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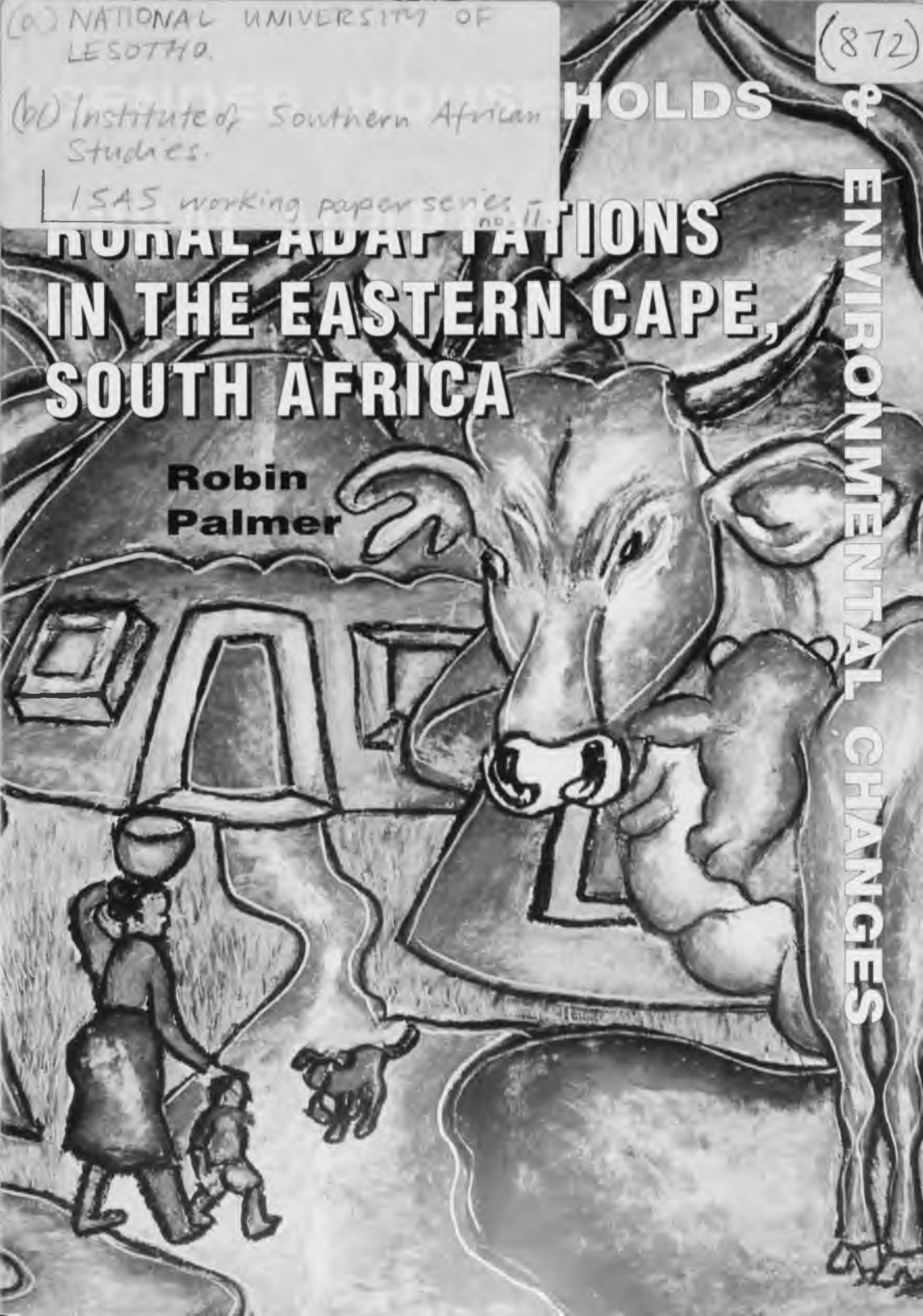
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RURAL ADAPTATIONS IN THE EASTERN CAPE, SOUTH AFRICA

