan. To this end extensive information was collected: detailed records were kept by members of the Black Sash²⁰, several surveys were undertaken²¹ and a video was made²². From the point of view of the Black Sash, their relationship with the residents of Canaan was the most important and delicate part of negotiations. In order to serve the interests of the residents, an awareness of the range of different people and perceptions in the settlement was necessary. As a woman's organisation the Black Sash was particularly concerned that interaction should not be exclusively with men from Canaan²³.

The Black Sash urbanisation group held weekly meetings of its own at which it soon became evident that more attention was being paid to those people at Canaan who were highly visible: men through the Chairman and because they constituted the majority of the committee, and children because of a member's particular interest in children's rights. A similar relationship had not been established with women at Canaan. Consequently women's needs were being heard less often and less clearly than others. A decision was made to attempt to establish links with women at Canaan and I was given the responsibility for exploring how welcome such overtures from the Black Sash would be to women from Canaan.

Endnotes

1. Video Interview with Tengiwe Msomi, Canaan, 9 November 1990.
2. E. M. Ardington, Buckpassing in Canaan: An example of authorities' failure to address the needs of informal urban dwellers, Working Paper no 24, Centre for Social and Development Studies, University of Natal, Durban, February 1992.
3. Ardington, op cit, p 5.
4. Personal communication with Mrs Mkhize, Canaan, 12 November 1990.
5. Video interview with Buyise Ndlovu, Canaan, 12 November 1990.
6. Ardington, op cit, p 3.
7. Video interview with Beatrice Memela, Ndlovu, Canaan, 8 November 1990.
8. cf: Video interview with Derrick Watterson, Durban, 1990. Mr Watterson, the ex-Mayor of Durban and then Chairman of Manco (the Management Committee), said about the inhabitants of Canaan, "...these squatters are in fact people who've moved from the rural areas. They are not displaced, they choose to come from the rural areas and explore their chances in the city."
9. Ardington, op cit, pp 20-21.
10. Video interview with Bidla Dlamini, Canaan, 7 November 1990.
11. F. Wilson and M. Ramphela, Uprooting Poverty: The South African Challenge, 1989, p 177.
12. W. Annecke, 'Fuel for Thought', paper presented at the First International Conference on Women in Africa and the African Diaspora: Bridges across Activism and the Academy, Nsukka, Nigeria, 12 - 22 July 1992.
13. Dr L. J. Dobrovolsky represented a group of anonymous West German financiers.
14. Residents of Canaan volunteered their services for specific tasks, eg. a male who had permanent employment and an address became a member of the Committee in order to apply for a telephone for Canaan.
15. Ardington, op cit, p 9.
16. Video interview with Steven Joseph, Canaan, Tape H.
17. Ardington, op cit, p 14.
18. TRAC, 'Demanding a Place Under the Kgotla Tree: Rural Women's Access to Land and Power', paper presented at the conference on Women and Gender in Southern Africa, 30 January - 2 February 1991.
19. The designation "Chairman" was insisted on by the women with special emphasis to imply his favouritising and disregard for women's interests.
20. Records including press clippings are kept at the Black sash Advice Office.
21. A preliminary survey of approximately 180 dwellings was carried out by a member of the Black Sash and students of the ML Sultan Technikon in August 1990, Ardington's survey followed in July 1991.
22. 'Take a Place like Canaan', a video-documentary was made at the request of the Canaan Committee in order to inform city councillors and other people in power about the conditions at Canaan.
23. A policy statement from the Black Sash National Conference of March 1990 reads: "that 'on a political level' the Black Sash would continue to be a human rights organisation with the added dimension of always asking how each area of our work affects women".

CHAPTER 2

"WE ARE SO POOR . . . "

THE FORMATION OF THE WOMEN'S GROUP

Nombulelo : *We are so poor can't you tell them we need water?*

Zuziwe : *We are so poor how can we move so far because the transport is so expensive?*

Thembakazi : *We are so poor can't you get us jobs?*

Thoko : *We are so poor you must tell them to bring their old vegetables here.*

Gretta : *We are so poor how can we pay for schooling?*¹

This chapter explains my role in the formation of the women's group and the initiation of the monitoring of consumption and expenditure on water, food and fuel, with a focus on the latter.

It was not as if the Black Sash had no contact at all with women from Canaan, rather that the organisation had become aware of how limited and constrained such contact was. One of the ways that I became aware of this was in my lack of response to women from Canaan who approached me individually saying "we are so poor."

This phrase "we are so poor " had become a recognisable refrain. The line continued, " we are so poor can't you ...?" The appeal, from an oppressed woman to one with perceived power to effect change, implicitly recognised my different position; white, middle class, with access to and speaking the language of the bureaucracy. The corollary may have applied equally: the woman perceived herself as powerless to effect the desired change, at least on her own. Also worth noting was that the appeal was made by a woman to another woman: not to the male attorney, nor to the male pastor active in the settlement. That it was easier for a woman to approach another woman

indicated an identification, an affiliation, however tenuous, superficial or sub-conscious, of one woman with another despite the fact that we were so different and that the white men had more public authority than white women. The women from Canaan and of the Black Sash had not 'missed' each other completely, but the opportunities for communication and the content of the interactions were different to the discourse maintained around negotiation with male committee members. The women's concerns were more immediate, dealing with the practicalities of daily surviving and the household concerns rather than land and housing in the future, and initially did not appear to be the concern of the Black Sash.

The frequency of the phrase, "we are so poor" both in private conversations and diffused through endless meetings, discussions and negotiations, ensured that it resonated after each encounter with women from Canaan and demanded acknowledgement. The persistence of the refrain "we are so poor" indicated its importance and signalled needs and potential relationships which were clearly not being addressed, at least not to the satisfaction of the Canaan women concerned, either in the Black Sash's interaction with the community or with state officials on their behalf. It was my perception that if the Black Sash was to represent the people of Canaan justly in land and housing negotiations with the state, it would have to understand the conditions and experiences beyond those that were immediately visible and evident including the conditions encapsulated in the "we are so poor..." statement. This would be of particular importance if, in the event of being offered land and housing options by the state, the Canaan committee was asked to determine the priorities of the residents, and the exigencies of the women, who were articulating their impoverishment and needs in disjointed private conversations beginning "we are so poor", were not to be excluded.

By the middle of November 1990, women members of the Canaan Committee, in particular Sizakele Mkhize, and I had agreed that there should be closer

interaction among women at Canaan and with members of the Black Sash, and that she would invite women from the Committee and their friends to discuss whether and how this could be achieved. The initial meeting, which was attended by eight women, was an introductory one. It was held in Zulu as were all the meetings, with Mrs Mkhize translating for me where necessary². Introductions were done, the purpose of the meeting, the role and the intentions of the Black Sash at Canaan were explained. In deference to the confidences that I was asking the women to share with me, they were invited to ask me questions, which they duly did³.

The women expressed their gratification in being recognised as important and requested that since the men had already told their stories (to the video camera), the women should do likewise. One woman volunteered to start the process by telling her story the following week and others readily agreed to meet again. Thus the women's group was formed.

The following week the use of the tape recorder was explained and approved⁴. The promised story having been given to me handwritten in Zulu⁵, the women proceeded to have a lengthy discussion on their past homes, how they had arrived at Canaan and perceived conditions there, and in comparison, how they would like to live⁶. Explication of the conditions at Canaan returned the discussion to the plea "we are so poor...". The requests were primarily for water, then jobs and skills training. Explaining yet again the Black Sash's role as one of information and support, rather than of the distribution of welfare and cure-alls, seemed pointless. I began asking the women, "why are you so poor?" The responses were various: "because I have no money", "no husband", "no job", and on further enquiry "because I haven't got money and we have to buy water and food and paraffin and everything is so expensive".

The extent and implications of this poverty warranted further exploration but the way to do this was not obvious that afternoon. During the next few visits

to Canaan I tried observe why it was that the concern "we are so poor ..." was expressed primarily by women. The only time I heard the expression used by a man, he said, "I am so poor..." . The women were asked who they referred to when they said "we" . It was both their households and all the people at Canaan. The women's responsibility for people outside of themselves meant the sharing of resources and contributed to their burden. I began to consider ways of measuring the poverty of women at Canaan as the material manifestation of how socio-economic and political structures have impacted hardest on the lives of black, and particularly african, women in South Africa.

The poverty lament did not abate. Sometime later one of the women arrived at a meeting complaining⁷ bitterly about an increase in the price of paraffin at one of the spaza shops. Her distress was taken up by others, linked to the high price of food and a general lack of money. Among the points of interest was the different prices that different spazas charged, and the amount of food that some women retrieved from the dump to help balance their budgets⁸. It was agreed that the most expensive items which were purchased daily were water, food, paraffin and candles. It seemed necessary to try to examine and compare these purchases to assess where women could save money. After much discussion and in the face of few alternatives, ten of the women agreed to keep daily records of what they spent on water, food and fuel for three weeks.

We agreed that the records would be used to appraise household budgets and expenditure, and to examine the management strategies employed by the women in order to determine how these could be best supported immediately by other women in the group, and in the longer term by the Black Sash or, if more appropriate, a welfare organisation. Each woman would keep a daily record of her water, food and fuel consumption and expenditure and bring this to weekly meetings to discuss. Thereafter I would collate and compare the daily records, bringing the results, with any trends or items of significance which the analysis had produced, to the next weekly meeting.

The project was approved by the Black Sash urbanisation group and explained at the next community when an invitation was extended to all women at Canaan to participate or attend meetings. This occurred sporadically⁹. In doing a brief literature survey before compiling the daily logging schedules, it became evident that of the three categories of expenditure we had agreed to monitor, (water, food and fuel), urban domestic fuel use was the one about which least was known. An analysis of food requirements appeared to demand specialist knowledge of nutrition, and water is a relatively well researched and documented area (of knowledge, not provision) in South Africa¹⁰. In compiling the logging schedules my interest in domestic energies came to the fore and I decided to focus the collection of information on the use of fuel. The urbanisation group approved a submission to the National Energy Council (NEC) for a small grant to cover the costs of the video production, the compilation, copying, collation and analysis of the logging schedules and incidental expenses arising out of the women's group meetings.

The proposal to the NEC described the study as a one which would investigate the use of fuel by ten women living in a urban informal settlement without access to electricity, in the context of their other basic needs. The collection of information would be through a brief socio-economic questionnaire to be completed by each participant, the logging schedules to be completed by each participant every day for four weeks, weekly meetings to be attended by the participants and the researcher, and a biographical account of how each woman came to be at Canaan and the forces which she perceived had shaped her life.

The NEC responded rapidly and positively. No such study of urban women's energy use patterns had been undertaken in South Africa and they were keen to use the small sample of ten case studies as a pilot study¹¹. Until recently domestic energy debates in South Africa have been dominated by studies

about large scale electrification schemes and biomass fuels. These studies have been done by and for white males who, on the whole, represent the researchers and the policy makers in South Africa¹². The senior researcher at the NEC was aware of the institute's gender blindness and was keen to accommodate a qualitative, women-centred study done by women. The NEC also offered the use of their standard questionnaire which inquires after socio-economic position, daily fuel use and overall attitudes to energy.

This questionnaire was completed by the ten women and later used to survey the energy use patterns in forty randomly selected households at Canaan. This was done when the women's daily logging schedules produced results which showed that they were spending more on domestic energy than they had estimated before the monitoring started, and is further explained in Chapter 6.

As had been agreed at the relevant meeting, the logging schedules were compiled in Zulu and English with visual aids (Appendix 3). They were discussed and accepted by the women on the following Wednesday with the extra page (Appendix 4) which constituted the focus on fuel. Since the investigation into fuel usage was originally situated firmly within the context of other basic needs - permanent housing, water and food - the dissertation reflects this context. Arguably the emphasis on fuel was my most direct and personal intervention. The logging sheets and the NEC questionnaires were discussed and accepted by the group. Each woman completed a logging sheet for that day, understood and agreed to what was required of her for the next week. The NEC questionnaires were completed over the following six weeks by arrangement with each participant.

Thus through a negotiated process, quantitative information was collected (the NEC questionnaires and the daily logging sheets) and qualitative information was recorded (at the meetings and through the narration of life experiences).

This dissertation documents the results of both, in the belief that, at least in this instance, the methodologies complement rather than oppose each other, and that by presenting a holistic picture of both the personal and the measured accounts of fuel use, the constraints and dilemmas of the women concerned may be better clarified and understood¹³.

Did the process of collecting information now recorded in this dissertation place "women at the centre, as subjects of inquiry and as active agents in the gathering of knowledge"¹⁴ or did it fall into the category described by Carol Ehrlich¹⁵ as: "'research on women' is a new rip-off which benefits academic women 'on the make'"?

The difference in mother tongue was only one factor that set the researcher apart from the 'researched'¹⁶. My race and class were frequently raised both by members of the group and by myself as reasons why I could not understand something, had not experienced something, or as factors which could be used to the benefit of the group: as in accessing information rapidly¹⁷ or preparing the way for the women's group to speak to officials from the municipality. Every "them" and "they" in this dissertation underlines the differences that exist, which would be futile to deny and dishonest to disguise by writing "we".

This is not to say that as an outsider I was an objective observer. I was there as a woman and an activist, self-consciously moving between two worlds: by invitation involved in Canaan, reflecting on the conditions at Canaan as they appeared to me, testing these reflections with the women's group and with the Black Sash urbanisation group, strategising, assessing and reflecting again. As a mediator between the residents of Canaan and the bureaucracies responsible for their homelessness, there was never any doubt whose 'side' I was on. "Conscious partiality" is the term used by Barbara du Bois to describe the replacement of the notion 'value free research' with the concept of research

subjects and objects constituting part of a social whole¹⁸.

As a white woman activist in South Africa one's position is tenuous¹⁹.

Charlotte Bunch suggested that by "understanding the specific circumstances of differently situated women [we] could forestall political divisions", but this has not always been the case in South Africa. Not only is the class divide (which grants access to resources) at work but the dynamics of power, inherent in one's whiteness, have to be confronted too. Members of the Black Sash constantly appraised their position at Canaan. The concepts 'empowerment' and 'dependency' (among others) were continually raised at weekly meetings and contrasted with the reality of their actions according to the conditions prevailing at Canaan. Some assessment of the women's group is offered in the Conclusion.

In summary this dissertation provides a **preliminary study** of the perceptions and material conditions of the lives of ten women living in an urban informal settlement. It does not claim to be exhaustive and clearly the number of women participants (ten : 2.1% of the total number of households) cannot and does not claim to be representative of all the women at Canaan let alone all women living in informal housing. The focus of the quantitative investigation was domestic fuel use. In order to contextualise the case studies an energy questionnaire was completed by forty randomly selected households out of a possible four hundred and twenty-nine (10.7% of the total number of households). The assumption underpinning the investigation was that women are the home-makers and the home-managers. In particular women are primarily responsible for the acquisition of water, food and fuel and managing their consumption. Yet women appear to be under-consulted and under-represented when decisions are made about what facilities should be considered priorities, and what 'realistic' and 'affordable' mean in terms of individual household budgets. As a preliminary study the dissertation also identifies areas for further investigation.

Endnotes

1. Personal communication with women at Canaan, October 1990.
2. On occasion my poor Zulu worked both to my advantage and disadvantage. For example in a discussion on lesbianism a misunderstanding on my part led to gales of laughter. The women who were in this instance the repositories of information took delight in the need to explain to me - which led to further intimate details and revelations. On the other hand being unable to follow the details of an assault by one of the youth on a member of the women's group was frustrating; I had to rely on the transcription of the tape in order to appreciate the full gravity of the situation.
3. Initially the questions were bland, but by the time each woman had her second turn, the ice had been broken and I had had to answer a range of pertinent questions ranging from details about my marital status and children to what I earned and whether I had domestic assistance. The questions themselves were a source of interest but are not dealt with in this dissertation.
4. All the women were able to operate the recorder. No-one had any objection to it during the meetings and generally when there was group discussion the presence of it was not a distraction. We found, however, that when a woman was telling her own life-story, the tape had a stultifying effect on both of us. We became self-conscious and tongue-tied. Eventually we agreed to turn it on and hide under the box-table which seemed to work well enough.
5. Thembakazi Mnisi, The 1987 Floods, 1991.
6. W. Annecke, "Ideal Homes" in P. Murray (ed), A Spirit for Our Times, 1992, p 21-25.
7. Women's group meeting, Canaan, 11 November 1990.
8. Ibid.
9. In practice participation was restricted to those women who did not have formal employment or other commitments on a Wednesday afternoon and were able to attend.
10. See, for example: Water World, November 1980; J. L. Rivett-Carnac, Report on the Embo and Ngqolosi Water Supply Scheme, September 1982; 'What water Crisis?', 'Politics of Water' and 'Water and Health', Indicator South Africa: Rural Monitor, January 1983, Water 2000, the Ungeni Water Reports. 1990.
11. This study formed the basis of nation wide and oo-going investigations into the role of fuel in women's lives.
12. The shortcomings of these studies include:
 - a) a limited analysis of the interests vested in the supply of domestic energy; b) little attention had been paid to so-called transition fuels such as coal, paraffin, paper waste, gas and batteries and c) the perceptions of women, who are assumed to be primarily responsible for the acquisition and consumption of fuel for domestic use, remained largely unknown and undervalued. Notwithstanding, white male researchers continue to make suggestions such as the propagation of wood-lots by women; supposedly to ease their wood-collecting responsibilities (in five years time ?) by giving them more work in the present.
13. While debate on what constitutes feminist research, and appropriate methodologies continues, and a tension between academic and political priorities exists, a definition of feminist research methodology remains elusive. What is important is that feminist research should contribute to the ending of oppression of women, and should be research **for and with** women rather than on women.
14. Judith Stacey and Barrie Thorne, 'The Missing Feminist Revolution in Sociology', in Marilyn Strathern, "An Awkward Relationship: The case of Feminism and Anthropology", Signs: Journal of Women in Culture and Society, vol 12, no 2, 1987 p 241.
15. Liz Stanley and Sue Wise, Breaking Out: Feminist Consciousness and Feminist

Research, 1983 p 24.

16. Strathern, op cit, p 277.
17. W. Annecke, E. Ardington and L. Robertson-Hotz, 'Canaan', Sash, May 1991.
18. Barbara du Bois, 'Passionate Scholarship: Notes on Values, Knowing and Methods in Feminist Social Science' in Gloria Bowles and Renate Duelli Klein (eds), Theories of Women's Studies, 1989. p 107.
19. S. Hassim, 'Putting Women on the Agenda: Some Issues and Debates', Agenda, no 9, 1991, pp 10-13.

CHAPTER 3

MY PAPER HOUSE:

THE WOMEN RE-ESTABLISH THEMSELVES

I came because I saw there were already three families. The people told me: 'We are also staying here. We are just hiding ourselves'. I didn't even have five cents in my pocket. My first day I slept at someone's house. The second day I tried to build with cardboard from the dump and I slept in my paper house. I felt helpless¹.

This is part of the story of Busisiwe, who was one of the members of the women's group. She recalled her priority when she arrived at Canaan as the need to establish a space and shelter of her own. Busisiwe's plight was typical of the women in the group represented in this dissertation and the manner in which she and other women re-established their homes is the subject of this chapter.

The ten women who volunteered to participate in the study arrived at Canaan destitute, having fled burning homes, in some cases for the second time in a year. The women came from different areas, had different life experiences and were not known to each other when they first arrived at Canaan. Because they had fled political violence, the women were initially wary of getting involved in any organisation or discussion which would expose political differences and precipitate more violence. A shelter, a place to stay, however precarious the construction or tenuous the possession, was something the women in the group all had and thus offered a common starting point for discussion and initiating trust among the group. After the first meeting women were willing to describe their lives until their arrivals at Canaan and the process by which they had re-established their households.

For the women in the group relocation to Canaan had been prefaced by the loss of most of the household's possessions and consequently implied not an upwardly mobile move, but starting again from scratch in the accumulation of the bare necessities for daily living. Since with each successive move the households' standards of living deteriorated rather than improved, it may have been anticipated that the women's quest for permanent homes or aspirations for an improved quality of life would have diminished accordingly. This was not entirely the case. Although fatigue, despair and perceptions of "slave labour" were expressed most frequently², counter perceptions of energy and hope were also articulated and enacted.