**Robin
Palmer**

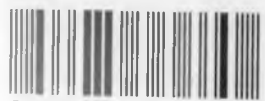
ENVIRONMENTAL CHANGES



Rural Adaptations in the Eastern Cape, South Africa

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**Robin Palmer
(Team Leader)**

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FOREWORD

This publication is a partial result of the *Gender, Households and Environmental Changes (GHEC)* research project in Southern Africa. Researchers from all countries of the Southern African Development Community participated with the exception of Angola, where civil unrest excluded field research. The interdisciplinary programme addressed environmental issues within the social context of gender and household. The principal hypothesis of the project was that environmental changes affect men and women differentially, and gender was taken as an analytical tool to look at the impact of the changing environment both within and outside the household. Many rapid changes are taking place, e.g., technological change, and the impact of these overlap and influence each other. Environmental change was selected because it affects women as managers of households when they interact directly with the natural environment in their daily activities of providing subsistence food, collecting water and gathering firewood or fuel. Degradation of the natural environment, so common in the region, has an immediate impact on men and their ability to raise livestock or grow subsistence and cash crops. Diminishing returns from degraded land is one reason why people migrate to towns. In the urban areas crowded living conditions and pollution create additional problems.

The GHEC country projects addressed environmental problems in particular areas. An innovative video methodology was used in five projects to bring out community-based action to resolve those problems. Learning was regarded as a collaborative

task which built upon the skills of all participants. Video was used to bring people together to participate in an educational process of creating knowledge, of engaging in debate and reflection that stimulated re-evaluation of traditional beliefs, views and opinions, and thereby to develop a critical understanding of the self and of the surrounding world.

Gisela Prasad

Co-ordinator, *Gender, Households and Environmental Changes Research Project*

1. INTRODUCTION

This report is a contribution to a regional research programme coordinated by the Institute of Southern African Studies at the National University of Lesotho. It focuses on two villages, Gwabeni and Gcinisa in South Africa's former Ciskei 'home-land'. Fieldwork was undertaken during the course of 1994, before and after the first democratic election.

The brief for the present study, as with all the others in the programme, was to investigate the interplay between the key variables of 'gender', 'household' and 'environmental change' in a specific national or regional context. The original proposal, *'Women, Household and Environmental Change: a Proposal for Regional Research in Southern Africa'* (ISAS 1991), set the guidelines for all contributions, including this one.¹

After noting that the importation of foreign 'solutions' to perceived environmental problems in southern Africa had often proved disastrous, the proposal called on "African researchers and policy makers to identify environmental problems facing their nations and discuss a range of policy and development options that make sense in their national context".

The proposal also recommended that researchers examine the situation at the grass-roots level. From the testimonies of people in the rural households, particularly the women who are responsible for "the provision, preparation and storage of food, the provision of water for consumption and cleanliness, the management of fuel supplies, and care of the sick, among other tasks" one could proceed to "identify the interactions between environ-

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mental changes and human societies and to suggest appropriate policies for sustainable development". The proposal further stipulated: "Participating research teams will be sought from each nation. Every effort will be made to ensure the participation of *teams* of cooperating researchers rather than individuals and the inclusion of as many *women* researchers as possible" (my italics).

The scope of the present project

The present project has adhered quite strictly to the terms of the original proposal as summarised above. It has highlighted an alien method of environmental control; it has concentrated on behaviour and perceptions at village level in an underdeveloped area; and involved a gender-mixed team of researchers.

An alien method of environmental control

Betterment Planning was the brainchild of South Africa's erstwhile Department of Native Affairs as far back as 1929. As such, it was a white South African 'solution' to problems of underdevelopment and environmental damage in the deep rural areas inhabited by Africans. From the point of view of the affected African communities, it was as alien as if it had been introduced from overseas. The professed aim of Betterment Planning was to reorganise rural land use practises and centralise (or villagise) the formerly scattered residences in those areas which were at that time classified as Native Reserves but were to become the nuclei of apartheid's homelands or Bantustans. Betterment Planning became part of official policy under the Land Act of 1936 and was extended to all land held under the South African Native

Trust (SANT) as well as to tribal land so long as the affected communities agreed to it (Board 1964; Letsoala 1988).