Some of this optimism was evident in the way the women built, bought, decorated and maintained shacks which revealed both the women's lack of resources and their resourcefulness. Each household at Canaan inhabited a unique structure usually consisting of a single room in many cases as small as nine square metres and less than two metres high. A variety of materials was incorporated into their construction; primarily different types of wood and cardboard but bricks, mud bricks, iron and plastic were also used. An old masonite menu from a roadhouse (egg and fries 2/6; toasted sandwiches 2/-); property FOR SALE signs and TOYOTA crates formed panels in shack walls, while the wire-meshed windscreen of a Putco bus (originally intended to protect the driver against stone throwing) served the purpose of a burglar-proofed window. Most of these had been carried back from the dump by women.

A range of imaginative and creative design skills were evident at Canaan such as the use of tin foil wound around wire and used as guttering - an addition more decorative than functional. A trendy look was achieved at one spaza when the spaza owner's wife found a length of canvas discarded at the dump and together they stretched it across a frame of green, bent sticks and nailed it in place as an awning over the shop counter. Inside many of the shacks, the

imperfections of the uneven sides (walls) were frequently hidden by sheets of discarded fruit juice, milk and Luba cartons which were used as wallpaper to smooth over the cracks and create a cheerful atmosphere. Thandekile was one of the first women to do this, and when asked the reason explained that it was to make the house look happy³.

Despite the numbers of people sharing a single space, only one of the women in the group lived in a shack that was anything other than consistently orderly. Despite their poverty most of the women went to considerable lengths to make their houses attractive and cozy by covering broken furniture with cloth or sheets found at the dump and washed and ironed, by using fresh and artificial flowers, hanging or pasting pictures on the walls and crocheting covers and anti-macassars with wool donated by church agencies. Outside appearances were less important. Nonetheless a few exterior walls were painted, some flowers and vegetables were planted and an umbrella from the dump propped in the centre of a wooden electric cable reel, served as patio furniture for one household. In these ten homes the search for aesthetically pleasing objects and the expression of artistic sensibilities appeared to be a predominantly female characteristic; it was largely women who took an interest in and responsibility for making their shacks look attractive. Since most of the ten women did not have regular co-habitators or spouses the 'homeliness' was not being created for men, but for the women themselves, their children, and in order to be considered respectable by their neighbours⁴.

Aestheticism which finds expression in western materialist forms (anti-macassars on all the chairs, lace curtains and artificial flowers) could be interpreted as the adoption of symbols of respectability and the reflection of aspirant middle class lifestyles. There would probably be some truth in such an interpretation. All the women in the group had been domestic servants and were familiar with white middle class houses and artifacts. But to explain the women's accomplishments with reference only to notions borrowed from the

upwardly mobile would be to belittle the effort and creativity entailed in producing a home out of a shack and to ignore the significance of the dump in the women's lives. The materials most readily available to the women were those discarded by the wealthy. Canaan was constructed largely from the cast-offs of the throw-away society across the highway. Had another set of materials been accessible the codes produced may have been quite different.

Despite the harshness of their lives and the severity of the conditions at Canaan, and contrary to popular myth which fears and dehumanises the poor⁵, aesthetic sensitivity among the women remained substantial. At the same time the group's aspirations, what the women considered to be ideal homes, were modest: somewhere where humans could live, where there was space for the family (Thandekile's desire for five rooms for a family of twelve was considered extravagant), running water, a toilet, a roof that did not leak and electricity⁶.

What was immediately noticeable was the meaning and responsibility attached to being a mother and home-maker and the seriousness with which women treated their built environment as part of the obligation and duty of their roles. Six of the women had arrived at Canaan either alone or with one or two members of their families to be joined by others later. The other four had arrived with almost complete households in tow although each anticipated having to house additional members of the family or older children at some stage⁷. These considerations could not be taken into account in the establishment of some minimal shelter and many of the initial structures at Canaan were too small to house families when they arrived. As soon as households found the means to do so shacks were extended. According to a ruling of the security company hired to "contain" the settlement⁸, only one exterior door per house was permitted, so that many additions contributed little to privacy and this caused much dissatisfaction⁹.

The lack of sanitation posed another problem and as the settlement grew so did the number of outhouses; by November 1990 almost every dwelling had a half-size plastic or canvas-covered structure a few metres distant from it. Partly because of the lack of running water diarrhoea became a problem¹⁰. A further frustrating feature of construction was the lack of drainage and inadequate roofing. Every time it rained most households would have all their possessions soaked by water coming through the roofs and many would have rivulets running through their houses¹¹. On several occasions the women's group changed its venue according to whose house was least wet.

In common with Todes and Walker's finding¹², the women's group placed great importance on the fact that each woman perceived herself to be the owner of her shack. Indeed the women's response to the question who was head of the household appeared to be refer to ownership of the house rather than who was the primary breadwinner. When asked why owning a shack was important the group offered a variety of responses: Ncamusile Malunga said that it was important because men did not care so much, and that if the woman owned the shack she could not be "chased"¹³. Busisiwe Dlamini was of the opinion that men are unreliable and since a woman can never know when she is going to be "chased" it is better not to rely on men from the beginning¹⁴. Thus independence and some security from the whims of men seemed important, equally significant was the response of two women that there was "no other option"¹⁵.

"No other option" implied a formidable challenge; the necessity of providing a home and doing so without assistance. As is evident from the quote at the beginning of this chapter, even Busisiwe, who is a trained builder, felt "helpless" in the face of task at hand when she arrived at Canaan. The ten women who participated in the survey described how they fulfilled their primary need for shelter and re-established homes at Canaan thus:

1. **Busisiwe Dlamini**, as mentioned, went to the dump to collect materials for her shack and once she had built a cardboard house put her skills as a builder into practice and built not only her own shack but several others with the materials she collected. She was forty-seven years old in 1990 and described herself as head of her household which consisted of five adults and one child. She was trained as a builder by a well known construction company but had been retrenched. Busiswe built shacks with the assistance of her sister and sold them to people coming into Canaan. At the time (1990) she was the only person in the household who had an income, the others, including her boyfriend, were work-seekers. Busisiwe had fled from Malukazi, then Siyanda then KwaMashu before she had come to Canaan in desperation. She was largely dependent on the municipal dump for wood and building materials and occasionally for vegetables.
2. **Ncamusile Eunice Malunga** and her companion built her shack with materials she had collected from the dump. She described the dwelling as belonging to her. She was twenty-seven years old and named herself head of her household which consisted of three people; two adults and one child. She worked three days a week as a domestic worker but would have liked a better paying job; her visitor worked as a driver. She had fled from Mpumalanga to Canaan.
3. **Thandekile Memela** built her shack with materials from the dump and added to it regularly as her family joined her and the popularity of her shebeen grew. She was about forty-eight years old although she often complained that she was tired enough for a pension¹⁶. She had left Matatiele as one of ten children under the age of twelve who had set out to walk to Durban with their mother¹⁷ and was now the head of her own household of twelve people; six adults and six children including grown up daughters and their children. Thandekile was one of the first residents

of Canaan, she had fled from Siyanda to KwaMashu and from there to Canaan.

4. **Zodwa Mavundla** bought one of the shacks built by Busiswe with money she had saved and brought with her. Zodwa described herself as twenty-seven years old and head of her household of one adult and two children. She had fled from Inanda, and was looking for work. She spent considerably more than her recorded income each week but was not prepared to disclose from where her additional income was derived.
5. **Jabulile Mdladla** borrowed money to buy her shack. She was thirty-seven years old and head of her household of nine people; two adults and seven children. She had fled from Siyanda to KwaMashu and then to Canaan. Jabulile worked full time for R100 per week. She estimated she spent double what she earned, but her daily record and her income tallied quite accurately. She bought basic provisions from the shack shop, collected wood regularly and used some vegetables and tins from the dump.
6. **Thembakazi Mnisi** and her sister collected materials from the dump and built her shack. Thembakazi was thirty-three years old and head of her household of two women. She had fled from Lindelani. Both women worked part-time selling fruit and vegetables. Thembakazi bought basic provisions from the local shop, Carla, at Clare Estates and wood from 'sellers'. Thembakazi spent considerably more than she estimated and it was not clear from where the extra income was derived.
7. **Zanele Mthumba** borrowed money from her family and co-habitor to buy her shack. She was twenty years old and named herself head of her household of two adults although she was uncertain as to why she claimed that. She had left Siyanda in the violence and been to KwaMashu before coming to Canaan. Both adults worked full time.

- 8. Gretta Ndukwane** built her shack with the help of her son and some neighbours out of materials collected at the dump. Gretta had six children only two of whom were with her permanently at Canaan. She had lost her job as a domestic worker some time previously and had made her living knitting jerseys until her machine was destroyed in the fire that sent her fleeing to Canaan. She and her daughter learned to pick from the dump for a living. Her son sometimes carried water for other people.
- 9. Nonkululeko Pkaqu** used her knowledge of "traditional methods" to build what was an unusual construction at Canaan - a two roomed wattle-and-daub home which housed a much sought after item from the dump; a bath. Despite this luxury she did not use an unusual amount of water but because there were two rooms to light she did use more candles than other households. Nonkululeko was thirty-two years old and named herself head of her household of two adults. She had fled from Maweti and was looking for work; her co-habitor was employed. She bought wood regularly and shopped at the closest spaza.
- 10. Nolwazi Phuzi** did not have enough cash to pay for her ready-made shack so she gave the woman from whom she bought it a new skirt and a leather jacket worth R80 to make up the difference¹⁸. Nolwazi was thirty-nine years old and named herself head of a household of three people; two adults and one child. She had fled from Inanda and was seeking employment. In the meantime she was doing casual work - selling oranges and other fruit and carrying water. She collected wood regularly and used vegetables and tins from the dump. Her spouse was a construction worker.

Sizakele Mkhize used some of her savings to buy her shack from the previous woman owner who decided to move out of Canaan after the eviction notice was served in August 1990. Mrs Mkhize had been an

affluent trader and was saving to pay for herself to attend a tertiary institution when her house and store were burnt down in KwaMashu¹⁹. Mrs Mkhize acted as translator whenever necessary at the women's meetings. As a member of the Committee, she played a leading role in the affairs of Canaan: she was constantly called on to translate at meetings and was an active member of a church group which became involved with Canaan.

Endnotes

1. Video interview with Busisiwe Dlamini, Canaan, 7 November 1990.
2. Gretta Ndukwane, Canaan, 27 May 1991.
3. Thandekile Memela, Canaan, 28 May 1991. A suggestion that the cartons may improve the water-proofing of the dwelling was rejected by Thandekile who said she only wanted her house to look nice.
4. Discussion with women, Canaan, 10 December 1990.
5. P. Madlala, 'Informal settlements: needs of the People', Informal Settlements and the Core City, 1988, p 23.
6. W. Annecke, 'Ideal Homes' in P. Murray (ed), A Spirit for Our Times, 1992, p 22.
7. E. Ardington, Buckpassing in Canaan: An example of authorities' failure to address the needs of informal urban dwellers, 1992, p 39.
8. Minutes of the meetings held at the Legal Resources Centre, Durban, 4 December 1990.
9. Personal communication with members of the Committee, Canaan, 5 December 1990.
10. Personal communication with Maria Mbuli and Gretta Ndukwane, Canaan, 1 December 1990.
11. Annecke op cit p 24.
12. A. Todes and N. Walker, 'Women and Housing Policy: Analysing the Past, Debating the Future', paper presented at the conference on Women and Gender in Southern Africa at the University of Natal, Durban, from 30 January - 2 February 1991, p 8.
13. Discussion with the women's group, Canaan, 21 November 1990.
14. Ibid.
15. Ibid.
16. Thandekile Memela, Canaan, 28 May 1991.
17. Thandekile Memela, 'Walking from Matatiele' in My Wash and Wait Clothes: Stories from the Women of Canaan, to be published.
18. Discussion with the women's group, Canaan, 21 November 1990.
19. S. Mkhize, 'My Story', paper presented at the conference on Women in Africa and the African Diaspora: Bridges across Activism and the Academy, Nsukka, Nigeria, July 1992.

CHAPTER 4

WATER IS WOMEN'S WORK

When I first came to Canaan I was helpless, I didn't even have water to drink. I got water, the very unhealthy water, from the pipe and it made me sick¹.

For the first eighteen months there was no drinking water available at Canaan. A canalised storm-water drain flowed intermittently at the bottom of the settlement between the houses and the highway. This was the "pipe" and source of polluted water to which Busisiwe referred above. Once the women who arrived at Canaan had established a shelter, the provision of clean water for domestic consumption was their next responsibility, but initially it was men² who more eloquently and more publicly than women raised the issue of water. At one community meeting a man said:

We've got no water. How can we live without water? The birds in the sky, the animals - even the snakes all must drink water. But we as humans have not got water and we are suffering. We hear about a post box and we are grateful. We hear about a telephone and we are grateful. But we hear nothing of water. We cannot live without water³.

Although men may have been restricted in their use of water for their own domestic purposes (drinking and washing), they did not usually have to concern themselves with where water came from and few had to labour to obtain the water they used. Provision of water in the dwelling was generally the responsibility of the women, and children instructed by women. It was the women who could not fulfil their domestic responsibilities of cooking, cleaning and washing unless there was water and it was generally women and children who laboured to bring clean water to Canaan⁴.

Participants in the women's group were all aware of the dangers of using and drinking polluted water⁵. Sizakele and Thandekile were among those who thought the storm-water drain was too dirty even for washing clothes or dishes, and they reported developing sores if they used this water to wash their bodies⁶. Thandekile, who ran a shebeen, described how when one of the other shebeen owners used the water for making beer everybody who drank it got sick⁷. Nonetheless water from the storm-water drain was used by a significant portion of the residents: 73.5 % of respondents in July 1991 reported using this water for gardening and washing clothes⁸ and children frequently played in the water while their mothers did the washing⁹.

In order that they and their households were safe, clean water for drinking, cooking and some personal ablutions had to be found outside Canaan and carried back to the settlement. At the time of the study there were three main sources from which fresh water was fetched: the cafe just over the top of the hill in the 'Indian' area; some of the affluent and generous 'Indian' neighbours, and the fire hydrant at Kennedy Road which had been fitted with a tap for the use of the (legally recognised) nearby shack dwellers at the dump. None of the three was ideal. In all three cases water had to be fetched. Water carriers were predominantly women or children of both sexes. Twenty-five litres of water weighs 25 kilograms and requires considerable physical exertion not only to carry but specifically to bend, pick up and lift onto the carrier's head as well as to perform the reverse procedure at the destination. Boys and girls of between five and ten years old could be seen carrying small containers on their heads but once they reached the age of about twelve or thirteen the number of boys seen carrying appeared to dwindle rapidly. Teenage girls and women carried 25 litres at a time, occasionally more.

The distances to the three sources of fresh water were different: the neighbours were the closest source, the fire hydrant the furthest. The conditions prevailing at each source changed over time and this altered

patterns of supply and use between the time that the first survey was done in August 1990 and the second survey was completed at the end of July 1991. These changes are elucidated in this chapter.

In August 1990, concerned and benevolent neighbours supplied water almost limitlessly and free of charge to approximately 8% of the inhabitants of Canaan¹⁰. But as the settlement expanded so did their water bills and their goodwill decreased accordingly. The householders began to complain of petty thefts particularly from washing lines and windows left open, their taps being left running and their privacy being constantly disturbed¹¹. When it became clear that negotiations for alternative land had stalled¹², and what had begun as a short-term friendly gesture threatened to become a long term nuisance, one by one the neighbours withdrew their hospitality. By March 1991 only two neighbours still offered the service and only to select residents between four and four thirty (pm) every day¹³. By July 1991 only the neighbouring doctor, a consistent and extraordinary friend to the Canaan residents, permitted known women to take water from his garden tap at specified times.

In August 1990 water from the cafe had to be paid for. There had been a time when the 'Indian' store keeper had allowed inhabitants of Canaan to help themselves to water quite freely but by the time the first survey was done a limited amount of water was being sold daily at 50 cents for 25 litres¹⁴. This was considered a reasonable tariff and convenient for people who lived near the top of the Canaan hill. The number of people obtaining their water from the shop increased over time, probably as a result of the neighbours shutting off their supply, the danger of the highway and the convenience of the cafe becoming known. The first survey showed that 23% of respondents obtained their water from this local store¹⁵ and this number increased to 41.7% by July 1991¹⁶. The women's group described this source as closer and more convenient than the fire hydrant, but the problems associated with going to the cafe were that the water had to be paid for whereas water from the

hydrant was free and sometimes the owner appeared irritated and refused to allow people to use the tap. When that happened the water seeker would have much further to go to the fire hydrant than if she had gone straight there in the first place. The owner explained his irritation thus:

The settlement has brought thieving and thuggery to this area. I am not a racist but I can't keep my shop stocked anymore. I know who the robbers are and I am afraid. The police don't go into Canaan. I used to stay open till 11 pm, now I have to close before dark. I used to open at 6am now the people knock me up at 5am for water¹⁷.

At the time that the first survey was done, 66% of the respondents walked across the N2 Highway to the tap on the corporation fire hydrant at Kennedy Road to obtain clean water¹⁸. By July 1991 this had decreased to just over 50% of the households surveyed¹⁹. There were three immediate possible reasons for the decreasing use of the fire hydrant: the distance to be covered, the hazardous highway and the hostility of the Kennedy Road residents. Firstly, fetching water from the fire hydrant entailed a walk of approximately twenty minutes. It was over relatively flat terrain for the most part and convenient for people who lived at the bottom of the slope or who did not wish to pay the cafe owner or who did not have access to a neighbours' water supply. But it was a long way to walk, especially in summer.

Secondly the route over the highway was dangerous: in October 1990 two twelve year olds who had gone to fetch water were killed; in February 1991 a pregnant women was killed and in July 1991 a man was run over and killed - all were on their way to or from the water tap. Thereafter the women's group kept their own records and reported a further thirteen deaths²⁰ before water hydrants at Canaan were opened in September 1991²¹.

The deaths on the highway, (and through shacks burning) constitute telling examples of the circularity of the poverty trap and how expensive it is to be poor. Because the people were poor and did not have water in their homes

they had to fetch it from fire hydrant which entailed crossing a six lane highway in both directions. Inevitably people (the majority being women and children) got killed either running with empty containers or trying to dodge the traffic with 25 litres of water on their heads. This happened seventeen times in just over a year. Death in itself was a tragedy and distressful for the already low moral of the community, but it was also costly. No one household could afford (or was expected to afford) the necessary burial expenses so that with each death most households contributed what they could to a funeral fund. Households gave whatever they could - sometimes R1 but often R10. Seventeen deaths implied that over the year poverty stricken households were contributing on average over R10 a month to funeral expenses (there were several deaths by fire too). Since R10 regularly represented one to two days' entire household allowance, this was a considerable sum to be spending on death every month when survival was an issue.

The third reason why the number of people using the Kennedy Road fire hydrant decreased over the year may have been the regular harassment by the police²² and the Kennedy Road shack dwellers. The tap was initially installed for the shack dwellers on the opposite side of the road near the dump. In an exceptional move, the Durban City Council had recognised this impoverished group's right to live at the dump and had provided chemical toilets and the tap on the fire hydrant for their use²³. There were those among this group who resented the Canaan residents presence and, no doubt, the inconvenience of having to queue once the Canaan people started using 'their' tap. There were also municipal officials who believed that the Canaan people should be discouraged from settling at all costs and since the provision of water may be construed as recognition of the right to be there, no water should be provided or permitted²⁴. The Kennedy Road shack dwellers periodically issued threats, including death threats to Canaan women²⁵, and Busisiwe²⁶ and Gretta²⁷ reported being assaulted at the tap. In addition there were several complaints of threats and harassment from police whom the women perceived as acting

on behalf on the municipal officials²⁸.

People taking water from the fire hydrant did not pay for it but people who carried water for others charged for their services. By July 1991, 60% of households surveyed at Canaan incurred expense for water either through buying it for themselves at the store or through paying other people to fetch it²⁹. Approximately 8% of the households surveyed in July 1991 were paying carriers to provide them with water³⁰. The implication of this was that there was money circulating within the community. An income was earned in return for services rendered. In order to maximise the opportunity to earn some money, most carriers obtained water free from the fire hydrant so that in effect they were being paid for the effort entailed in walking to Kennedy Road, standing in a queue, dealing with occasional harassment from police and shack dwellers, and carrying 25 litres of water home again.

It has been pointed out that this work was not generating 'new' income for Canaan³¹. But it could be argued that since the transaction involved employed people paying unemployed women or youth to fetch water, a degree of reticulation of income was occurring within the community and the water carriers were earning a legitimate living albeit within a corrupt system. Thembakazi, Gretta and Deliwe from the women's group all carried water for money when they did not have any other source of income.

The households who paid for water to be fetched were either those who could afford the convenience or those in which, for various reasons, there was no-one strong enough to carry water. Within the women's group there three such cases: one was a women of fifty-six who was too ill to carry water, the second was a young women who was new to Canaan and had no-one to care for her baby while she fetched water and in the third case the single mother had a bad leg and her only child, a teenage daughter, "has not had to carry water before in her life and has not been trained"³². In these instances there

was no man in the household which would indicate an initial disadvantage of a relatively low income³³ which would be further reduced by the need to pay a water carrier. The structural and infrastructural reasons for not supplying water to the residents of Canaan was thus likely to have the greatest impact on the poorer households headed by women while other impoverished women, in an attempt to supplement their incomes, benefited from this anomaly.

'Carried' water was expensive. Until November 1990 the carriers had charged R1 per 25 litres³⁴. This meant that during most of the period monitored some of households (including some of the poorer ones) were paying the equivalent of 4 cents per litre for 'carried' water while those who bought water from the cafe were paying 2 cents per litre and for the few who could count on the neighbours, water was free. At 2 cents a litre water was expensive, at 4 cents a litre it was exorbitant. At the time water was being supplied to the City Council for .06 cents a litre and sold to middle class suburban residents for .1 cent a litre³⁵.

At R1.00 per 25 litres, i.e. 4 cents a litre, the water carried to Canaan rated among the most expensive in South Africa. Wilson and Ramphela reported:

But the worst area of all was found in Gazankulu in the northern Transvaal where, in some areas, water costs 50c for a 25-litre drum; that is, 67 times as much as the tap water in Cape Town suburbs at the time³⁶.

These figures were from a 1983 survey and allowance needs to be made for inflation. Nonetheless the cost of water at Canaan is roughly comparable: approximately the same as the Gazankuklu rate of 2 cents per litre if bought from the cafe, twice the amount if delivered to the dwelling. A study done on the water supplied to the Embo and Nqcolosi in the Ndwedwe district in 1980 found similarly high tariffs. Water cost the Ndwedwe residents 4 cents a litre as opposed to the 0.4 cents per litre which was being paid by the "white urbanists just across the KwaZulu border in Hillcrest"³⁷. More recently Janet

Small from TRAC reported even more expensive water in an area also in Gazankulu where a warlord was selling it for R2.50 per 25 litres³⁸. For a short while the cost of 'carried' water at Canaan was comparable.

On the first Saturday in December 1990, a wholesale trading company, Macro, opened a branch of its chain store in Quarry Road some twenty minutes walk across the freeway from Canaan. That afternoon, three shopping trolleys were purloined and six male adolescents joined the queue at the water tap. The youths had the advantage that they could fit up to five 25 litre containers in a trolley and earn an income more quickly and more easily than the toiling women and girls. Over the next few days these mass carriers increased the charge for delivered water from R1.00 to R1.50 and then to R2 per 25 litres. Most of the women and children carrying water followed this lead³⁹. This increase was reflected in the expenditure of some of the households involved in the second week of the daily logging exercise. However the price hike lasted only about two weeks. The people who paid for water began using less or fetching their own. Even water carriers are sensitive to market pressure and the price settled back at R1.50 per 25 litres⁴⁰.

Do women carry water unquestioningly as part of their acquiescence to the gendered division of labour and their acceptance of domestic roles, and why was it young men who turned carrying water into a profitable commercial enterprise? Probing this sphere of work was not the undertaking of this dissertation. Suffice it to say that the conditions for fetching water were not conducive for the task to serve a social function or provide an opportunity and meeting place for women. Both of these conditions have, under different circumstances, been offered as the explanation for why women persist in fetching water from a river when a tap has been provided⁴¹. Apart from the hostility previously mentioned, Kennedy Road carried heavy traffic and there was no space at the side of the road that could serve as a convivial meeting place as there may be at a river. Women frequently went to fetch water alone

and there was no regular time when most women would be at the tap as there was at the canalised storm-water drain or even at the dump. There was little of the interaction at the Kennedy Road tap which happened in the storm water drain at the bottom of Canaan. There continual conversation was heard and children played while their mothers did the washing. The drain therefore could be perceived as serving the function of a meeting place.

Any explanation for the male youths' entrepreneurial spirit evidenced in carrying water should include the time and freedom permitted to boys to roam the streets and visit Macro. The girls were not encouraged to leave the settlement other than to go for water or to the dump. Another factor may have been the interest of boys in vehicular contraptions. All things with wheels (skate boards, bicycles, pull-along toys) were salvaged from the dump. All loose wheels found were treasured and converted into some mode of transport. Nor were these young men the first to carry water on wheels. Twelve year old Musa Nyathi explained how he had made his housework easier:

Nobody worries us here in Canaan. I stay here at home and guard the house while my mother is away selling. My mother is too fat to bend and clean. I clean and then I collect water. I made something similar to a wheelbarrow to carry the container and then I collect the water and come back with it⁴².

Having to fetch, carry and pay for water meant that as little as possible was used. The households monitored on a daily basis used about 15 litres per day per person. (Table A). This was inadequate in terms of the World Health Organisation's goal of 50 litres per day per person⁴³ and well below the 400 litre per household per day restrictions of the drought in the DFR in 1983/4 which aroused so much indignation among white households. In fact, the monitored households at Canaan used on average as much water in a month, 1 600 litres (Table A), as suburban residents used in a day and a half. The monitored households paid between R64 (old price) and R96 (new price, late December 1990) per month for water delivered to their dwellings, whereas suburban residents paid approximately R35 for water on tap:

An average household with a well-kept garden spends about R35 a month on water. That's just over R1 per day for approximately 1 000 litres of pure, sparkling water⁴⁴.

In the week before the carriers' price increase each of the monitored households spent between 50 cents and R3 each day on water or an average of 20% of the household income. The effort and expense entailed in obtaining water therefore rendered it a valuable commodity. In March 1991, Thabani, the leader of the youth group and his cohorts launched a series of attacks on members of the women's group who were getting "too powerful"⁴⁵. Nombulelo described his assault on her:

he tried to attack me. He came into my house and kicked over a container of water - destroyed the water - when water is so scarce, and even my child started crying when she saw that⁴⁶.

In this case, Thabani used his physical strength to vent his resentment of the women's group's growing influence. His target was the water container as a symbol of women; women's labour and responsibility and also a scarce resource.

Observing the income generating possibilities of water, the urbanisation group was concerned that the erection of a stand pipe or tap at Canaan (which had been argued for by the Black Sash and the Committee jointly since August 1990), would deprive a number of people, primarily women and children, of their most obvious means of earning an income⁴⁷ but was uncertain of how to proceed. In August 1991, the women's group, which by then had called itself Masicedani, sent a delegation to the City Engineers. They were persuasive and eventually a water hydrant was opened for the people of Canaan at the bottom of the settlement on 17 September 1991. Sizakele reported that those who could not carry their own water previously still could not, and those who could afford the convenience of 'delivered water' still made use of the service. Because of the shorter distance to be covered the price dropped to 25 cents for

25 litres with the result that incomes of water carriers fell but did not entirely disappear⁴⁸.

In addition, a temporary job was created by the need to protect small children from the gushing water which formed pools below the tap where some children had slipped. Residents contributed to a wage for an older, unemployed man to sit and watch the water and the children until the Durban Corporation tidied the area and made provision for a drain⁴⁹. It was interesting to note that although women had been responsible for determinedly pursuing the provision of a supply of water to Canaan and negotiated the opening of the fire hydrant, once their task had been accomplished they retreated into a their less visible roles once more and left men to administer the water supply. There was no ready reason given for this at the women's meetings.

Having noted the toil involved for some women and the expense for others of obtaining water to fulfil their domestic responsibilities of washing, heating and cooking it is now time to elucidate the next most urgent basic needs: food and fuel. These are the concern of the following chapters.

Endnotes

1. Video interview with Busisiwe Dlamini, Canaan, 7 November 1990.
2. TRAC, "Demanding a Place Under the Kgotla Tree" in Sash, vol 34, no 2, September 1991, describes the initial reluctance of women to speak in public and the Mogopa's women's struggle for a voice on the community decision-making body.
3. Video of community meeting, unnamed male resident, Canaan, 4 November 1990. The community had requested that a public telephone and post box should be installed in the community hall and the committee was reporting back on the process of trying to attain these. But as the speaker pointed out, there was little point in this since basic needs had not yet been met.
4. There were a few households consisting of only young males who irregularly fetched their own water, otherwise they paid young women to do it. Personal communication CSDS fieldworker, Canaan, July 1991.
5. Women's group meeting, Canaan, 28 November 1990.
6. Ibid.
7. Ibid.
8. E. Ardington, Buckpassing in Canaan: An Example of Authorities' Failure to Address the Needs of Informal Urban Dwellers, 1992, p 26.
9. Video footage, Canaan, 6-8 November 1990.
10. W. Gildenhuys and the ML Sultan Technikon students' survey August 1990; analysed by E. Ardington in an unpublished report 1991.
11. Personal communication with teacher, SM Jhavary Primary School, November 1990.
12. This was clear to different people at different times; at a meeting held at the Legal Resources Centre on 17 April 1991 it was clear that the Department of Transport accepted that the Canaan residents would not be moved for some months hence.
13. Personal communication with Mrs Mkhize, Canaan, 25 March 1991.
14. Discussion with the women's group, Canaan, 14 November 1990.
15. Gildenhuys and Ardington, op cit, p 3.
16. Ardington, op cit, p 26.
17. Video interview with Mr Ivan conducted by Lynne Robertson-Hotz, 20 March 1991.
18. Gildenhuys and Ardington, op cit, p 3.
19. Ardington, op cit, p 26.
20. S. Mkhize, "My Story", paper presented at the conference on Women in Africa and the African Diaspora: Bridges across Activism and the Academy, Nigeria, 12 - 22 July 1992.
21. Natal Mercury 18 September 1991.
22. Women's Group meeting, Canaan, 9 April 1991.
23. Data Research Africa data base 1992.
24. Letter from C.A. Pieterse, City Medical Officer of Health to Chairperson of the Canaan Committee and the Black Sash, 19 December 1990.
25. Thandekile Memela, women's group meeting, Canaan, 26 March 1991.
26. Busisiwe Dlamini, women's group meeting, Canaan, 26 March 1991.
27. Gretta Ndukwane, women's group meeting, Canaan, 27 May 1991.
28. Women's group meeting, Canaan, 9 April 1991.

29. Ardington, op cit p 26.
30. Ibid.
31. Personal communication with E. Ardington, Durban, 22 January 1991.
32. Women's group meeting, Canaan, 28 November 1990.
33. Ardington, op cit, p 17.
34. Women's group meeting, Canaan, 15 November 1990.
35. Umgeni Water brochure, 1990.
36. F. Wilson and M. Ramphele, Uprooting Poverty: The South African Challenge, 1989, p 50.
37. J.L. Rivett-Carnac, 'Report on the Embo and Nqucolosi Water Supply Scheme', Indicator, September 1982.
38. Personal communication with Janet Small, Grahamstown, March 1991.
39. Women's group meeting, Canaan, December 1990.
40. Women's group meeting, Canaan, January 1991.
41. Personal communication with Janet Small, Grahamstown, March 1991 also with Valley Trust, July 1991.
42. Video interview with Musa Nyathi, Canaan, 12 November 1990.
43. F. Wilson and M. Ramphele, op cit p 51.
44. Umgeni Water brochure, 1990.
45. Women's group meeting, Canaan, 26 March 1990.
46. Ibid.
47. W. Annecke, "Out of the Fire to Find New Fetters", paper presented at the conference on Women and Gender in Southern Africa, University of Natal, Durban, 30 January - 2 February 1991.
48. Personal communication with S. Mkhize, Canaan, 15 November 1991.
49. Ibid.

CHAPTER 5

SHOPPING AT THE DUMP

When I came to Canaan ...it was very difficult and things were really bad. My possessions had all been burnt down. Busiswe Dlamini advised me to go to the dump. In the beginning I found it very difficult to go there. Then I would find an old cabbage and peel off the outside. I would find a small good part inside and come back to Canaan and cook it so the children could eat¹.

Gretta's description of her destitution and the lack of alternatives that forced her to go to dump (she had never scavenged before) highlight the concerns of this chapter: the humiliation of being poor, the responsibility of children and the importance of food. Gretta's account raises questions too. Since she had no possessions how did she cook this "small good part" of the cabbage? Where did she find a pot? Did she have a way of sharing out the "good part" or did they eat from the pot? Did the water for boiling come from the fire hydrant or the storm-water drain? How did she heat the water and cook the cabbage? Did she cook inside or outside on a stove or a fire? What type of fuel did she use? Did she have to buy it? If so where did she obtain the money? It is these latter questions which are of significance to this dissertation. The relations between food and fuel are complex and a study of the one would be incomplete without an examination of the other². Some of the complexities of the relationship which became evident in the discussions of the women's group are elucidated in the Chapters 6 to 8.

This chapter seeks firstly to establish the place of food as a priority in the lives of the women in the group. Food as an essential human need second only to water for physical survival should not need to be elucidated but the importance of food in the lives of those who regularly do not have enough is

emphasised. This is done through investigating the role played by food in the women's own lives and how this is linked to their perceptions of good mothering and housekeeping. Secondly the women's acceptance and fulfilment of the task of provision of food for their households is elaborated³. Thirdly the sources and types of food used most frequently by the women's group are described. Finally some of the factors which influence decisions about what to cook are explored.

For those of the women in the group who had arrived at Canaan as refugees, the war had exacerbated their poverty and in particular the difficulty of providing meals for their households every day. But the scarcity and thus the significance of food in their lives was not new⁴. When the women told the stories of their lives, each biography included several references to food and the way in which food or a lack of it had been instrumental in determining decisions made and directions taken. Just a two extracts are offered as examples of this:

I was born in Matatiele. My mother did not keep dates so I do not know exactly how old I am. When my father died my mother thought about coming to Natal because there was no work in Matatiele. At the time she had ten children. I had eight sisters and one brother.

My mother made preparations for us to go to Durban...In those days transport was very scarce so we walked. We did not know how far Durban was. We set out with my mother early one morning. We walked and walked each carrying a little bundle of clothes. We walked over the hills and through the forests. We walked and walked and walked until we were very tired. When the sun went down my mother looked for a place for us to rest. When we came to a good place to stop for the night my mother made it comfortable for us. She put grass and leaves and made us a cozy place to sleep. **Then she gave us some steamed wheat bread and sour porridge for supper. She had prepared it before we left home and carried it all day in a big tin with a lid. We were hungry and the food was delicious.** Then we lay down to sleep. My mother sat up right through the night and watched over us. The next morning we walked again. We did this for three days and three nights.

Now after the third day and night the food got finished. My mother did not know what to do because we were not yet in Durban ...

On the fourth day ... my mother went to the farmhouse. She explained she was looking for togs (temporary work) and the farmer said she could work there...This was a good white man **he gave us milk⁵.**

So they stayed on this wheat and dairy farm where they could all be together and have enough to eat. The decisions which Gretta's made in her early years were swayed by insufficient food:

I was four years old when my mother died. Then I was brought up by my grandmother [and when she died by her first born daughter, and when she died by my grandmother's brother]. That was the beginning of a hard life for me ... I was just their slave and got slave treatment. **I would wake up and have nothing to eat.** I would just have to work, washing, fetching water and hand grinding the mealies on the stone....I could not stand it any more **just being hungry and unhappy. I decided to run away.**

Then I went to an elderly lady to ask her to direct me because I wanted to trace my paternal relatives. The day that I was to go to my paternal relatives I chose my favourite and most beautiful dress because I didn't have any money and I gave it to the bus driver because I couldn't pay him. I told him to keep it till I came back with the money because I couldn't pay him now.

When I found my paternal relatives they were so happy to see me, even though I was already big now and they did not know me as a child. It was the first time I felt love and family feeling and warmth. They went to the bus driver and paid the money and brought my dress back. That was at Mount Frere.

They then took me back to school. **Then I had a normal life. I had breakfast when I woke up in the morning and before I went to school, when I came home I had a snack and then it was dinner time - just like the other children. I didn't have that [before]- I was like a slave; I would wake up and have nothing to eat.**

I was still enjoying this, having a proper family life when ... my aunt's sister, at G.township wanted me to go and babysit for

her and she treated me badly again. Though I was very young my relatives urged me to fall in love with one guy. **When I refused to fall in love they started not to give me food, they only gave me supper. Then I was forced to have a boyfriend** but I wasn't happy and eventually I had to run away again⁶.

What was significant in each of the references to food in the women's stories was the relationship between food and nurturing rather than food and nutrition. In the examples above, the provision, preparation and availability of food served a more significant role than a simply physiological one. The provision of food symbolised caring and acceptance of responsibility; knowing that as children they were wanted and would be provided for. Nourishment and sustenance inhere several layers of meaning and fulfilment when Thandekile remembers her mother's preparations for the journey and willingness to carry food for over thirty meals. The fact that the mother's will to reach Durban was thwarted by ten hungry children was not significant to the story. The purpose of the journey was to enable her to earn enough money to feed her children since the work she found on the farm allowed her to do this, at least from Thandekile's point of view, was sufficient.

For Gretta the measure of her acceptance in the households from which she was passed one to the other, was how often she was fed. The withholding of food when she declined a boyfriend implied emotional rejection from her family as well as physical coercion. The relief she felt at living a "normal life" with "family warmth" at her paternal relatives who gave her three meals a day is significant for it was what she believed was the least she should provide for her children and she is endlessly distressed that she cannot⁷.

This introduces the next aspect of the importance of food: the women's experience of scarcity did not end with their youth. Indeed it deepened as the women bore children. It became evident from the women's life stories that the inevitability of mothering⁸ and the sexual division of labour through which

they became responsible for feeding (beyond breast feeding) and rearing their children was accepted as part of a 'women's lot'⁹. Mothering implied dedication to the role of providing. The roles of mother, breast-feeder/ food-provider and nurturer were perceived as intimately interconnected - to a degree which may be difficult for middle class women whose mothering may be somewhat removed from mere food-provision to imagine¹⁰.

However, full responsibility for financing child rearing was not unproblematically or unquestioningly accepted. Thandekile narrated how she was forced by an intransigent husband to run away so that she could support her children because he would not allow her to work but neither would he maintain his children as she clearly thought he should. It was an unfair trap:

I stayed with him because he begged me to. But life with that man was not good. He never really wanted to support the children and he was often drunk. This man could not really love me. I decided that the only thing was to run away to where I and my children could be free of him.

... As for me I was even worse **off than before because the children's father did not give me any money - never even a penny to buy food for the children....**

My children were starving and I did not know what to do. I decided that I should run away to where no-one would know me and try to get work¹¹.

Thandekile took her children with her and thereafter accepted full responsibility of providing for them. Gretta too, knew that her husband should contribute to their children's maintenance. Her lack of success in making him do so evoked the telling of many similar experiences:

I have been so unfortunate with money from the fathers. I used to apply for maintenance at the court. [But the men I married were] such clever men. They used to pay a little something to the clerk of the court and then the clerks would send me away. They said I had to back to Transkei to get maintenance¹².