By 1954, 99 locations in the Ciskei had accepted 'betterment'. This was less a reflection of local enthusiasm for the scheme than the pressure chiefs and communities were under to implement official policies. The reason for the slow progress, and the eventual demise of Betterment Planning, was the strong local resistance to betterment ever since its inception. The major objections were against livestock culling, fencing and the removal of people from the land into closer settlements (De Wet 1987; McAllister 1986).

For a decade government ignored the mounting opposition to the betterment schemes. It was not until the first of the Regional Development Strategies in the 1960s confirmed that betterment was not working that government acknowledged the failure of the policy and considered alternative forms of development (Yawitch 1981; De Wet 1991; McAllister 1989).

Wherever betterment has been instituted it has problematised the relationship between rural communities and the environment. It has led to the concentration of people which villagisation entails and the resultant pressure on resources such as water, fuel, thatching and grazing; the break-up of the territorial groups on which economic cooperation, as well as local management of natural resources, was based; the absence of community-sanctioned controls under conditions of villagisation which leads to the degradation of the environment; and the disruption of established patterns of interhousehold cooperation and collaboration.

Under conditions of closer-settlement, or betterment, the proximal resources are soon exhausted or polluted and those whose responsibility it is to collect firewood, water, etc., have to cover ever-greater distances. This places a heavier burden on,

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particularly, women, who are traditionally seen as the cultivators, the collectors of fuel and the drawers of water. In contrast the more traditional conditions of the scattered settlement ensures that the exploitation of resources is less intensive (because the homesteads are spaced more widely), and exploitation is more subject to local management controls.

The most effective way to study the impact of betterment at first hand would be via a 'before-and-after' investigation in a community undergoing transformation from the traditional to the betterment systems. All variables other than those connected with betterment would be controlled for, and *ceteris paribus* a clear picture of the changes in the relations between men and women, the structure of households and involvement with the natural environment would emerge over time. The impact of Betterment Planning as an alien system of environmental control would have been clearly demonstrated. Although betterment's legacy may still be with us, it is no longer being implemented in the former Ciskei and so a before-and-after study is not possible. The other option was to compare a community which had not been bettered with one that had, and this is what we did.

Behaviour and perceptions at village level

Although it was not the first choice of venue, Peddie district in the former Ciskei offered a secure as well as more convenient setting in which to conduct the study. The area has plenty of betterment villages as well as several which escaped the attentions of betterment planners. It was thus possible to discuss the three variables of gender, households and environmental changes in the contrasted settings without risk to our mixed team. After two inspections *in loco*, and plenty of local advice, we selected

Gwabeni, a non-bettered village in the northern highlands of the district, and Gcinisa, a somewhat larger, bettered community on the southern coastal plain.

Peddie district has been historically more susceptible to external sources of socio-economic change than any other former homeland district in the Eastern Cape. And, of all Xhosa-speakers, the Mfengu, who predominate in Peddie district, have been most open to Christianity, Western education and way of life generally. The National Road from Cape Town to Durban bisects Peddie district, and the cities of East London and Port Elizabeth are only one and two hours away, respectively. The district was until recently subject to the Ciskeian administration, and the bureaucracy is an important source of employment for the village-dwellers as well as the townspeople.

Employment in the civil service and in the private and informal sectors, whether on a commuter basis involving Peddie or as migrants in the cities may contribute to the incomes of rural households, but it also removes labour, especially that of male, from the rural sector. This tendency has important consequences for gender relations and decision-making as well as rural production. Another crucial external influence has been the increasing dependency on social pensions which support not only the elderly or disabled claimant but also whole households in the impoverished rural areas. Another way in which the state impinges is through its educational and health structures which take over some of the tasks traditionally associated with men and women at the household level. The rural communities of Peddie district are heavily involved in the rapidly changing, encapsulating political economy of South Africa.

A gender-mixed research team

The general proposal emphasized teamwork and the inclusion of as many women researchers as possible. At the same time the success of the project depended on having at least some qualified and experienced researchers and preferably at least one member who was fluent in the vernacular (in this case, Xhosa). Granted the research topic, the team also had to be interdisciplinary, yet researchers who are competent in both social science and ecological research techniques are rare. In a South African academic community traditionally dominated by white males it was not easy to satisfy all these conditions and remain within a severely limited budget. But eventually a suitably mixed team of fieldworkers was assembled by the project leader, Dr Robin Palmer.

Robin Palmer is senior lecturer in Anthropology. He has conducted rural research in Italy, but this is his first time in Africa. He has had a long-running urban project in the Ciskei, so is quite familiar with the area and its political, economic and social dynamics.

Karen Higginbottom has a Ph D in Zoology and a strong interest in human ecology. Her role was to do ecological surveys of the two villages after the main fieldwork in each case had been completed. She was responsible for most of chapter 3 and important contributions to chapters 6 and 7. She also helped to formulate the recommendations in chapter 9.

Dumisani Deliwe, has an M A in Anthropology and considerable research experience. As the only black member and Xhosa-speaker as well as having the most research experience he had a great deal of organizing and trouble-shooting to do as well as pursue his research interest, which was herding, agricul-

ture and gardening. He made important qualitative contributions to chapters 4 and 6 as well as assisting with the household survey.

Andrew Ainslie and Michelle Cocks have honours degrees in Anthropology and are working towards their M A. Andrew made a general contribution to the first phase of research, but was not available for the second phase, involving Gcinisa. His main interest was in the relationship of Gwabeni and other communities in the area to the adjacent nature reserve. His qualitative contributions are to be found mainly in chapters 4 and 7, and he also assisted with the household survey in Gwabeni.

Michelle made a general contribution to both phases of the research, but was most interested in women's tasks and the role of the environment in health and healing. Her qualitative inputs are thus to be found mainly in chapters 4, 5 and 7. She also contributed to the household surveys of both communities.

Nicky Motteux is a graduate who majored in Anthropology and Geography. Besides the roles of women in the field, she had an abiding interest in that scarcest of Ciskeian resources, water. While she made contributions to the household survey and to general observations of both communities, her principal input was to chapter 8.

Although the original proposal made provision for only two fieldworkers, the opportunity to empower or train well-qualified and highly motivated fieldworkers, especially those representing the historically disadvantaged categories (blacks and women) was too good to pass up. It was also felt that a project on this topic would benefit from, if not depend on, the insights of an experienced ecologist. With contributions flowing from five sources besides those of the project leader instead of two, the report was bound to be large and detailed, consuming an inordinate amount of time in the write-up.

An additional qualification required of every member of the team, especially the whites and the women, which should not go unacknowledged, was physical courage. In the aftermath of South Africa's extraordinarily successful political transition in 1994 it is easily forgotten how negative the prognosis was in the months leading up to the April elections, and how tense the populace, with reports of violence, particularly in the former homelands, a daily occurrence. Very few whites dared to go into black areas at that time. This point was not lost on the people in the villages where the team stayed. Some of them took it as a sign that a new non-racial dispensation might indeed be just around the corner.

Key concepts

In recent years there can be few terms more frequently cited in the social sciences than gender, environment and, to a lesser extent, household. To find them all together in the same project is daunting considering the extent of the literature and the depth of the controversies in which these terms feature. It is impossible to do justice to the way these key terms have been employed and understood by others in a report of this nature. All we can offer is a fairly brief account of the conceptual problems the terms pose and the way in which they have been understood for the purposes of this project.

Gender

As noted previously, gender replaced women in the original proposal for this project, presumably because women excludes men and gender does not. What gender excludes, or at least plays down, is sex, in the sense of the biological characteristics of and

differences between males and females. Sex describes basic and unalterable biological facts; gender describes roles and relationships which are more or less consciously constructed and inculcated in a social and cultural context. The basic point of reference may be biological sex, but gender roles and norms have more to do with the mode of production, the division of labour and the distribution of power and wealth in the society than anything else. These phenomena do not involve men and women on an equal or interchangeable basis: they are structured by patriarchy, the age-old and universal system in terms of which men monopolise at least formal and public power over women.