In response to the question "where do you shop?" over half the respondents to the survey replied, "at the dump"¹³. Seven of the ten women's group participants had children and said they had arrived at Canaan with hungry children who had to be fed. With very few material possessions and little or no cash the women's options were minimal. Hence Gretta's first ever visit to the dump quoted at the beginning of the chapter. As mentioned, the experience of scarcity was not new but the experience of scavenging was. Another resident of Canaan, Lazarus Mputhi, explained in the following moving interview that it was not by choice that people scavenged and that those who lived from the dump were sensitive to their position:

A lot of people are unemployed. Most of the food we eat and the material to build with we get from the dump. That's something we're living out of. There's some nurses that promised to help us but they haven't helped us yet. They say the food we're eating from the dump is unhealthy and can make us sick. There is no help for that because they are not coming here to help us and we're living from the dump. Most of the people whose belongings were burnt out are based on the dump. That's our biggest problem here. So this means whichever sickness we get over here, we get from there on the dump because the food we're eating is very unhealthy because its food that's already been thrown away. It's stuff that's expired already. That's our biggest problem¹⁴.

The municipal dump was central to the lives of most of the poorer people at Canaan and particularly to the women who were more likely to be earning low incomes or be unemployed than the men¹⁵. The dump was some twenty minutes walk from Canaan across the N2 highway and just past the water hydrant in Kennedy Road. It was used by a variety of supermarkets, green grocers and small construction companies as well as the residents of the affluent parts of Overport and the Berea to discard their waste. It provided most of the settlers at Canaan with the initial materials for their shacks and remained a significant source of supplies for many. The positive aspect of the dump was that it served as a collection point for free wood, building materials, fruit, vegetables, tinned food, clothing and household goods. Some of these

were not consumed by the collector but sold thereby providing a cash income for the picker.

The negative side was the filth, the stench, the humiliation of being reliant on waste, the dangers of consuming the contents of aged tins, rotting food, or of being cut by glass or rusted pieces of scrap metal. There were also the dangers of the "diseases which the children get" from living close to the dump or playing there and the video camera was witness to the open and oozing sores which many of the children had¹⁶.

Many women went to the dump on a daily basis. There were two 'rush hours' when the greatest number of trucks seemed to arrive. The women left Canaan at about nine o'clock in the morning and three in the afternoon in order to benefit from these. Those who lived off the dump by selling what they collected, frequently spent all day raking through the rubbish. The dump covered a large area and each time a truck arrived there would be a rapid consolidation of colour as pickers moved from wherever they were to investigate the new off-loading. Despite the stench and the flies much normal activity happened at the dump: one group of youngsters played soccer with a punctured ball, another fought over a broken radio, while yet others searched for a wheel to fix a skateboard, a baby dropped its dummy which was picked up and promptly put back in its mouth; and the women worked. It was primarily boys who played on and women who worked over this dump. The women chopped boxes into manageable pieces, gathered cardboard, sail (black plastic sheeting used for roofing), milk and fruit carton wrappers (for 'wall-paper') cloth, planks, fruit, vegetables and tins and carried them back to Canaan.

Men went to the dump too, but not as frequently as women, and when they did go it was usually in response to a message to go and help carry home an item of furniture or something similar that the woman could not manage to

carry on her head. The smaller number of men working the dump was in accordance with de Kock's findings¹⁷, although in the case of Canaan it may be accounted for by the relatively high percentage of males at Canaan who were employed and the fact that several of the youth found easier ways of making a living.

Despite the centrality of the dump in the group's lives, and the perception of 'shopping at the dump' it did not supply the households with basic provisions. According to the completed logging sheets, bread, milk and mealie meal constituted the staple diets of the participating households and these had to be bought. What the dump did provide was a primary source of income for four of the group of ten so that these staples could be bought, or the dump provided free ingredients for the stew or gravy to accompany the staples. Apart from the dump, women acquired fruit and vegetables from hawkers who either lived at or visited Canaan. Basic provisions were bought from shack shops at Canaan, local shops within walking distance from Canaan and occasionally from large stores at shopping centres although this was considered an extraordinary luxury¹⁸. The nearest shopping complex was 4 kilometers away in Sydenham. The hawkers were usually women, often their fruit and vegetables had come from a dump. Their products were accordingly inexpensive and their incomes low¹⁹. Male sellers fared better. The shack shops were owned and run by men (in one case a husband and wife team) and were expensive relative to supermarkets but convenient. There were no transport costs involved in getting to the shops and customers could buy in small quantities to suit themselves. The women reported doing their daily shopping - milk, bread paraffin and candles - at these spazas and travelling to local or city stores for weekly groceries and meat if possible.

According to the participants' logging sheets summarised in Table B, bread was bought most regularly (almost every day by all households) then milk and thirdly meat. Expenditure on meat, including chicken and fish, accounted for

the highest percentage of the food bill. An average of R18.29 or 35.9% of the food bill was spent on meat, chicken and fish each week and one of these was prepared on average five times a week. Put another way 20% of the total weekly expenditure on fuel, water and food was spent on meat in some form. This was often a small quantity (100-300 grams) which would be combined with vegetables or curried and served as a sauce rather than a meat dish to be eaten with phutu or samp or rice. None of the participants owned refrigerators so meat was bought locally and in small quantities or in tins. This would account for part of the high cost for small amounts. Of interest was the understanding of nutritional value revealed in the completion of the daily forms. On days when no meat was bought dried beans were frequently written in to the 'meat' column. In response to questions about this, almost all the women in the group showed clear understanding of what they knew they should be feeding their children. They said they had learned the nutritional value of beans at the clinics they had attended when they were pregnant. The women expressed a sometimes desperate sense of inadequacy at being unable to provide nutritious food: "Where can I get peanut butter from?" asked Nombulelo²⁰, and her tone indicated it might as well have been truffles. On the other hand, despite the higher price, white bread was regularly bought and cooked in preference to brown, and few of the women appeared to know the difference in nutritional value.

The second highest monthly expense was bread at 20% of the food bill and 11% of the total expenditure on fuel, food and water. Roughly 13% of the food bill (or 7% of the fuel, food and water expenditure) was spent on both milk and staples (samp or mealie meal or rice). Powdered milk was one commodity that was bought fairly regularly in bulk every month. The figure for milk may therefore be slightly low because the time period monitored was less than a month.

The women participating in the logging used vegetables almost every day but

frequently did not pay for them. Wild spinach and pumpkin leaves were collected regularly from local sources. Other vegetables came from the dump or were bought cheaply from hawkers at Canaan. Expenditure on vegetables accounted for 5.9% of the food bill.

When asked how decisions were made on what to cook each day, initial responses indicated that the amount of money available was the prime factor in decision making but further discussion revealed that the actual amount available was not the only criterion. The physical and emotional well being of the mother was a central concern with some consideration of what the household had eaten the previous day²¹. A significant factor influencing decisions about expenditure in general that came to light during the study and which should have been specifically monitored²² was the manner in which income was derived.

Within the ten participating households five of the women were solely responsible for the household income, three contributed "substantially" and two thought they contributed very little in terms of cash but they carried their own water and collected wild vegetables and wood²³. Income was derived in a number of ways: carrying water, selling fruit and vegetables, building shacks, running a shebeen, domestic work and scavenging, in particular collecting cardboard. Within the wider women's group, these activities extended to hairdressing, sewing, candle and soap making, healing, knitting, dagga selling and collecting wood. Except for domestic work these occupations share a significant common factor: income is earned irregularly, unpredictably and usually in small amounts. Whether a woman received her household income in one lump sum monthly, smaller sums each week, or "some few cents"²⁴ every day (or every few days) affected her choices and decisions. The participating women who earned irregular incomes articulated the anxiety caused by being uncertain both about the length of interval between receiving any income and the sum anticipated. In terms of this anxiety it was prudent

to spread any income received over a variety of commodities rather than spending one day's full allowance on, say, 25 kg of mealie meal which may save money in the long term. On the other hand the uncertainty of the future engendered a 'live for today' philosophy according to which long term planning seemed ludicrous and any windfalls which did occur were immediately celebrated and enjoyed to the full²⁵.

The need to earn some money every day is stressful and in Gretta's case this was exacerbated when her dubious self-image and already low self-esteem were hurt by having to go to the dump. Initially she masked her embarrassment at being dependent on scavenging with laughter, justifying her actions by emphasising her need and the responsibility involved in earning something every day and indicating vigorously just how hard earned the "few cents" were. Gretta had little choice but to learn to take what she could get, and on occasion, fight for it. She arrived at one meeting with a serious gash on her arm and Sizakele reported what had happened:

Gretta went to the dump to collect something to eat and she fell on a bottle; a broken bottle. And she nearly died. Maria met me at night when I was coming home and I sent her to ask for ice from the Indian doctor down the road. I was trying to stop the bleeding. She [Gretta] came to sit here waiting for me instead of going to hospital. Blood was half full in the washing basin. We tried to stop blood. Fortunately it did stop but she says even afterwards, when she was this badly injured, she had to fight to get a whole frozen chicken - something to eat at night. I was scolding her the whole evening - why did she still continue? But she said she wanted some chicken to eat²⁶.

Thereafter Gretta's status in the group rose; she became known as a "dumpacholic" and as a woman who was determined to feed her family.

Endnotes

1. Gretta Ndukwane, Canaan, 27 May 1991.
2. I. Dankleman and J. Davidson, Women and the Environment in the Third World: Alliance for the Future, 1988, p 71.
3. C. Moser, 'The Urban Context', in S. Sontheimer (ed), Women and the Environment: A Reader. Crisis and Development in the Third World, 1988, p 141.
4. N. Xenos, Scarcity and Modernity, 1989, p 3.
5. T. Memela, 'Walking from Matatiele' in No Space to Plant: Stories Told by Women from Canaan, to be published, 1992. Emphasis added.
6. G. Ndukwane, 'Early Days' in No Space to Plant: Stories Told by Women from Canaan, to be published, 1992. Emphasis added.
7. Gretta Ndukwane, Canaan, 27 May 1991.
8. Ibid. "I have never really enjoyed life. I had children and carried on having children. There was no family planning in those days. My whole life I have been a slave serving whoever I fall in love with."
9. Deltwe Pakathi, Canaan, 29 May 1991.
10. Removed in the senses of bottle rather than breast feeding, having a domestic servant to prepare and present meals and not being solely financially responsible for child-rearing.
11. Thandekile Memela, Canaan, 28 May 1991.
12. Gretta Ndukwane, Canaan, 27 May 1991.
13. Ardington op cit p 30.
14. Video interview with Lazarus Mputhi, Canaan, 7 November 1990.
15. Ardington op cit p 15.
16. Video interviews and background material, Canaan and the dump, 11 November 1990.
17. R.de Kock, "Garbage Picking as a Strategy for Survival", unpublished Masters thesis, University of Natal, 1986.
18. One of the arguments provided by the women's group as evidence of the Chair's corruption was that, without being employed, he acquired enough money to shop at the supermarket store called Checkers. Women's group discussion, Canaan, 14 March 1991.
19. Ardington op cit p 15.
20. Women's group discussion, Canaan, 28 November 1990.
21. Ibid.
22. A follow-up study funded by the National Energy Council was carried out between August 1991 and February 1992. The study monitored incomes and substantiates the findings in this dissertation. It also revealed the significance of the presence of a man in the women's decisions not only about what to cook but also about whether to cook.
23. Women's group discussion, Canaan, 14 November 1990.
24. Women's group discussion, Canaan, 21 November 1990.
25. W. Annecke, "Fuel for Thought", paper presented at the First International Conference on Women in Africa and the African Diaspora: Bridges across Activism and the Academy, Nigeria, 1992.
26. Women's group meeting, Canaan, 17 April 1991.

CHAPTER 6

A QUANTITATIVE ANALYSIS OF FUEL USAGE AND APPLIANCES OWNED

Having established their shacks, obtained water and acquired food, the women were then responsible for acquiring a means to heat the water and cook the food. While energy is not a basic need in the same order as shelter, water and food¹, energy in one form or another is required on a daily basis by all households for heating and lighting. Although Canaan was surrounded by power lines and within 5 kilometers of a sub-station, there was no electricity supply to the settlement. In fact only 35% of the population of the DFR (primarily whites and 'Indians') have access to electricity². It likely that some of the conditions pertaining to Canaan are replicated in other informal settlements. This chapter presents a quantitative account of the relatively under-researched area of fuels used and appliances owned by women who live in non-electrified homes.

Where electricity, arguably the most convenient source of energy, is not available, women use a variety of other sources: wood, coal, bottled gas (LPG), paraffin, batteries, furnace oil, paper waste and candles instead. "Women" is used deliberately in this context since it is traditionally women who are responsible for the maintenance tasks of washing and feeding, and it is women who are most closely concerned with the management (in this case the selection and use) of fuel for domestic purposes. In particular this account presents women's own measurement of their fuel usage. This is unusual; there have been few studies to date which have focused on the use of fuels other than electricity in urban areas in South Africa³. Generally men have been the interviewers and the interviewees⁴. Thus the quantities of fuel used

in households have been estimated by male respondents who frequently neither buy nor use fuel.

This study, which focused on women's measurements and perceptions of domestic fuel, has produced results different from those previously recorded⁵. On the whole the quantities consumed are greater than previously measured and the prices paid higher. When the ten women monitoring their daily consumption and expenditure began to produce these results, the women participating and I were surprised at how much larger the quantities and greater the percentage of income was spent on fuel than the women themselves anticipated. It was therefore decided that the daily monitoring study should be checked and contextualised in terms of other women's perceptions of fuel usage. To this end women (rather than men) from forty randomly selected households⁶ were asked to complete a survey which dealt specifically with fuel usage (Appendix 5). The results of this survey revealed that these forty women estimated that their households consumed larger quantities of fuel than male respondents had estimated, and paid more for it, but not as much as the monitoring group was finding in their daily logging.

At Canaan paraffin and candles were the chief sources of domestic energy but wood was also used by 97.5% of respondents as a supplement to paraffin. Gas and batteries were used to a lesser extent. Out of these fuels, wood is known as a bio-mass fuel, the rest as transition fuels. The use of a combination of bio-mass and transition fuels is significant as it has been argued that there are six phases in the process of transition from dependency on bio-mass fuels (wood, dung and crop wastes) through transition fuels (coal, paraffin, gas) to 90% dependency on electricity as a domestic energy source, and that consumption and expenditure of fuel can be used as an indicator of the process of modernisation⁷.

This study presents evidence in which women oscillate between using

bio-mass and transition fuels, suggesting that it would be difficult to plot a point of modernisation according to fuel usage on any linear scale. There is evidence that a variety of factors influence this oscillation including the manner in which income is derived and the emotional and physical well-being of the housekeeper. These factors are complexly related and it is more difficult to assess their part in the selection of fuel than it is, for example, to calculate correlations between fuel usage and the period of urbanisation and education. The latter are posited by Viljoen and Eberhard as primary components in fuel expenditure and consumption⁸. This preliminary study suggests that there is sufficient evidence of other complex factors influencing fuel selection to warrant further investigation.

General profile of forty respondents:

Of the forty respondents to the energy survey the youngest woman was nineteen years old and the oldest sixty-four. The average age of the respondents was thirty-four. The youngest woman respondent was part of a household which consisted of two adults who had both completed std 10. The respondent's male co-habitor was a full time student while she tried to earn money, study part-time and keep house. The oldest woman respondent was head of a household of six, she had completed std 1 and she reported no regular income in the household. Three of the forty respondents had no schooling, three had completed matriculation exemption and the majority had attained std 4. The respondents reported that they had been at Canaan for between two weeks and a year, and in Durban for between two and thirty-four years. Thirty-seven out of forty (92.5%) gave "the violence", "unrest" or "house burnt" as their reason for coming to Canaan and three were "desperate for accommodation".

Composition of households

Adults: there were eighty-three adults altogether in the forty households, thirty-three of whom were male and fifty female, that is a ratio of 33:50 men to women.

Children: there were fifty-six children in the forty households; thirty male and twenty-six female.

Household size: there was a total of one hundred and thirty-nine people in the forty households or an average of 3.5 persons⁹.

Incomes varied among the forty households from no recorded income for seven of the respondents to eleven households who had income of over R150 per week with an average household income of just on R100 per week or R400 per month¹⁰. Of the eighty-three adults thirty-one (37.5%) had full time employment, seven (8.6%) had casual or part time employment, eight (9.8%) were recorded as active work seekers, eight (9.8%) engaged in informal activities, twenty-three (28%) did not have an income, and five were uncertain.

Domestic energy use was probed in terms of the socio-economic indicators mentioned above, sources of energy, the cost of each source, distribution networks and appliances owned and used in each of the households.

Sources of domestic energy in forty households:

Wood: wood was used as a supplement to paraffin by 77.5% of the respondents of the energy survey. Twenty-eight of the forty respondents made use of wood for heating water and twenty-five for cooking too.

Paraffin: All forty of the respondents used paraffin for cooking, thirty-eight for heating water and thirty-seven for heating the dwelling when necessary. Six of the forty households used paraffin for lighting and one (the full time student) also used gas.

Gas: gas was used by two of the forty households for cooking and by one for lighting.

Candles: of the forty respondents thirty-nine used candles for lighting.

Batteries: Twenty-five out of forty households used dry batteries in radios and three had a car batteries for larger appliances.

No coal, charcoal or furnace oil was recorded at Canaan.

Appliances owned by the forty households surveyed:

Many of the residents of Canaan arrived without appliances which had been destroyed by fire along with all their other possessions. The acquisition of some form of stove was considered a priority, the next appliance to be bought was an iron.

Stoves: at the time of the survey all forty households had a stove. There were twenty-six paraffin stoves (one of which was used only very rarely), fourteen paraffin primuses and two gas stoves.

Irons: thirty-nine of the forty respondents owned paraffin irons.

Lanterns: six of the forty respondents had a paraffin lantern and one a gas light.

Heaters: three of the forty households recorded owning heaters, otherwise stoves were used to heat the dwelling when necessary.

Radios: twenty-three of the forty households had battery operated radios.

Hi-fis: two of the respondents owned hi-fis which were powered by car batteries.

Television: there was one household which owned a battery-powered television.

Refrigerators: none of the respondents owned a refrigerator in 1990.

Cost and Distribution:

The distribution of domestic energy sources was largely through the dump and the spazas.

Wood was generally free and readily available. It could be collected from the dump, cut from an area of bush within twenty minutes walk from Canaan or bought from a local shop or "sellers". The latter were women who had obtained wood from the dump or brought in bundles of wood from the "rural areas"¹¹. Most of the respondents obtained their wood from a variety of sources; three (7.5%) collected regularly from the dump, eighteen (45%) from

the surrounding bush, twelve women (30%) purchased from "sellers", one woman purchased from the shop. The spazas did not sell wood. Respondents to the larger survey estimated that they bought 10 kilograms of wood for R2.00. As a supplement to paraffin this lasted between one and two weeks. In other words the households buying wood consumed approximately 20 - 40 kilograms of wood a month.

Paraffin: only two households (5% of respondents) did not report some expenditure on paraffin. One of these households consisted of the students who used primarily gas, the second was an older, very poor woman who used primarily wood. The amount used by the respondents per week averaged just over a litre per household per day (7.16 litres per week). The reported amounts spent per week ranged from nothing for two households to between R6.50 and R11.50 (both for seven litres of paraffin) and averaged R9.06. The lowest price recorded paid for a litre of paraffin was 60 cents, the highest R1.60 and the average R1.27 a litre. This substantial difference in price is accounted for through the different distribution networks. Most of the paraffin consumed was obtained from spaza shops within Canaan and most of the balance from the local Indian store, although a few respondents travelled further in search of cheaper paraffin. Thirty-three of the thirty-nine paraffin users bought their paraffin at the shack shop closest to them and paid according to the spaza owner's pricing.

Buying small quantities of paraffin at Canaan was more expensive than buying in bulk in town. Two respondents reported paying slightly less than the average (R1.27 per litre) at the local shop, two respondents travelled to town, one to Phoenix and one to a garage to obtain paraffin more cheaply and in bulk. The women who recorded paying 60 cents, bought a 20 litre container of paraffin for R12 in town.

Gas: the two households who made use of gas bought it once a month from a shop in KwaMashu for R20.95 for a 15 kilogram cylinder.

Candles: Of the forty respondents thirty-nine households (97%) regularly used candles. On the whole each household used one candle a night. Thirty-one (77.5%) of the women bought candles singly or in packets of six from the spazas at prices which ranged from 40 cents to 50 cents for a single candle and from R2.29 to R3.50 for a packet with an average price of R2.41 a packet. The two women who walked to the local store paid more than the average (R3.50); the three who went to town and the three who went to Sydenham fared slightly better at R2.09 a packet which did not include the cost of transport (one woman did not respond to the question).