"Although acknowledging this fact is a precondition for understanding more fully the process of female oppression, in itself it tells us nothing about the specificity of gender relationships in particular contexts or about the way in which these are generated and perpetuated" (Ramphela and Boonzaier 1988, 155). Being socio-culturally derived, gender is flexible in a way that biological sex is not; the definition of gender and the social relations it governs can change. Women may find themselves taking over men's roles and boys and men may find themselves doing women's work if the situation demands it.

South African society exhibits what has been described as 'a patchwork quilt of patriarchies', each in the process of penetration and transformation by economic forces (Bozzoli 1983). Particular social systems among the country's various racial and ethnic groups presented particular forms of patriarchy which were seized upon by the processes of capitalist penetration, proletarianization and class and state-formation, and transformed in significant ways in the 19th and 20th centuries (*ibid.*, 168).

The transformation is far from complete, however, particularly in deep rural areas such as Peddie District.

As opposed to men, the lives of a majority of women in rural and peri-urban areas of South Africa are linked intimately with their natural environment in the course of their daily activities. Women are responsible for providing food, water and fuel (survival tasks); preparing food and caring for children (household tasks) and income generating activities such as trading of forest products. At the same time they are poor and face many legal and cultural obstacles which deny them the right to own and control natural resources (Deshingkar 1994,1).

Traditional patriarchy dies hard in the rural areas, but the distortion of local demography through migration, the disruption of the agrarian economy through congestion and the diminution of male authority as a result of unemployment and a host of other factors have softened the old rigid division of labour based on age and gender. In the crisis conditions that obtain in the worst affected villages it can be a case of, quite literally, all hands to the pump.

Household

The concept of the household has been developed chiefly by social anthropologists and social historians (e.g., Fortes 1949; Goody 1958; Laslett 1969; Hammel 1972; Guyer 1981; Netting *et al.* 1984). It is not a particularly well-founded concept even in those disciplines. Until comparatively recently anthropologists were too much involved with kinship systems at a high level of abstraction to be much concerned with anything as mundane and seemingly self-evident as the household. Besides, there was a contradiction between studying kinship, which is essentially

structural, and households which are more about behaviour, what members are actually doing.

"We still live with this contradiction; household organization is widely acknowledged to be separable from the concept of kinship (Bender 1967), yet when it comes to classifying households into types, we group them on the basis of what kind of family lies at the core", (Wilk and Netting 1984, 3). There remains a strong tendency, almost a compulsion, to subordinate what households do to the essentially Victorian taxonomic exercise.

What households do, however, is logically prior to all other considerations, such as size, composition and kinship ideology. These small corporate units we call households are the sites of numerous activities, frequently involving more than one person at a time and just as frequently overlapping. Some of these activities are confined to the homestead; others take the participants further afield, linking them to other households, and other groups (e.g., economic or political interest-groups or cults and congregations).

Household activities are not limitless. Wilk and Netting have identified six categories of activities in which household members are involved. These include production, distribution, consumption, transmission, reproduction and coresidence (*ibid.*, 5). As in any economic system, at least some members of the household must engage in productive activities if the unit is to support itself; that which is produced must be distributed within and beyond the household in such a way as to sustain the members; and the form eventual consumption takes may be very telling about household organisation. For some, commensality, that is, sharing the same table for meals, becomes a crucial indicator of the household. Transmission describes the way

households transcend the developmental cycle, transmitting rights and duties from generation to generation. Some households, of course, have little or nothing to transmit and little in the way of continuity. Reproduction may not occur. But in most households founded or continued by fertile adults of opposite sexes, reproduction is a feature, and continuity a prospect. Coresidence may appear to be a redundancy but in the modern world of high population mobility it cannot be taken for granted.