Batteries: twenty-five of the forty households (62.5%) used dry batteries every day and twenty-two (55%) of these were for radios. The majority of batteries bought were PM9s from spazas. There were three respondents who had car batteries, two for hi-fis and one for a television.

This sample of forty households provided a useful context for the ten case studies; for although the women participating in the daily logging were volunteers from the women's group and not randomly selected, the socio-economic profile of the small group was not much different to the large: see comparative Table C.

The ten case studies:

General profile of the participants:

The ten women participants ranged in age from twenty to forty-eight with an average age of thirty-five. One of the women had not attended school at all, two had passed std 5 and the average level of schooling attained was std 3. All had been in Durban for more than three years and all but one had come to Canaan when their previous houses were destroyed by fire in the 'violence'. Eight of the ten women named themselves as head of the household and in three of the households there were salaried men.

Composition of households:

The households consisted of forty-five members altogether.

Adults: there were twenty-five adults, fourteen women and eleven men.

Children: there were twenty children; there was no accurate record kept of their sexes.

Household size: among the ten households, sizes varied from two (both adults) to twelve (six adults and six children) the average household size was 4.5 which is in accordance with Ardington's findings that women headed households are larger than those headed by men¹².

Incomes: weekly household incomes ranged from R45 to R150 with an average weekly income of R89.50 per household. This would indicate that the participants were among the 50% of households at Canaan who had weekly incomes of less than R150¹³. The ten women contributed to the household incomes in a variety of ways: by building shacks, running a shebeen, selling fruit and vegetables at the roadside, hair-dressing, sewing, carrying water, doing odd domestic jobs at Canaan, selling cardboard collected at the dump and domestic work.

Sources of domestic energy:

Wood: wood was used as a supplement to paraffin by all ten women who used it for heating water and cooking.

Paraffin: all ten households used paraffin for cooking, and eight for heating the dwelling when necessary.

Gas: gas was used by one of the ten women for cooking.

Candles: all ten households used candles for lighting.

Batteries: four of the ten households used dry batteries radios and one had a car battery for a larger appliance.

Appliances owned by the ten self-monitoring households

Stoves: the women each had a paraffin stove.

Irons: all ten households owned paraffin irons.

Lanterns: none of the households had a paraffin lantern.

Heaters: one household had a paraffin heater.

Radios: nine of the ten women had battery operated radios in their dwellings.

Hi-fis: none of the women owned a hi-fi.

Television: one household had a television which was battery powered.

Refrigerators: none of the women owned a refrigerator in 1990. Thandekile, whose house was, by co-incidence, included in those randomly selected, was the first person at Canaan to buy a refrigerator in 1991.

Cost and Distribution:

Wood: Four of the women collected their own wood either from the dump or from the bush near Canaan. Six bought a bundle or two of wood once a week from "sellers" at R2 for 10 kg. Busisiwe, because she was a builder, collected far more wood than the others, but she used most of it for building.

Paraffin: all the women made use of paraffin, the amounts varied from R9.55 to R21 per week and averaged R11.90 all purchased from local spazas.

Gas: gas was purchased by one women for between R18 and R20.95 depending on whether she bought it at a garage or in KwaMashu respectively.

Candles: all ten women used candles for lighting. The women tried to limit their consumption to one candle a night, these were generally bought singly from spazas at between 40 cents and 50 cents each or in packets of six from R2.10 to R3.50.

Batteries: nine of the ten women used dry batteries every day which, apart from one torch, were used to power radios. In general PM9 batteries were purchased from spazas. The television owner used a car battery. The average amount spent on dry batteries per week was R2.29.

Here is a summary of the average weekly expenditure on five sources of domestic energy by the ten participating households:

Ten households	
Fuel	Weekly average expenditure
gas	194 cents
batteries	229 cents
paraffin	1190 cents
wood	120 cents
candles	350 cents
Total	2083 cents
R20.83 as a % of average weekly income: 21%	

Overall, in the forty households and the ten case studies, the majority of women reported spending over R11.50 a week on paraffin and candles and over R13 a week if wood was purchased. In summary the ten households spent approximately 21% of their average weekly income on domestic energy whereas the sample of forty households spent 23% of their average weekly income.

The information on fuel consumption and expenditure recorded by the women at Canaan differs from that given by the men in response to Ardington's survey and from other informal settlements in and around Durban where households (primarily men)¹⁴ were asked what they **estimated** they spent on fuel. In Umgababa, Gamalakhe and Mpumalanga the **estimated** amount spent per household per month on paraffin (alone) was R27.65, R21.60 and R23.32 respectively¹⁵. In Canaan the average expenditure **recorded** by the women was R47.60 per month on paraffin alone and total monthly fuel bills averaged around R73. The discrepancy in these figures needs to be explained. It could be that the recording was inaccurate, but it could also be that estimated and actual expenditure do differ markedly.

The high price of paraffin at Canaan is another possible explanation for why expenditure on fuel is so much higher at Canaan than other informal settlements where a litre of paraffin may cost as little as 80 cents¹⁶. A third factor accounting for the difference would be that male respondents seldom do the actual fuel purchasing. Consequently their responses were estimates which fell short of what fuel was actually costing women. Lastly women's own estimates (in response to the energy survey), although closer than the male respondents', may also have fallen short of the actual quantities used and amounts spent if the daily record keeping is to be believed. This is feasible. At the beginning of the monitoring period the women participating were asked what they estimated they spent on fuel. In some cases these estimates differed by more than 100% from what they thereafter logged.

The sample is too small to be sure. But a larger follow up survey being done over a more extended period of time¹⁷ is confirming that women spend more than they realise on energy, primarily on candles and paraffin. This would lend credence to those who argue for electricity for all on the grounds that it is cheaper than transition fuels¹⁸. However, proponents of this argument seldom take a) the cost of the connection fee, b) the cost of electric appliances and c) the way in which it suits low income households to purchase fuel. The following chapters explore some of these factors.

Endnotes

1. S. van der Berg, Urban Electrification: Economic and Social Interactions, 1990, p 23.
2. Daily News 30 March 1992.
3. S. van der Berg, J. du Toit and A. Wessels, The Socio-Economic Impact of the Provision of Energy to Settlements in Rapidly Growing Metropolitan Areas of South Africa, with Particular Emphasis on Electricity: Conceptualisation and a Framework for Research, 1990.
4. This was the case with regard to Gildenhuys and Ardington's surveys at Canaan.
5. E. Ardington, Buckpassing in Canaan: An Example of Authorities' Failure to Address the Needs of Informal Urban Dwellers, 1992, p 27.
6. From a hill opposite Canaan a staff member of the National Energy Council and I marked out forty houses which were then surveyed.
7. R. Viljoen and A. Eberhard, Urban Domestic Energy Transition, unpublished paper, 1990.
8. Ibid.
9. Ardington, op cit, p 3.
10. Ibid, p 22.
11. Personal communication with members of the women's group and "sellers", Canaan, February 1991.
12. Ardington, op cit, p 3.
13. Ibid p 21.
14. Personal communication with fieldworkers, University of Natal, December 1990.
15. Data Research Africa database, 1990.
16. Personal communication with Fiona Ross, National Energy Council Workshop, Pretoria, August 1991.
17. Work in progress; a comparative study of fuel usage by women in three informal settlements in the DFR, funded by the NEC.
18. D. van Heerden, 'Krag is Mag', Die Suid Afrikaan, no 39, Junie/Julie 1992, bls 19.

CHAPTER 7

DISCIPLINING MYSELF: ATTITUDES TO FUEL USAGE

If I buy only one bottle of paraffin a day and one candle I use only that amount, so I am disciplining myself. Also if I have only some few cents I must buy some food, some paraffin, one candle and what about the bus fare?¹

This chapter explores the relations between income and fuel purchase, the energy sources most commonly used at Canaan, women's preferences with regard to these and their management of energy resources within their households.

When the forty women respondents to the energy survey at Canaan were asked what source of energy they would **prefer**, thirty spontaneously replied "electricity", seven named gas as their first choice and three were uncertain. However, when the women were asked what fuel they thought they could **afford** nineteen of the forty respondents said they thought they could afford electricity and twenty-one did not know. The cost of electricity is constituted not only by the consumption of electric current but also by the cost of being connected into the system and by the price of electrical appliances which are, on the whole, far higher than those using paraffin or gas. In the light of this uncertainty with regard to affordability, which was discussed by the women's group as a whole, the smaller group of ten women were willing to continue monitoring. The women appeared interested to assess whether or not their households could afford electricity.

Apart from urbanisation and education (mentioned in the previous chapter), cost and availability are assumed to be major factors in the selection of domestic fuel². The evidence in this chapter will show that in some instances at least, although cost and availability are important, they are not always the primary considerations. Factors including convenience, the women's perceptions of their roles as mothers, wives and housekeepers, the manner in which income is derived (and consequently the form and amount in which it is available to be spent), are some of the other key components in decision-making about fuels.

Fuel purchase and income:

The women of Canaan spent considerable proportions (over 20%) of their household incomes on purchasing domestic energy³. This total comprised relatively small amounts of domestic energy which were purchased for relatively small amounts of cash on a daily basis. It is these relatively small amounts of money and fuel, the advantages and disadvantages thereof and the justifications offered for maintaining particular patterns that are scrutinised in this chapter.

Although daily household incomes were not specifically monitored in this study⁴, indications were that the form in which income was derived was an important factor in decision-making and budgeting. The group's weekly household incomes ranged from R45 to R150 with an average of R105 per household. This would indicate that the participants were among the 50% of households at Canaan who had weekly incomes of less than R120⁵, that is, they were in no way exceptional. Six of the ten women participating in the study were primary or sole breadwinners, in three of the households there were salaried men (one part-time) and in one household both adults were employed. All ten women contributed to the household incomes in a variety of ways: as a domestic worker, by building shacks, running a shebeen, selling fruit and vegetables at the roadside, hair-dressing, sewing, carrying water,

doing odd domestic jobs and selling cardboard collected at the dump. The significance of all but the first type of labour, is that income is acquired irregularly in small and unpredictable cash amounts. A vegetable or cardboard-seller may be able to estimate that she will earn some R25 - R35 in a week but she will be dependent on what others discard, her skill and good fortune at the dump, good weather, and good health for profitable selling days to make up that amount. The critical factor is the uncertainty of any income; the way this influenced the women's attitudes to necessary purchases and constrained their choices in a variety of ways. Two apparently contradictory ideas about expenditure were expressed strongly by the women in the group.

Firstly the participating women articulated pragmatic and thoughtful attitudes to spending arising out of the constant anxiety of "we are so poor"; not having any money, or being uncertain when and where the next amount would come from and how much it would be⁶. Their so-called informal activities⁷ meant that they were likely to have small amounts of money (between R2 and R10) in hand every day or every alternate day rather than a substantial lump sum at any stage. In terms of their households' daily requirements and their anxiety that they may not have any money the next day, the women considered it prudent to spread whatever income they had over a variety of small purchases rather than spending a day's full earnings on just one commodity, say, twenty litres of paraffin. This is part of what Zodwa was expressing when she said:

If I buy only one bottle of paraffin a day and one candle I use only that amount, so I am disciplining myself. Also if I have only some few cents I must buy some food, some paraffin, one candle and what about the bus fare?⁸

Secondly on different occasions the same women articulated a short-term extravagance. They agreed that life itself is precarious, particularly for poor black people in Natal. They could not spend their lives worrying about what was going to happen in the future but had to live each day as it came and celebrate whenever possible. A good example of this was a fortuitous (and

relative) windfall. Several of the women made a living from collecting cardboard from the dump and selling it to a waste-collector called Mr Gandhi. He was reputed to pay very mean rates per kilogram but the women had no other buyer unless they walked to another seller for over an hour forwith their bundles. On various occasions the women managed to cheat⁹ the waste-collector and make more money than was warranted. There was no censure in the group for this, only approval for the subversive activity of resisting exploitation. On these occasions the women promptly spent their entire 'windfalls' on meat and beer and sweet things for that evening¹⁰. The vindication for this was that we might all be dead the next day¹¹ and the households might as well enjoy a "feast" even if the event consumed all the money and there was nothing left for the next day. The two philosophies of frugality and 'live for today' were not incompatible under the circumstances. Both may be interpreted as survival strategies. The thrift was evidence of a rational approach to day-by-day budgeting to cover bare, physical necessities. The seemingly extravagant "feast" served as a necessary occasional morale boost, providing the rare satisfaction of full stomachs, the relief from the usual bleak routine of the poverty and some hope for the future.

Fuel was required both for the routine meals and for the "feasts" but the different foods cooked required different preparation. Phutu (mealimeal) or bread which was likely to constitute the staple of the routine meal, requires a long, slow cooking well suited to the low, slow heat generated by burning paraffin. On the other hand, the roast or fried meat and vegetables for the celebration are better cooked quickly at high temperatures - a characteristic advantage of electricity or gas.

The questions which concerned this study were whether the same fuel was used for the different types of cooking, whether this was appropriate, and if not, whether, particularly when the women had extra cash in hand, their different needs could be accommodated by national energy planners in a

women-friendly energy system. The first part of the question was relatively simple. Generally the women used paraffin for their ordinary cooking unless there was too little money in which case they used wood. Paraffin was used for celebratory cooking too, unless there was a man actively involved who would make the fire and cook meat outside. The answer to the second part of the question requires a broader analysis of women's domestic energy needs and their capacity to pay for these than this preliminary study can offer. It may also require consideration to be given to subsidising domestic energy.

To reiterate briefly: the ten women participating in the daily logging all used primarily paraffin for heating and cooking, candles for lighting, wood as a supplement to paraffin for heating and sometimes cooking. All used batteries for their radios. One had a gas cooker and a battery-powered television set. The women were asked whether they considered these domestic energies efficient and whether they made any attempt to manage their consumption. The women were in agreement that wood, paraffin and candles were inefficient. They were adamant that they tried to use the fuels to their best advantage but maintained that this was difficult to do in terms of the dynamics of the relationships in the household¹². They complained that there was never really enough heat or light to manage and that they often felt they were the only people monitoring and caring about the household's resources¹³. This sole responsibility was exhausting; they too would have liked to listen to the radio more¹⁴ and not have to worry about the batteries running out. They described their attitudes and management strategies as follows.

Lighting: in order to economise, the ten women tried to limit their households to one candle per evening. Zodwa makes this explicit when she says, "If I buy only ... one candle [a day] I use only that amount, so I am disciplining myself..."¹⁵. For this reason, and because it was easier to find 50 cents per day for one candle than R2.39 for a packet of six, candles were usually bought singly from the spaza shops. It was pointed out that by doing this the women

were paying R3 for six candles as opposed to R2.39, that is 20% more (or the equivalent of another candle). Some of the women merely shrugged; making it clear that they were either not willing or not in a position to take advantage of the information. But the two women from the households in which there were weekly waged men, each bought packets of candles when they next received a lump sum of money¹⁶. However, as one woman explained, buying a packet was only a first step in an attempt to save, the next step was trying to maintain the rationing of one candle a night otherwise her effort would be negated.

I tried by all means to buy a packet of six and not let my husband know, otherwise he will sit up the whole night using all the candles¹⁷.

This insight raises questions around household resource management and authority. The assumption that women are the primary selectors and purchasers of fuel for domestic consumption proved correct, at least in the cases of the ten women who participated in the daily monitoring, and appeared likely to hold for the majority of the women in the group who met once a week at Canaan. There were no cases reported of men making decisions about the choice of fuel type even where men were the primary breadwinners¹⁸. But women's authority to manage the consumption of supplies once they had been purchased was contested. This was not the only occasion on which it was implied that men were careless about the energy saving or budgetary limitations of their co-habitors¹⁹. In this instance the perceived way to maintain control was to hide the stock. This supported the women's contention that they felt alone; there was no perceived joint responsibility and the most effective way to retain control was not to enter into any dialogue. This perceived inability to win an argument, or, in a broader sense, manage resources for which she was responsible, was a significant factor in assessing women's status in the household and a pointer towards the kind of support women would need if the dynamics of the household were to change.

On the other hand, the position of power²⁰ afforded by being in control of the source of light, is a strong one, perhaps not easily abrogated when there are few sources of power available to one.

The diminishing value of candles was another issue. The women complained that a few years ago candles looked exactly the same as they do now but they burned for twice as long and cost half the price. This was confirmed by several people who have used candles on a long term basis. The difference is accounted for by a faster burning wick and wax²¹. The light from one candle is barely sufficient to light a shack let alone read or study by (which is why the post-matriculation student in the broader energy survey used paraffin and gas lanterns). In one of the women's group's homes an ingenious design was used to boost the effect of the small candle flame. The inside walls were papered with newsprint which was then polished with clear floor-polish until it shone. The polished surface reflected the light and improved the visibility considerably. The efficacy of the candle-light thus enhanced, the mother and daughter sat one each side of the candle and were able to read at night²².

Heating and cooking

Wood was used by all ten participants as a supplement to paraffin for heating. As fuels both wood and paraffin were disliked by all the women in the group. Wood had the advantage of being free or cheap. It was collected from the dump or from the bush some forty minutes walk from Canaan or purchased for R2 a bundle weighing approximately 10 kilograms which was "brought in from the rural areas" by women simply known as "sellers"²³. As supplementary fuel this wood was consumed over one to two weeks. The women described the disadvantages of wood thus: it is not always available to urban dwellers, it is hard work to collect, it makes you dirty while you collect it, fires make a lot of smoke which make you dirty while you are cooking and make you smell of smoke afterwards. Wood-fire is slow to cook on, it takes a great deal of time to make and has to be constantly tended. Fire has to be

made outside the dwelling and has to be watched; it is difficult for a mother to be busy inside and outside the shack at the same time. In inclement weather it is inconvenient or impossible to light a fire and cook outside. In essence, using wood is labour intensive; it constitutes physically hard work, makes one dirty and is time consuming.

An important point to note about the settlement at Canaan is that it was established on a steep and geologically unstable site where trees had been planted to hold the soil. When the settlers began to arrive these trees provided an immediate and obvious source of building materials and firewood, and people began to chop them down. An attorney, acting on behalf of the Canaan Committee in the land negotiations, explained to the residents at a community meeting that the trees could not be chopped or removed without the risk of precipitating a landslide²⁴. The residents were sensitive to this warning, and the trees were not subjected to further damage²⁵. This belied the common perception that poverty stricken people disregard their environment²⁶. Despite the extra work involved, the women walked to the dump or to an area of bush nearby, to obtain wood.

Wood or Paraffin?

It was significant that in this area where both wood and paraffin were available and wood could be obtained free, women consistently chose to purchase paraffin. This was despite their very real economic constraints. All ten participants used paraffin more often than wood. When asked why, the common response was: "It's the only means"²⁷. As has been pointed out, it was not the only means. Wood was readily available at little or no cost and gas was available at the local garage. When the same women were asked why they used wood if paraffin was "the only means", they replied: "It's the alternative and it's cheaper". Upon probing it became evident that the women referred to paraffin as the only viable domestic energy for their purposes. Its viability was predicated in its convenience and cost, its availability in terms of the

distribution network, and the absence of something better. Wood was not perceived as a viable source of domestic energy. It was perceived as a short-term, economic and disciplinary measure; a necessary intervention when paraffin and money were depleted simultaneously. Thus, albeit driven by economics, women did make choices, and whenever possible, chose paraffin because of its advantages over the so-called lower order fuel, wood.

Paraffin

Thoko, who is 39 years old, told the story of her courtship and marriage. She described the lobola (bride price) paid by her husband-to-be to her parents, and interestingly, her perception of his considerateness in giving her mother paraffin among his gifts:

He paid all things that were asked for by my parents ... sleeping rugs, a big, big Zulu three-legged cooking pot ... and twenty litres of paraffin - in those days it was a treat to have that much of paraffin, and a primus stove These things are to say 'I'm grateful for those times when you have had sleepless nights bringing up your children. If you have nothing to put on you on cold nights here is a rug, and here is a pot to cook and here is an axe so that you can go and cut wood so that you can make fire ... or here is paraffin to put in the stove; you musn't carry on going to the bush to cut wood...' 28

However, having come to the city to be with her husband, and having worked for years in wealthy white households who had electric washing machines and microwave ovens, Thoko's perception of the luxury of paraffin had dimmed along with the other women's. In response to the question "What do you like about paraffin?", thirty-six out of forty respondents replied "nothing", four shrugged their shoulders and said "no comment". Not one of the forty respondents considered paraffin a satisfactory fuel. The ten women monitoring their consumption and expenditure on paraffin readily enumerated their complaints. These fell into subjective and objective categories which are explored separately. Respondents said paraffin was poisonous, dirty, dangerous, expensive and inefficient.

These allegations are examined in the following chapter, in relation to the use of appliances and food.

Endnotes

1. Zodwa Mavundla, women's group meeting, Canaan, 21 November 1990.
2. R. Viljoen and A. Eberhard, "Urban Domestic Energy Transition", unpublished paper, Cape Town, June 1990, p9.
3. This proportion is likely to be in the region of 20% of lower household incomes whereas it is likely to be only 4-5% of the income of a white urban household.
4. A follow-up study, funded by the National Energy Council, thoroughly investigated incomes and work-in-progress is confirming the conclusions of this dissertation.
5. E. Ardington, Buckpassing in Canaan: An Example of Authorities' Failure to Address the Needs of Informal Urban Dwellers, 1992, p 21.
6. Women's group meeting, Canaan, 14 November 1990.
7. The definition of the informal sector is contested. For the purposes of this dissertation the following definition is accepted: J. May and S. Stavrou, The Informal Sector: Socio-Economic Dynamics and Growth in the Greater Durban Metropolitan Region, 1989, p 6.
8. Mavundla, op cit.
9. Women's group meeting, Canaan, 5 December 1990. On one occasion the women had bound books inside their bundles of cardboard before taking them to the waste collector, on another they soaked the inside bundle of cardboard in water so that it would weigh more. The women resented their dependence on this man. Sometimes if they had had a bad week he allowed them to take vegetables from his garden, or that he had thrown away, and for this they felt they should be grateful and did not understand why they felt angry instead.
10. Ibid.
11. Since all the participating households had fled burning houses and many had lost relatives this was not idle speculation.
12. Personal communication with fieldworker, Sizakele Mkhize, January 1991.
13. Ibid.
14. Ibid.
15. Mavundla, op cit.
16. Women's group discussion, Canaan, 5 December 1990.
17. Ncamusile Malunga, women's group meeting, Canaan, 5 December 1990.
18. In the follow-up study referred to in (4) there was an instance of a boyfriend determining both the fuel to be used (gas) and the food to be cooked. The woman said it was because she had no schooling and was ignorant, whereas he had a good job (as a policeman) and paid for everything.
19. The inconsiderateness of men and children was recorded several times in the meetings of the women's group at Canaan on 14 and 28 November and 5 December 1990. The women complained that older children, who often did the cooking, rarely remembered to turn the paraffin stove off.

20. D. Posel, 'Women's Power's, Men's Authority: Rethinking Patriarchy', paper presented at the conference on Women and Gender in Southern Africa, University of Natal, Durban, 30 January - 2 February 1991.
21. Personal communication with Kelly Knott, Durban, May 1991 and Michael Fish, Little Springtime, 7 November 1992.
22. Canaan, March 1992.
23. Women's group discussion, Canaan, 28 November 1990.
24. The attorney who assisted the Canaan residents to resist eviction and spoke at the community meeting was Peter Rutch from the Legal Resources Centre, Durban.
25. Two years later a disillusioned settlement and a substantial change of population has seen the beginnings of tree cutting again. No follow-up information was given to the residents.
26. R. Tobich and C. Dingley, 'Electrification of the Ciskei: Attitudinal Survey among the People', Research Review, vol 12, no 2, 1988, p 6.
27. Personal communication with Sizakele Mkhize, December 1990; this was by far the most common response by the forty respondents to the energy survey.
28. Thoko Qwaba, "Thoko's Story" in No Space to Plant: Stories Told by Women from Canaan, to be published.

CHAPTER 8

AND THEN THE PARAFFIN RUNS OUT: FUEL IN THE CONTEXT OF EVERYDAY LIVING

Cooking in one pot takes a lot of trouble. Everybody wants hot water and cooked food at the same time. And then the problem is the paraffin runs out¹.

The essence of this chapter is contained in Zodwa's succinct description in the statement above. There can be few better examples of the connections and slippage between fuel, appliance and food than in Zodwa's experience. Since fuel and the manner in which it is used should not be separated, this chapter investigates the subjective and objective complaints against paraffin in relation to the appliances used and the food cooked. The complaints are elucidated first:

Paraffin is poisonous: paraffin liquid and fumes are poisonous. Women complain that it is the cause of respiratory problems; eight out of the ten women mentioned difficulty in breathing, headaches and nausea as regular consequences of cooking with paraffin. Skin contact with paraffin causes irritation, burning and in some cases peeling. A further hazard is that paraffin is frequently sold in cold drink bottles and drunk in error by small children².

Paraffin is dirty: paraffin burns leaving an oily black residue. It makes the pots black and difficult to clean, it leaves black marks up the walls which "can never" be cleaned. Being oil based, paraffin is not soluble in cold water; it cannot be cleaned with cold water and a rag. A relatively expensive cleaning agent or hot water is needed and the latter involves using more paraffin to heat the water. In addition, paraffin smells unpleasant.

Paraffin is dangerous: paraffin is, of course, highly inflammable. In a shack settlement such as Canaan where the shelters are built in close proximity and are crowded and small (often no more than 6m² and less than 2m high) this property presents an additional hazard. In six months at Canaan from November 1990 to May 1991, nine shacks burnt down in three separate incidents. In the first, on the night of 26 November 1990, four shacks burned down as a result of a candle burning out, falling over and setting paraffin alight. A strong wind carried the flames to adjacent shacks. All that remained the next day were charred iron beds and a some half-melted steel tools. Once again, probably for the second time in a year, the occupants had to re-build their homes. The second fire was caused by children playing with matches near the paraffin stove and resulted in the loss of two shacks and the gruesome death of a four year old. In a third incident another burnt-out candle caused the initial fire and the destruction of two shacks.

Each time there was a fire, more than one household was affected because the flames were carried so easily to adjacent shacks. The total destruction of the shacks was attributed to the paraffin in each dwelling catching fire and staying alight and the fact that there was no water on tap to fight the flames³. Candles, paraffin and no water on site were a lethal combination.

For the community as a whole, the fires were demoralising and expensive. Funeral costs, to which most households contributed, were a regular and costly item in household expenditure at Canaan (see Chapter 4).

Paraffin is expensive: the women complained that paraffin was expensive. This was a subjective judgment predicated on the low realisable incomes. Nonetheless the substance of this allegation needs to be assessed. Cost is invariably a factor advanced in arguments about the viability of large-scale electrification schemes for low income households in South Africa and it is important to separate and elucidate the various facets of the argument before

making recommendations about what people can afford. Details of the actual price of paraffin at Canaan are given in Chapter 6. The fact that the women were spending over 20% of their households' incomes on fuel justified the perception that energy was expensive, and paraffin constituted a major proportion of this.

Ways of improving the situation and supporting the women were, however, not immediately apparent. Paraffin, candles and batteries sold by the spazas at Canaan cost more than those sold at formal outlets. In addition some petrol stations and supermarkets sold paraffin relatively cheaply in bulk. To benefit from this the women would have needed at least R20 plus the bus or taxi fare from Canaan plus the willingness and ability to carry twenty litres of fume-emitting paraffin. The women rarely had the cash in hand necessary to give them this option. The spaza owners bought in bulk and dispensed in amounts to suit their clients. The women in the group numbered among the 50% of households at Canaan who bought relatively small amounts (between 500ml and 1500ml) of relatively highly priced fuel from the spazas on the basis of the funds available to them each day⁴. The alternative to the spazas was to buy from local stores in the area adjoining Canaan.

There were further complicating factors. It was usually a child who was sent to the closest spaza to buy the daily ration⁵. This meant that the women were largely unaware of the different prices charged by the spaza owners until a specific price increase was brought up at a weekly meeting - and precipitated this study⁶. That afternoon the discussion about the apparently arbitrary increase was animated. Women were interested to hear what other shack shops charged for paraffin and candles. Significantly, they appeared to have established relationships (and sometimes credit facilities) where they shopped and were not immediately amenable to changing⁷. It was pointed out that supermarkets in town were the cheapest suppliers and the local 'Indian' storekeepers the second cheapest, but this was not necessarily the deciding factor.

The women reasoned that the residents of Canaan had to support each other and buy at the shack shops. They were clear that they wanted any profit made at their expense to feed into Canaan people's pockets and not those of supermarket or cafe owners⁸. In addition the disadvantages of having twenty litres of paraffin in a shack were strongly argued: it was very dangerous because it was so inflammable (the four shacks had just burnt down); it was bad enough having the fumes while cooking was being done, but twenty litres was just too smelly to keep in the shack; there was not enough space for another bulky item in the crowded dwelling; and the mess and inconvenience of having to decant paraffin into bottles and stoves was not worth the saving to be made, especially for those who suffered skin irritations from contact with paraffin.

After a lengthy discussion some women thought they might walk further to another spaza or to an 'Indian' store to buy paraffin at slightly cheaper rates. Three women said they might try to club together to buy in bulk, and two decided to make the effort to buy in bulk on their own. However, the reality was that the spazas offered the most convenient service in terms of hours kept, quantities available and cost, and most women continued to patronise them. A shack shop owner presented his case as follows:

I bought this shack shop on June 10. I used to sell cigarettes at Berea Station. I sell bananas, paraffin, onions, bread, UJuba, beer. I sell paraffin for R1.30 a bottle. I pay R20 for 20 litres and get a profit of R12 [sic]. I sell candles for 40 cents each. I am still going to count how much profit I make on them. There is a supermarket above here where I buy things. A man here helps me [carry the things]... We usually make between R45 and R50 a day. I have children in Umtata. I send them things. Last month I was home. It's very far so I only go every month or two...⁹.

Paraffin is inefficient: a woman complained:

Sometimes a litre of paraffin cooks only dried beans, and cooking bread uses a whole litre. Before the day ends I use two litres of paraffin¹⁰.

This complaint is problematic. If a paraffin stove is kept clean, the wick trimmed regularly and only the smallest amount allowed to burn at a time, its burning time improves noticeably¹¹. At Canaan the difficulties of maintaining a stove in this pristine state were several: there was a shortage of cleaning materials (paper, cloths, water or detergent); the women said they did not have scissors or a sharp enough knife to trim the wick, and a desire for rapid cooking and sometimes for heating the shack accounted for the tendency to burn the wick on high most of the time.

The unwanted labour involved in maintaining the appliance and a lack of knowledge about the "tips for fuel efficiency" contributed to the perception that paraffin is inefficient. On the other hand it should be noted that primus stoves are easier to maintain at a constant low heat than a fire is, and for this reason are well suited to simmering - as is required for cooking most staples. In addition paraffin appliances are efficient in the relatively high order of 50% (approximately twice as efficient as many electrical appliances)¹².

The issue of appliances is a vexed one and of paramount importance in the transition from one energy source to another. The transition to higher order fuels (wood to paraffin or paraffin to electricity) is constrained by the dramatic leaps in cost of both the higher order fuel and the corresponding appliances. Given the constrained economic circumstances of the ten participating households, what were the appliances the women deemed essential?

Appliances and energy usage patterns:

All ten households had a paraffin stove, a paraffin iron and nine had a battery operated radio. In addition there was one paraffin heater, one battery operated torch, one gas stove and one battery operated television set. None of the participants owned a paraffin lantern nor a gas light. The ten households used predominantly candles for lighting which was typical of most of the residents of Canaan¹³.

Battery operated appliances

Radios: consumption and expenditure on dry cell batteries were not adequately monitored by this study. Indications were that batteries were bought irregularly but were high on the priority list once food had been accounted for. The households spent an average of R2.29 a week on batteries, or the equivalent of one and three quarter bottles of paraffin. This is sufficient to warrant further investigation and may be an area where electricity would provide considerable cost saving. Since the appliance is on hand already, only the small current required to power a radio would have to be paid for. This however does not take account of the initial connection fee.

Television: there was only one household in the study who owned a television set. This was run off a car battery which originally cost R100 and was recharged approximately every ten days.

Paraffin appliances:

Irons: each household had and regularly used an iron which was heated on a paraffin stove. Ironing in the heat of the day (so that the visibility was good and according to the rhythm and timing of domestic responsibilities) inside a small shack using a paraffin-heated iron with the accompanying emission of heat and fumes, seemed the most arduous of all tasks. The labour could be perceived as the epitome of the dedication to 'housewifeliness' and the women and older children's efforts to maintain dignified and respectable appearances at all costs, within the community, going to school, work or negotiation meetings.

Stoves: the ten women in the group used single-burner primus or wick stoves which cost approximately R20 each new. They complained that these primuses lasted only about three months before the wick needed replacing or they simply "collapsed". Double-burner primus stove were considered superior both in terms of convenience and durability. The problem was that they cost

from R30 upwards. That is they were at least a third more than single-burners and R30 was a third more difficult to accumulate than R20. Another disadvantage was that although they lasted twice as long, they were expensive to repair.

The women articulated their irritation at being able to cook in only one pot at a time on a single burner. Nolwazi expressed her frustration thus:

Sometimes a litre of paraffin cooks only dried beans, and cooking bread uses a whole litre. Before the day ends I use two litres of paraffin cooking in just one pot all day¹⁴.

Much of the literature now acknowledges that technologies are not value free or value neutral¹⁵. Although primus stoves are relatively well suited to the simmering required to cook bread and beans, the constraints of a single-burner appliance which requires constant cleaning and tending are considerable: what would men have designed for their own use?

If a woman cannot plan ahead because she is uncertain of her income that day, or has "only some few cents" with which to juggle, does she buy food or fuel first, and how does she decide on what type of food or fuel to buy?

Particularly interesting was the regularity with which women said, "I had no money so I cooked bread today". Bread is made with a small packet of flour, salt and a raising agent (such as sour milk, beer or yeast) and water, and is boiled in a strong plastic bag for over an hour. This consumes a litre or more of paraffin. The combined cost of the ingredients plus the paraffin is twice that of a government loaf of bread - even one bought at an inflated price at a spaza shop. When asked "Why do you make bread?", the responses indicated that it was not the cost that was the first consideration.

The bread we make is so nice, W. It is so nice if a woman makes bread and it's not too much work. First you mix the dough, then you have to wait a long time for it to rise if you use yeast. Then you have to find one or two packets* that don't have holes. You put the well-risen dough inside and tie it

up securely so it doesn't get wet and gets crusty. Then you boil it on the stove for an hour and it smells good. When it's ready it's all hot and steamy and smells good and the children will just say "Ooh, ma, you've made bread", and eat the whole lot and go to sleep without asking for more¹⁶.

[* Since the women do not shop at supermarkets where carry bags are supplied, plastic bags were a scarce and valued commodity at Canaan].

In this case it was not so much the amount of money spent on making bread that was important, but the implications of satisfying mothering and housekeeping. "It's so nice if a woman makes bread and it's not too much work" recognises the sexual division of labour that apportions cooking to women at the same time as it acknowledges the satisfaction of making bread. Perhaps most significantly, because it was so rarely articulated, the speaker identifies the expediency involved in the decision: the work involved is not only manageable but advantageous in relation to the benefits derived from being perceived as a mother who cares enough to make bread. The expense and inconvenience of paraffin and the extended cooking time do not appear to be a major consideration. What was important was that the children were satisfied and the woman felt that she had fulfilled her role, as provider and nurturer, adequately.

The group was aware that although bread was appreciated it did not constitute a sufficiently nourishing meal on its own. What might constitute a nourishing and affordable meal was regularly discussed. It was generally agreed that beans and bread or phutu fulfilled the necessary requirements. This was perceived as relatively inexpensive combination and good value for money both in terms of being filling and nutritious¹⁷. This meal was enjoyed by the whole family although it was not their favourite. This was meat and phutu or samp, but meat was considered too expensive for every day consumption.

However, when the group calculated what beans, bread and the two litres of

paraffin cost in total, it was equivalent to purchasing a kilogram of meat or a chicken and cooking this on a (free) fire outside. Was this an option? The group explained why this was not considered a feasible alternative. To buy meat entailed a walk to the butcher which took about twenty minutes and a further walk to the dump or the bush to collect wood. If there was only a little money at the end of the day the butcher might be closed before the decision could be made, whereas the spazas would be open until late which allowed for last minute purchases. (In fact the women usually made use of the day light for cooking and started preparing the evening meal in the mid or late afternoon). Then there was the tediousness of making and tending the fire before cooking. Once again the labour intensiveness of a wood fire was emphasised. This process was more demanding than than buying the necessary ingredients from the spaza. Usually, the women agreed, such a meal was not worth the effort because it was not as filling as beans and bread. The question of whether the women themselves would receive less food if it were meat¹⁸, was unfortunately not addressed. Although the slowness of paraffin and the amount necessary to produce a meal were disadvantages, the convenience of being able to buy paraffin and cook inside one's own home, in one's own time, outweighed the other considerations.

One afternoon one of the woman explained to the group how she had overcome the limitations of a single burner and still fed her family nutritiously. She had cooked samp and added different vegetables to the same pot to make a stew¹⁹. The suggestion of the stew was successfully adopted by others. Over the next month other women in the group reported that they were using a variety of vegetables and greens, from pumpkin leaves and wild spinach that they picked themselves, to cabbage and carrots found at the dump to tinned beans and onions bought at the spaza, and that they were pleased that they had found a way of persuading their children to eat vegetables²⁰.

Food and fuel are complementary needs. There is evidence in the literature that fuel shortages affect incomes²¹, lead to changes in the number of cooked meals a day and alter the types of food consumed²². The period of time monitored in this study was too short to discern changes in eating patterns. Certainly more refined foods were preferred when available; white bread was bought and cooked in preference to brown, refined meal meal not only takes less time to cook than coarse, but is more readily available, and only one of the ten monitored households cooked porridge for breakfast; for the others if there was breakfast, it was bread and tea. The difference in the nutritional value between white and brown bread was not known to the group. The high price of fuel may contribute to malnutrition but it is just one of several factors in a complex socio-economic and gendered network.

The preparation and serving of the evening meal was one of the significant tasks of the day, either performed or overseen by each woman. Evidence of her role and importance to the household inhered partly in the time and labour expended in this function. This could account for the lack of success of the introduction of "wonderboxes" and other fuel and labour saving stoves and Canaan: these diminished the visibility of the woman's role. Finally when the food was prepared, the household sat wherever there was space in the shack and ate together. The significance of the housekeeper and mother involved not only the satisfaction of producing a meal but also in watching it being shared and enjoyed by members of the household together.

Endnotes

1. Zodwa Mavundla, women's group meeting, Canaan, 21 November 1991.
2. In a study done in three hospitals in the Cape, paraffin accounted for 61% of the poisoning of children under the age of four, and was fatal in approximately 3% of the cases. Personal communication with Dr Blanche de Wet, Trauma Research, Medical Research Council, Cape Town.
3. Women's group meeting, Canaan, 28 November 1990.
4. W. Annecke, 'Fuel for Thought', paper presented at the conference on Women in Africa and the African Diaspora: Bridges across Activism and the Academy, Nigeria, July 1992.
5. W. Annecke, 'Rising from the Ashes', New Ground, no 9, Spring 1992, p 30.
6. See Chapter 2: Methodology.
7. Women's group meetings, Canaan, 28 November 1990 and 5 December 1990.
8. The spaza shop owners were strongly supported on other occasions too; video interview with cafe owner, 15 November 1990.
9. Video interview with unnamed spaza owner, Canaan, 12 November 1990.
10. Nolwazi Phuza, the women's group meeting, Canaan, 28 November 1990.
11. Personal communication with Carla Eckersdorff, Shell House, 1991.
12. R. Viljoen, National Energy Council Workshop for Project Leaders, Pretoria, August 1991.
13. E. Ardington, Buckpassing in Canaan: An Example of Authorities' Failure to Address the Needs of Informal Urban Dwellers, 1992, p 26.
14. Nolwazi Phuza, the women's group meeting, Canaan, 28 November 1990.
15. Vandana Shiva, 'Appropriate Technologies', paper presented at Earthlife International Environment Conference, What It Means To Be Green, University of Natal, Pietermaritzburg, 15 September 1992.
16. Annecke, op cit.
17. The women had previously demonstrated their awareness of the nutritional value of beans by filling "beans" in the "meat" column of the logging sheets on days when no meat was bought, and said that they had learned this at clinics.
18. Irene Dankelman and Joan Davidson, Women and the Environment in the Third World: Alliance for the Future, 1988, p 71.
19. Women's group meeting, Canaan, 28 November 1990.
20. Women's group meeting, Canaan, December 1990, January 1991.
21. Dankelman and Davidson, op cit, p 71.
22. Liz Clarke, 'Malnutrition', paper presented to the Institute for Race Relations, Pietermaritzburg, 1977.

CONCLUSION

We need these meetings to show us. We thought our being strong is not of significance because we are not enlightened. We don't know what direction to go in. When we thought we were taking a step forward we were taking two steps backwards. Now we know¹.

Briefly the dissertation offers a preliminary study of the lives of ten women living in an urban informal settlement with a focus on domestic energy usage. The investigation is not treated discreetly but is set in the context of other basic needs as the women participating in the study perceived them. Did the collection of information for this dissertation constitute research on women or research for or with women, and what were our conclusions about survival strategies?

The women's group meetings, which were usually held on Wednesdays were attended by a core group of about twelve women and an additional twenty-three women attended irregularly. In total some forty different women attended, several of whom had not attended a community meeting, or as in one woman's case, attended, but had little regard for men and declined to speak in public. The women's group afforded an opportunity for such women to be heard.

The first week that the women completed the monitoring forms they expressed some satisfaction in being able to account for the amounts disbursed each day. They were surprised both at how much (relatively speaking) they managed to scrape together from their own activities and how much they spent. This provided the group with a concrete account of their (women's) economic value in the household apart from their domestic responsibilities. The forms were conscientiously completed and brought to meetings. The women listened to the feedback from the previous week's monitoring and

discussed access to water, food and fuel, prices and availability with vigour. In some instances the discussions changed behaviours (as in the women who bought packets of candles in Chapter 7) but more often they did not. The logging sheets seemed to serve more as a warming up exercise or a trigger for what the women really wanted to discuss. Whoever had news to tell or a question to ask would wait until the business of the meeting was over (the monitoring discussed and the state of everyone's finances that week commiserated or celebrated, see Chapter 8). Then by some slight phrase on intonation, a woman would indicate a change in topic of conversation and this would be taken up immediately by the others.

I read in this eagerness to change the focus an indication that the group was not really interested in assessing their means - at least not in the manner undertaken. After all, the notion of keeping accounts, although it had come from one of the members of the group, was an unusual one that I had seen the use of and taken up, and the focus on energy had been my interest. Together these could be argued to constitute sufficient top-down management to ruin any project. In addition the discussions about prices and the reasons for not buying in cheaper quantities had persuaded me that there might be little of real value or interest in the results being produced. Consequently at the third meeting I suggested that the logging should cease. The women were adamant that it should not. For whatever reason the women wished to continue to meet together.

The effect of my presence in the women's group was difficult to assess and changed over the months. As an outsider, yet a representative of the interests of Canaan at meetings with other outsiders, my initial role was as a listener and a recorder of land and housing needs. A second role was as a facilitator, assisting women to articulate their needs, and a third was as an activist: reflecting what the women had told me back to them and encouraging discussion, debate and action.

Providing information (on topics as diverse as land and housing rights, high blood pressure, how to organise a creche, sewing and literacy); highlighting alternatives and offering choices which may not have been previously perceived was another significant function. If there was 'empowerment', in the short term it came not so much from this study as from its incidental results - bringing women together who had not previously known each other, and who proceeded to unite in action on several fronts.

The group knew from the beginning that my presence was temporary and met of their own accord irregularly from December 1990 onwards. It was this women's group which was responsible for the ousting of the dishonest Chair of the Committee in March 1991, and by May 1991, the women had formalised their structure and called it **Masicedani**. They began meeting, without me, every Sunday afternoon in order that more women would be free to attend. In explaining the launching of the new group and the need to get more women involved Gretta continued the quote at the beginning of the chapter saying:

Here we saw the light. We used to be just different women not getting on at all. Now we are good friends. Ever since this organisation we take care of each other. We know what to do².

It was the members of Masicedani who were responsible for the establishment of a creche and a feeding scheme for the children in June 1991 and for finally achieving the opening of a fire hydrant close to Canaan in September 1991. The women could not have accomplished these and other feats if they had not acted together and established a self-sustainable structure. Another advantage of the group was the sharing of experiences³ on childbearing and rearing, food preparation, work, men and sexuality⁴. The oral histories which were recorded and, by agreement with the story tellers, produced in a form suitable for women in similar positions⁵, affirm the richness and value of the women's life experiences and contribute to documentation and awareness of South African women's experiences.

In terms of the women's own priorities the most urgent need was for tenured land with access to water. Yet not just any land would suffice. The land required would need to be in close proximity of the present Canaan. Seven of the ten participants in the study were heavily dependent on the municipal dump for food and an income. Moving any distance away from the dump would remove their lifeline. "Starting over" causes immense hardship and contributes to poverty, both as status and as a material condition.

If, in the long term, the study contributes towards a woman-friendly energy policy it would serve more women than the ten who provided the core information. The study confirmed the assumption that women are still primarily responsible for managing household budgets and the acquisition of fuel and food. Together fuel and food accounted for a large proportion (some 60%) of the incomes of the ten participating households. A factor which was identified in the study as influencing the purchase of fuel, and which warrants further investigation by electricity and paraffin producers⁶ was the effect of the manner in which income was derived. Whether a woman receives her housekeeping money in one large sum monthly, smaller sums each week, or "some few cents" every day (or every few days) may affect her choices and the decisions that she makes. Saving from an irregular income, putting aside a relatively substantial amount to buy a packet of candles, an appliance or pay a bill, appeared to be more difficult for those women who derived their incomes irregularly from informal activities than it was for those women who received weekly or monthly wages - even though their total disbursements for a month might be comparable.

The women in the group purchased small quantities of relatively expensively priced fuel on the basis of the funds available to them on a daily basis. The monitored households whose incomes were low and unpredictable had to balance their daily spending accordingly and were unlikely or unwilling to spend more than approximately R2 a day on domestic fuel. They did not have

the cash in hand to give them the option of travelling to bulk depots or buying in wholesale quantities. In addition they expressed loyalty to the spaza owners at Canaan from whom they preferred to make their purchases.

There were few constant principles involved in decision making but the perception of good housekeeping and a desire to provide a nutritious meal were most frequently expressed. The cost of fuel was an important but not always a determining factor in the decisions made by the ten women each day. Convenience as well as the perceived physical and emotional well-being of the women and their households were equally important. However these choices were made in the final instance within the constraints of the limited income 'in hand'.

For both objective and subjective reasons paraffin is thoroughly disliked. Although paraffin may be an inferior source of domestic energy in terms of quality, it is superior in terms of convenience. As a liquid it is able to be distributed in bulk and dispensed in amounts suitable for differing customer requirements, and was consistently used in preference to wood. In this transitional phase, women's reversion to traditional (lower order) fuels is determined largely by the harsh realities of poverty. The higher order fuel paraffin reduces the arduousness of the women's domestic tasks considerably.

The issue of appliances is a complex one and of paramount importance in the transition from one energy source to another. The transition to higher order fuels is constrained by the dramatic leaps in cost of both fuel and the corresponding appliances. It is difficult to assess how an electric stove or iron will be purchased if the household cannot at present afford a two-burner paraffin stove.

In most instances, the relative affordability of paraffin liquid and appliances in conjunction with its accessibility, efficiency and convenience in comparison

with other sources of domestic energy, suggest that it is likely to continue to be used extensively - at least in the short to medium term future. In this event there is substantial room for paraffin producers to improve their product before they can boast satisfied customers. Paraffin producers should be urged to improve their product without increasing the price. Poison by swallowing or toxic fumes, skin irritations, the unpleasant smell and residual grime from burning, all need to be researched and addressed without raising the price to consumers. The ripple effect of the recent increase (November 1992) in the price of paraffin has still to be analysed.

It is not the intention of the dissertation to suggest that low income households be limited to using paraffin. All households should be able to access electricity on demand, and consideration should be given to ways to do this. Energy planners need to consider the relative smallness of the amounts of money available to the households on a daily basis and the skill of the women in manipulating these in order to devise imaginative ways that women may derive maximum benefit from a variety of fuels. Structures should be designed whereby users in the category of the ten Canaan households are enabled to make payments for electricity in small, regular amounts as currently occurs with wood and paraffin. The subsidisation of energy and appliances warrants consideration so that women are able to use electricity at least on 'windfall' days when income is unexpectedly high, without the burden of maintaining the system. Creative ways have to be found to do this; electrified study spaces, television lounges and kitchens are a possibility and it may be that these are natural extensions of the functions of a spaza.

In order to support women's strategies, a better understanding of the role of men in relation to fuel is required. Evidence from the study suggests that men perceive the cost and quantity of fuel consumed in the household to be less than it is; that they are (perhaps therefore) more extravagant than women in their use of fuel, and that women find this problematic to control. If this is the

case, then one of the implications is that in any information about domestic energy usage or savings has to be directed at both men and women.

Finally, energy in the form of domestic fuel played an important role in the lives of the women at Canaan, but energy in the form of the ability to act, played a crucial role. The cost of energy, both in terms of money and physical effort is enormous for most, paralysing for some. There can be few better illustrations of what may be implied in the phrase 'the quality of life' than observing the efforts expended by the women in the group to meet the basic needs of their households. The women's willingness to share experiences and discuss issues revealed some of the complex variables pertaining to decision making and led to small adjustments in daily schedules as well as experiments such as the successful 'mixed stew pot' cooked with one litre of paraffin on a single burner. The household management strategies employed by the women in the group had their own rationality which warrant further investigation and understanding so that women's needs can be taken into careful consideration in the planning of a women-friendly national energy policy.

Endnotes

1. Gretta Ndukwane, Canaan, 27 May 1991.
2. Ibid.
3. The setting of the words and actions of the women in print, as this dissertation has done, may imply freezing moments in time as if they are immutable. This was not the intention of the study which accepts change.
4. W. Annecke, 'Gossip', Agenda, no 11, 1991, pp 2-4.
5. T. Memela, G. Ndukwane, D. Phakati and T. Qwabe, No Space To Plant: Stories told by Women from Canaan, 1992.
6. Although it has not been the focus of this study, energy should be considered in its broader context of consumer goods and vested interests. Electricity producers, oil and forestry companies all have an interest in promoting the supply of a specific form of energy.

REFERENCES

I. PRIMARY MATERIAL

1. Official Sources

- Investigation done by Davies Lynn and Partners, Consulting Engineers and Engineering Geologists, 10 December 1990.
- Letter from Pieterse, C.A., City Medical Officer of Health to the Chairperson of the Canaan Committee and the Black Sash, 19 December 1990.
- Minutes of the meeting Pinetown Municipality and the Klaarwater/St Wendolin's Steering Committee, 26 January 1991.
- Minutes of the meeting held at the Legal Resource Centre, 17 April 1991.
- National Energy Council: Annual Report 1990-1991.
- Umgeni Water: Water 2000, Pietermaritzburg, 1990.
- Umgeni Water Annual Report, 1991.
- White paper on the energy policy of the Republic of South Africa, Government Printer, Pretoria, 1986.

2. Newspaper Articles

- The Daily News 6 June 1990.
- The Daily News 4 April 1991.
- The Daily News 11 October 1991
- The Daily News 18 October 1991
- The Daily News 19 October 1991.
- The Daily News 8 November 1991.
- The Daily News 30 March 1992.
- The Daily News 14 May 1992
- The Natal Mercury 18 September 1991.
- The Natal Mercury 8 November 1992
- The Sunday Tribune 9 October 1988
- The Sunday Tribune 16 June 1991.
- The Sunday Tribune 13 October 1991

3. Interviews

Take a place like Canaan, 20 minute documentary of interviews produced by the Black Sash and Audio-Visual Alternatives, Durban, February 1991.

Video Interviews at Canaan:

4 November 1990: Community Meeting at Canaan.

6-8 November 1990: video footage.

6 November 1990: Steven Joseph.

7 November 1990: Busisiwe Dlamini.

8 November 1990: Beatrice Memela.

8 November 1990: S. Msomi.

9 November 1990: Tengiwe Msomi.

9 November 1990: Peter Smuts.

10 November 1990: Unnamed woman.

12 November 1990: Buyise Ndlovu.

12 November 1990: Musa Nyathi.

12 November 1990: Unnamed spaza owner.

Derrick Watterson, Durban, 1990.

20 March 1991: Mr Ivan interviewed by Lynne Robertson-Hotz.

Discussion with women and the women's group, Canaan:

October 1990

14 November 1990

15 November 1990

21 November 1990

28 November 1990

5 December 1990

7 January 1991

3 March 1991

14 March 1991

26 March 1991

9 April 1991

27 May 1991

1 September 1991.

February 1991: discussion with the women's group and "sellers", Canaan.

4. Personal communications

- Ardington, Elizabeth. Durban, 22 January 1991.
- De Wet, Dr Blanche. Trauma Research, Medical Research Council, August 1991.
- Fish, Michael, Little Springtime, 7 November 1992.
- Gcaleka, Zuzuwe. Canaan, 19 November 1990.
- Jhavery, S.M. Primary School, November 1990
- Knot, Kelly. Port St John's, 21 May 1992..
- Mbuli, Maria and Gretta Ndukwane. Canaan, 1 December 1990.
- Mkhize, Sizakele. Canaan, 12 November 1990; 15 November 1990; 8 December 1990; January 1991; 25 March 1991.
- M, N. March 1991.
- Mnisi, Thembakazi. Canaan, 21 November 1990.
- Nombulelo, Canaan, 4 November 1990.
- Gwabe, Thoko. Canaan, 28 November 1990.
- Ross, Flona. National Energy Council Workshop, Pretoria, August 1991.
- Small, Janet. Black Sash National Conference, Grahamstown, March 1991.
- Eckersdorff., Carla. Shell House, 1991.

II. SECONDARY MATERIAL

1. Books

- Atello, J.R. and Baum, A. Residential Crowding and Design, New York, Plenum Press, 1979.
- Anderson, B. Imagined Communities, Verso, London, 1983.
- Barrett, M. Women's Oppression Today, Verso, London, New York, 1988.
- Bhagwati, J. Essays in Development Economics, Oxford, Blackwell, 1985.
- Berger Gluck, S. and Patai, D. Women's Words: The Feminist Practice of Oral History, Routledge, London, 1991.
- Bozzoli, B. Women of Phokeng, Raven, Johannesburg, 1991.
- Bowles, G., and Duelli Klein, R. (eds), Theories of Women's Studies, Routledge, London and New York, 1989.
- Brydon, L. and Chant, S. Women in the Third World: Gender Issues in Rural and Urban Areas, 1986.
- Bunch, C. Passionate Politics: Feminist Theory in Action, St Martins Press, New York, 1987.
- Burne, P.R. and Ontiveros, S. (eds), Women in the Third World: A Historical Bibliography, 1986.
- Chapman, J.D. Geography and Energy: Commercial Energy Systems and National Policies, Longman Scientific and Technical, Essex, 1989.
- Dankelman, I. & Davidson, J. Women and Environment in the Third World: Alliance for the Future, London: Earthscan Publications Ltd in association with IUCN, 1988.

- Davis, A. Women, Race and Class, London, The Women's Press, 1981.
- Dubois, E., Kelly, G., Lapovsky Kennedy, E., Korsmeyer C.W., and Robinson, L., Feminist Scholarship: Kindling in the Groves of Academe, University of Illinois Press, Urbana and Chicago, 1985.
- Eberhard, A., and Williams, A. Renewable Energy Resources and Technology Development in Southern Africa, Elan, Cape Town, 1988.
- Giddens, A. Profiles and Critiques in Social Theory, University of California Press, Berkeley and Los Angeles, 1982.
- Ginsburg, H. (ed), Poverty, Economics and Society, University Press of America, Lanham, 1981.
- Hagenaars, A. J. M. The Perception of Poverty, North Holland, Amsterdam, 1986.
- Harding, S. (ed), Feminism and Methodology: Social Science Issues, Indiana University Press and Open University Press, Bloomington and Milton Keynes, 1987.
- Harrison, P. Third World Tomorrow : A Report from the Battlefield in the War against Poverty, Penguin Books, Hamondsworth, 1980.
- Hess, B., and Ferree, M.M. (eds), Analysing Gender: Handbook of Social Science Research, Sage Publications, California, 1987.
- Jagger, A. Feminist Politics and Human Nature, Harvester, Brighton, 1983.
- Jardine, A. Gynesis : Configurations of Woman and Modernity, Cornell University Press, New York, 1985.
- Keohane, N., Rosaldo M. Z., and Gelphi, B.C. Feminist Theory: A Critique of Ideology, The Harvester Press, Brighton, 1982.
- Knowles, R.L. Energy and Form : An Ecological Approach to Urban Growth, MIT Press, Cambridge, 1974.
- Leach, G. Energy and Growth : A Comparison of Thirteen Industrial and Developing Countries, Butterworths, London 1986.
- Mies, M., Bennholdt-Thomsen, V., and Werlhof, C. Women: The Last Colony, Zed Books, London, 1991.
- Murray, H. A Spirit for our Times, Churchill Publications, Cape Town, 1992.
- Ndukwane, G., Memela, T., Phakati, D., and Qwabe, T. My Wash and Wait Clothes: Stories from the Women of Canaan, New Readers Project, Centre for Adult Education, University of Natal Durban, 1992. To be published.
- O'Neill, O. Faces of Hunger : An Essay on Poverty, Justice and Development, Allen and Unwin, London, 1986.
- Overholt, C., Anderson, M., Cloud, K., and Austin, J. (eds), Gender Roles in Development Projects, Kumarian Press, Connecticut, 1991.
- Roberts, H. (ed), Doing Feminist Research, Routledge and Kegan Paul, London, 1981.
- Sahlins, M. Stone Age Economics, Tavistock, London, 1974.
- Sontheimer, S. (ed), Women and the Environment: A Reader, Crisis and Development in the Third World, Earthscan Publications Ltd, London, 1991.
- Spiegel, A.P. and McAllister, P.A. (eds), Tradition and Transaction in Southern Africa, African Studies Fiftieth Anniversary Volume, vol.50, no.1 and 2, Witwatersrand University Press, Johannesburg, 1991.
- Stanley, L. (ed), Feminist Praxis : Research, Theory and Epistemology in Feminist Sociology, Routledge, London and New York, 1990.
- Stanley, L. and Wise, S. Breaking Out: Feminist Consciousness and Feminist Research, Routledge and Kegan, London, 1983.

- Tong, R. Feminist Thought: A Comprehensive Introduction, Unwin Hyman, London, 1989.
- Walker, C. Women and Gender in Southern Africa, 1945-1990, David Phillip, Cape Town, 1990.
- Wilson, F. and Ramphela, M. Uprooting Poverty: The South African Challenge, Cape Town and Johannesburg: David Phillip, 1989.
- Xenos, N. Scarcity and Modernity, Routledge, London, 1989.

2. Journals and Articles

- Abrahamse, L. "Getting it Right", Leadership, vol.9, June 1990.
- Anneck, W. "Gossip", Agenda, no.11, 1991.
- Anneck, W. "Rising from the Ashes", New Ground, no.9, Spring 1992.
- Anneck, W., Ardington, E. and Robertson-Hotz, L. "Canaan", Sash, May 1991.
- Bernstein, A. and McCarthy, J. "Post Group Areas Urban Planning and Management", Opening the Cities, The Urban Foundation and Indicator Project of South Africa, September 1990.
- Bernstein, A. "Sign Posts", Leadership, vol.9, June 1990.
- Botha, H. "Durban Now and in the Year 2 000", The Condenser, 1989.
- Dewar, D. "Giving SA's Cities a 'Human' Face", Democracy in Action, July/August 1990.
- Dunstan, J. "A Brick in the Wall", Work in Progress, no.72, January/February 1991.
- Du Plessis, T. "Power for the People", in New Ground no.2, December 1990.
- Flax, J. "Postmodernism and Gender Relations in Feminist Theory", Signs, Summer, 1987.
- Gillies, A. "Research for Empowerment: Tanzanian Women Explore Alternative Research Methods", Voices Rising, no.1, 1992.
- Haarhoff, E. "High Density Cities", Nu Focus, vol.2, no.1, Summer 1991.
- Hassim, S. 'Putting Women on the Agenda: Some Issues and Debates', Agenda, no.9, 1991.
- Joubert, P. "Encirclement", Leadership, vol.9, June 1990.
- Mabin, A.B. "Shacking Up with Private Capital", Work in Progress, no.72, January/February 1991.
- Madladla, P. "Informal Settlements: Needs of the People", Informal Settlements and the Core City proceedings of a seminar held at the University of Natal, Durban, on 10 June 1988.
- Mascia-Lees, F.M., Sharpe, P., and Cohen, C.B. "The Postmodernist Turn in Anthropology: Cautions from a Feminist Perspective", Signs, Autumn, 1989.
- Maughn-Brown, M. "Demystifying the Problem", Nu Focus, vol.2, no.1, Summer 1991.
- McCarthy, J., Simkins, C., and Bernstein, A. "Farming for Ideas", Work in Progress, no.72, January/February 1991.
- Pheterson, G. "Alliances between Women: Overcoming Internalized Oppression and Internalized Domination", Signs, Autumn, 1986.
- Rivett-Carnac, J.L. "Report on the Embo and Nqcolosi Water Supply Scheme", Indicator, September 1982.
- Rogerson, C. "Foreign Policies", Leadership, vol.9, June 1990.
- Strathern, M. "An Awkward Relationship: The Case of Feminism and Anthropology", SIGNS, Winter, 1987.

- Swilling, M. "Planning a Democratic Urban Policy", Work in Progress, no.67, June 1990.
- Tobich, R. and Dingley, C. "Electrification of the Ciskei: Attitudinal Survey Among the People", Research Review, vol.12, no.2, 1988.
- Tronto, J. "Beyond Gender Difference to a Theory of Care" in Signs, Summer 1987.
- "What Water Crisis?", "Politics of Water" and "Water and Health", Indicator South Africa: Rural Monitor, January 1983.

3. Reports

- Aitchison, J. "Interpreting Violence: The Struggle to Understand the Natal conflict", Centre for Adult Education, University of Natal, Pietermaritzburg : 1990.
- Ardington, E. M. Buckpassing in Canaan: An Example of Authorities' Failure to Address the Needs of Informal Urban Dwellers, Working paper no.24, Centre for Social and Development Studies, University of Natal, Durban, February 1992.
- Beckerman, W. Measuring Poverty in Rich and Poor Countries, Southern Africa Labour and Development Research Unit, Second Carnegie Inquiry into Poverty and Development in Southern Africa, Cape Town, 1984.
- BESG. "Feasibility of Upgrading of Section D Squatter Settlement", Umlazi Squatter Settlement Interim Report, August 1990.
- Best, M. The Scarcity of Domestic Energy : A Study in Three Villages, Southern Africa Labour and Development Research Unit, Cape Town, 1979.
- Clark, J. For Richer, for Poorer: An OXFAM Report on Western Connections with the World, OXFAM, Oxford, OXFAM, 1986.
- Cosser, E. (ed.), Homes for All: The Challenge of Homelessness, CREID, Cape Town, 1990.
- George, M. Black Urbanisation Trends in the Durban Functional Region, Inkatha Institute for South Africa, Durban. 1990.
- Kidgell, U. and Viljoen, R. Compendium of 1991/1992 Energy for Development Projects, National Energy Council, Pretoria, 1991.
- Law, S.M. and Eberhard, A.A. Directory of Rural Energy Programmes in Southern Africa (excluding South Africa), NEC, Pretoria, 1991.
- May, D. and Stavrou, S.E. The Informal Sector: Socio-economic Dynamics and Growth in the Greater Durban Metropolitan Region, Rural Urban Studies Working Paper no.18, Rural Urban Study Unit, University of Natal, Durban, 1989.
- Sutcliffe, M. Informal Settlements in Natal-KwaZulu: a Research Register, sponsored by The Urban Foundation, University of Natal, Durban, 1989.
- The Urban Foundation, Policies for a New Urban Future series, 1990
1. Population Trends
 2. The Urban Challenge
 3. Regional Development Reconsidered
 4. Rural development
 5. Managing the Cities
 6. Tackling Group Areas
 7. The International Experience
 8. Governing Urban South Africa
 9. Housing for All
 10. Homes for the Poor

- Van der Berg, S. The Socio-Economic Impact of Energy Provision to Settlements in the Rapidly Growing Metropolitan Areas of South Africa, with Particular Emphasis on Electricity, Interim Report no.3, Institute for Futures Research, University of Stellenbosch, 1990.
- Van der Berg, S., du Toit, J. and Wessels, A. The Socio-Economic Impact of the Provision of Energy to Settlements in Rapidly Growing Metropolitan Areas of South Africa, with Particular Emphasis on Electricity: Conceptualisation and a Framework for Research, Institute for Future Research, University of Stellenbosch, 1990.
- Wellings, P. A Case of Mistaken Identity : The Squatters of Lesotho, Development Studies Unit, University of Natal, Durban, 1983.

III. UNPUBLISHED THESES

- De Kock, R. "Garbage Picking as a Strategy for Survival", unpublished M.A. thesis, University of Natal, 1986.
- Haarhoff, E. "A Spatial Analysis of African Urbanization and Informal Settlements in Natal/KwaZulu", unpublished PhD thesis, University of Natal, 1984.
- Viljoen, R. "Fuel Study in the Winter Rainfall Region", unpublished M.Sc thesis, University of Cape Town, 1989.

IV. CONFERENCE PAPERS

- Anneck, W. "Fuel for Thought", paper presented at the First International Conference on Women in Africa and the African Diaspora: Bridges across Activism and the Academy, Nsukka, Nigeria, 12-22 July 1992.
- Anneck, W. "Out of the Fire to Find New Fetters", paper presented at the conference on Women and Gender in Southern Africa, University of Natal, Durban, January/February 1991.
- Clarke, L. "Malnutrition", paper delivered to the Institute of Race Relations, Pietermaritzburg, 17 June 1977.
- De Tolley, J. "Squatting in the Peri-Urban areas of Metropolitan Cape Town", paper delivered at the Black Sash National Conference, 1989.
- Hall, L. "The Use of Drawing in the Development of a Gender-sensitive Participatory Methodology in the Natal/KwaZulu Area", paper presented at the conference on Women and Gender in Southern Africa, University of Natal, Durban, 30 January - 2 February 1991.
- Little, T. "Towards new settlement policies in housing in Natal/KwaZulu", paper presented at the seminar on Improving the Quality of Life through Human Sciences Research; A Natal/KwaZulu Perspective, University of Natal, Durban, 13 April 1989.
- McCarthy, J. "Factual Background to the Durban Functional Region: Past, Present and Future", paper presented at the seminar on Prospects for a Greater Durban Services Authority, Urbanisation Programme Committee, University of Natal, Durban, 1989.
- Mkhize, S. "My Story", paper presented at the First International Conference on Women in Africa and the African Diaspora: Bridges across Activism and the Academy, Nsukka, Nigeria, 12-22 July 1992.
- Posel, D. "Women's Power's, Men's Authority: Rethinking Patriarchy", paper presented at the conference on Women and Gender in Southern Africa, University of Natal, Durban, 30 January - 2 February 1991.

- Raubenheimer, R. 'Land Usage Control and General Services', paper presented at a seminar on Informal Settlements and the Core City, University of Natal, Durban, 10 June 1988.
- Shiva, V. "Appropriate Technologies", paper presented at Earthlife International Environment Conference, What It Means To Be Green, University of Natal, Pietermaritzburg, 15 September 1992.
- The Urbanisation Group of the Natal Coastal Region of the Black Sash, "The Urbanisation Crisis", paper presented at the National Conference of the Black Sash, Grahamstown, 1990.
- Todes, A. & Walker, N. "Women and Housing Policy: Analysing the Past, Debating the Future", paper presented at the Conference on Women and Gender in Southern Africa, University of Natal, Durban, 30 January - 2 February 1991.
- TRAC, "Demanding a Place Under the Kgotla Tree: Rural Women's Access to Land and Power", paper presented at the conference on Women and Gender in Southern Africa, 30 January - 2 February 1991.
- "Violence in Natal: counting the cost: assessing the future", papers from an Institute for a Democratic Alternative for South Africa seminar held on 14 June 1990, Durban, 1990.

V. MISCELLANEOUS

- Gildenhuys, W., and the ML Sultan Technikon students' survey of Canaan, August 1990, analysed by E. Ardington in an unpublished report 1991.
- Haarhoff, E. "Durban in the Year 2000", Forum lecture, University of Natal, Durban, September 1989.
- Klotz, H., Mayor of Durban. Opening address at the seminar on Informal Settlements and the Core City, University of Natal, Durban, 10 June 1988.
- Report Back on the Shell Paraffin SAFE Forum, 7 February 1992
- Umgeni Water Brochure, 1990.
- Viljoen and A. Eberhard, Urban Domestic Energy Transition, unpublished paper, 1990.
- "World Water", November 1980.

Table A.
Example of Weekly Water Consumption by 10 Households
in comparison with fuel and water

Name	Household size	Water in Litres	WATER Cost	Fuel & Water	Food,Water,Fuel total expenditure
B.D	6 5A1C	350	16	42.9	97.95
J.M	9 2A7C	550	24	41	90.76
E.N.M	3 2A1C	300	13	26.75	74.66
N.P	3 2A1C	300	11	32.55	82.76
N.P	2 2A	300	12.25	28.64	72.64
J.T.M	12 6A6C	900	36	75.78	149.66
T.M	2 2A	350	14	41.85	103.39
Z.M	2 2A	450	18	59.94	80.04
Z.M	3 1A2C	450	18	47.33	91.99
G.N	3 1A2C	350	14	42	77.32
	TOTAL	4300	176.25	438.74	921.17

Key
A - adults
C - children
Y - had in the home, did not buy
- or got free from the dump
N - did not buy or use

Table B. Self-Monitoring households weekly expenditure on food

Name	Household size	Dump	Average Weekly Expenditure on Basic Food				meat	vegetables	tins	Total
			bread	milk	sugar	staples				
B.D	6 5A1C	Y	9.8	10.15	6.8	4.8	20.85	3	1.65	57.05
J.M	9 2A7C	Y	10.5	6.6	5.42	7.19	16.29	2.75	4.54	53.29
E.N.M	3 2A1C	Y	8.05	6.6	2.75	9.78	16.69	5.5	2.59	51.96
N.P	3 2A1C	Y	9.1	5.86	3.7	3	16.03	3.4	4.5	45.59
N.P	2A	Y	10.4	7.98	1.2	2.6	22.36	4.55	5.96	55.05
J.T.M	12 6A6C	Y	19.6	2.59	Y	12.99	32	2	4.7	73.88
T.M	2A	Y	9.8	10.43	6.5	10.31	13.25	6	4.2	60.49
Z.M	2A	N	9.8	3.23	4.98	Y	16.86	Y	2.59	37.46
Z.M	3 1A2C	Y	9.8	1.09	3.59	12.99	14.7	2.39	Y	44.56
G.N	3 1A2C	Y	9.6	3.23	1.2	9.29	10	2	Y	35.32

Key

A - adults

C - children

Y - had in the home, did not buy
- or got free from the dump

N - did not buy or use

Name	Household size	Age	Income weekly	Average Weekly Consumption of Fuel for 10 Households								Total	percent of income	Av month
				Appliances, Extra	wood	candles	Fuel / Energy Sources			batteries	car bat			
B.D	6 5A1C	47	R80+	heater	Y	3.75	N	16.95	10	N	30.7	33.625	102	
J.M	9 2A7C	37	R100	Y	3	4.65	N	10.2	Y	N	17.85	17	71	
E.N.M	3 2A1C	27	R62.5	Y	2	4.2	N	9.73	Y	N	15.93	12.744	61	
N.P	3 2A1C	39	R100	Y	Y	4.13	N	10.75	2.5	4	21.38	21.38	72	
N.P	2A	32	R150	Y	Y	3.5	N	10.95	Y	N	14.45	9.63	63.7	
J.T.M	12 6A6C	48	R200	gas stove,TV	Y	4.78	18	12	Y	5	39.78	9.945	159.7	
T.M	2 2A	33	R47.5	Y	6	6.8	N	12.43	Y	N	25.23	26.56	92	
Z.M	2 2A	20	R125	Y	2	5.28	9	12.3	5	N	33.58	35.35	98.3	
Z.M	3 1A2C	27	R60	Y	2	5.39	N	14.25	7.99	N	29.63	31.19	118.2	
G.N	3 1A2C	45	R45	no radio	2	3.5	N	10.2	N	N	15.7	16.53	62	
TOTAL					17	45.98	27	119.76	25.49	9	244.23			

All households owned a stove, radio and iron

Key

A - adults

C - children

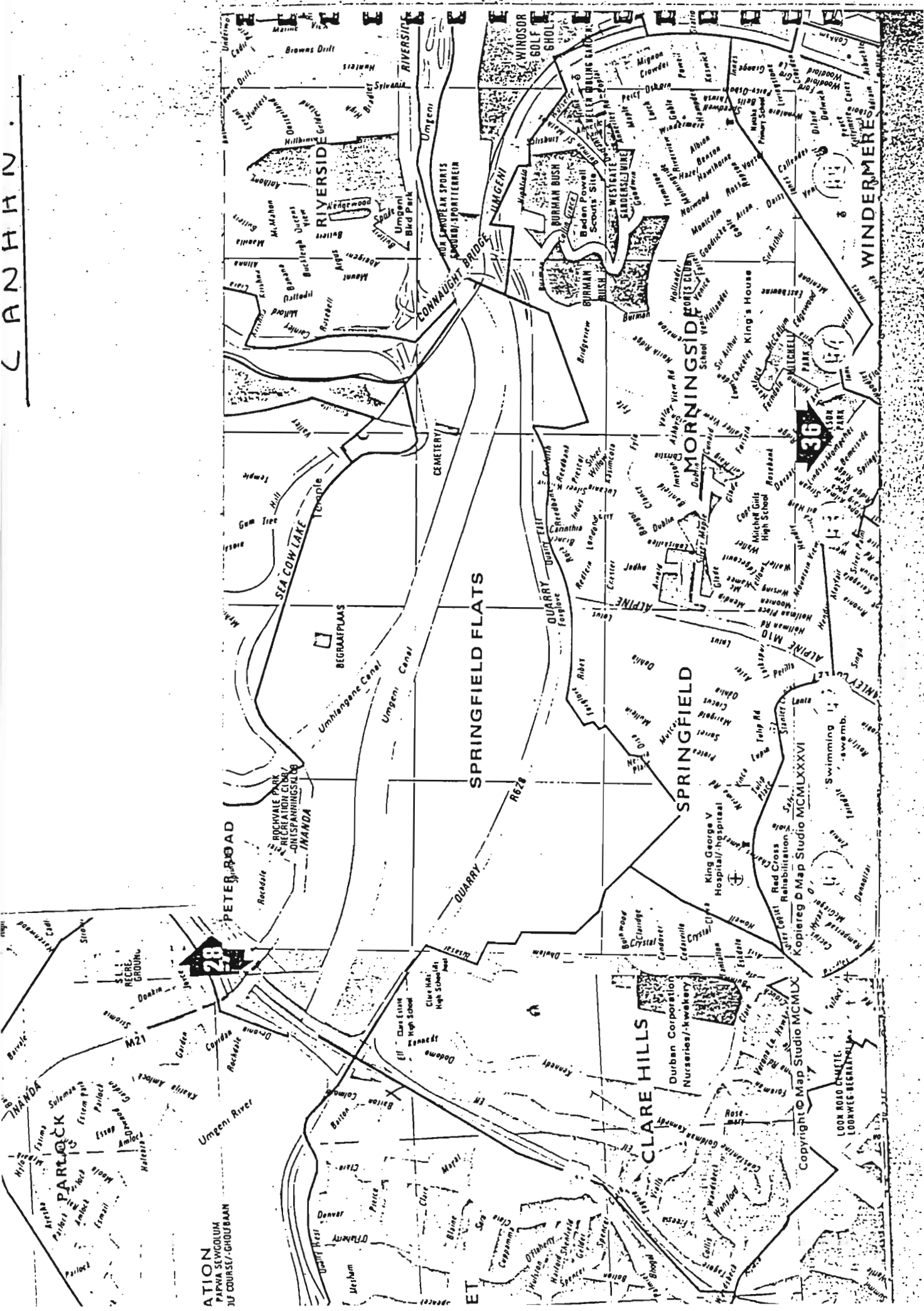
Y - had in the home, did not buy

- or got free from the dump

N - did not buy or use

APPENDIX I

CANAL



ATION
PAPWA SEWCOLUM
JUF COURSE/GHOUFBAAN

Copyright © Map Studio MCMLXXVI
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LOOK ROAD PHOTIC
LOOKWEE-RECARB

APPENDIX II

WARNING

This property is privately owned and as such it is illegal to reside, occupy, squat or erect any structure of whatsoever nature thereon.

Any person who resides, occupies or squats on the land is doing so illegally against the owner's will and without his permission.

You are hereby advised that the land is unstable and landslides could occur without prior warning. Your lives could be endangered due to the unstable conditions.

You are hereby warned and given notice to vacate and remove yourselves from the land together with structures thereon by ⁴⁶October 1990.

If you fail to do so legal proceedings will be taken to have you removed and to demolish the structures.

Take notice none of the undermentioned persons accept any responsibility for any damage or loss suffered by any person as a consequence of any landslide or any other cause whatsoever while you are on the land.




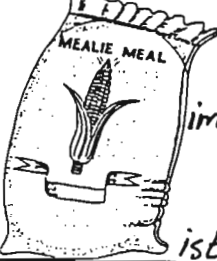
BY ORDER: The South African Roads Board

Department of Transport.

City Council of Durban

Dr L J Dobrovolsky


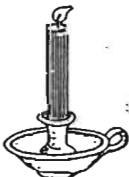



Siloette Investments (Pty) Ltd

date		name
	use	buy - how much
 <p>amanzi water</p>		
 <p>bread isinkwa</p>		
 <p>ubisi milk</p>		
<p>sugar ushukela</p>		
 <p>mealie meal impuphu samp istambu</p>		
<p>meat inyama</p>		
<p>Vegetables izagathe</p>		
<p>tins</p>		

APPENDIX IV

date:

name:

fuel	use	buy - how much
 <p>wood inicuni</p>		
 <p>candles khandela</p>		
<p>gas</p>		
 <p>paraffin</p>		
 <p>battery</p>		
<p>petrol</p>		
 <p>car battery</p>		

APPENDIX V

CANAAN SURVEY: ENERGY QUESTIONNAIRE

0. CODE NUMBER _____ 1. SHACK NUMBER _____
 2. INTERVIEWER _____ 3. DATE _____
 4. TIME _____

I'm _____ and I am doing a survey of
 whether people use paraffin, wood, coal and other fuels.
 The survey is for a project at the University of Durban.

A. INTRODUCTORY QUESTIONS

1. NAME OF RESPONDENT? _____
 2. AGE OF RESPONDENT? _____
 3. ARE YOU THE HEAD OF HOUSEHOLD?

YES	NO
-----	----

 IF NOT, WHO IS? _____
 4. HOW LONG HAVE YOU BEEN AT CANAAN? _____
 5. WHY DID YOU COME HERE? _____
 6. WHERE WERE YOU BEFORE? _____
 7. FROM WHICH AREA OF KWAZULU DID YOU ORIGINALLY COME?

 8. WHEN DID YOU LEAVE THERE? (DATE)? _____

B. HOUSEHOLD

1. HOW MANY PEOPLE EAT TOGETHER IN YOUR HOUSE?

2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	----

 2. AGES: ADULTS 18 YEARS OR OLDER: MALE _____ FEMALE _____
 UNDER 18 YEARS OLD: MALE _____ FEMALE _____
 3. BOARDERS: (NOT FAMILY): MALE _____ FEMALE _____