In those peripheral parts of the world system where labour migration is appreciable, households must be examined for the presence of *intermittent coresidents* whose economic contributions adapt local productive and reproductive units to the demands of larger, money-based exchange systems (Netting *et al.* 1984,19).

'Intermittent coresidents' are those who are linked by kinship or sentiment to a given household and express this link through correspondence, remittances and visits but no longer dwell in the homestead with which the household is identified. They may not have lived there for many years. Yet they regard themselves as members of that household and are so regarded by its other members (cf Watson 1977). Just as, all over the world, formerly territorially-defined communities have become non-territorial communities or rural-based networks, so the households of which they are comprised have become non-territorial households, each with a smaller or greater 'diaspora' temporarily or permanently absent.

The households of Gwabeni and Gcinisa have been involved in out-migration over a long period, whether it be the oscillating labour migration of the past or the urbanisation (involving single

women or couples as much as single men) of the present, and they have generated extensive 'diasporas' of kin elsewhere. Informants in Gwabeni and Gcinisa readily identified their own and others' households, but they did not initially distinguish between members who dwelt permanently under the same roof and those who lived elsewhere but paid short visits 'home'. They inhabited extensive networks of kin all identified with the same original homestead, but the absent members frequently outnumbered those present.

A characteristic the non-territorial households of Gwabeni and Gcinisa shared with households everywhere was their territorial and extra-territorial linkages with other households and, indeed, the whole community. The communities, in their turn, were involved with the formal administrative structure as well as informal relations beyond the community. So holistic a conception of the project could threaten its coherence, but the approach of the researchers being actor-orientated emphasises the perceptions of men and women at the level of the household as much as their actions, or behaviour. It took its cue from the way they viewed their community and their natural and social environments and how these perceptions motivated or constrained their actions. The boundaries of the research thus tended to coincide with the cognitive and social boundaries of the local people.

Environment

Environment literally means nothing more than surroundings but it has come to denote the natural environment, the physical and biological element in a community's surroundings -- more than any other component of the environment (cf Goudie 1986; Fuggle and Rabie 1992). Hence, contemporary concern for the environ-

ment entails, primarily, the threat to the rain forests, endangered species, and so on, and the appellation 'greens' for those who support environmentalism. This understanding certainly simplifies what would otherwise be an extraordinarily complex conceptualisation. Were the cultural, social and artificial (man-made or non-natural) components of a community's surroundings to be included in the same framework as the physical and biological elements, the multiplicity of variables would threaten to overwhelm the analysis.

In traditionally anthropological research settings where the subjects are obtaining almost their entire subsistence from the natural environment through cultivation, pastoralism, hunting and collecting or fishing, conceptualising the environment solely in physical or biological terms poses few problems because it corresponds to empirical experience. Such economic, political and social influences which emanate from beyond the immediate natural environment either impinge only slightly on the subjects, or have been treated as if they do by the anthropologists (cf Wolf 1983 for his remarkable critique of such treatment). In the former Ciskei and rural South Africa more generally, however, where earnings from employment beyond the community, pensions and remittances have largely replaced subsistence based on cultivation, herding, hunting and gathering, a more holistic interpretation of the environment is called for, one in which nature is one of several life-sustaining resources, and not necessarily the most important of them from the community's point of view. Any study of two villages in Peddie District which restricted its understanding of that which surrounds them, the environment, to considerations of climate, topography, vegetation, hydrology, wild-life, etc., important as these elements might be, would utterly distort the empirical situation as experienced by the

inhabitants. A more holistic understanding of the environment also accords well with concepts such as those of the 'intermittent coresident', 'the non-territorial community' or 'the rural-based network' discussed above. These extensions of the household and the community serve to extend the environment, usually into the urban and modern sectors in which the biological element is negligible if not entirely absent. A research project which is focussed on the household, such as the present one, would severely distort reality if it gave undue weight to the natural environment under these conditions.

Clearly, then, the 'environmental changes' which are highlighted in the proposal for this project should not be limited to changes which emanate from the immediate natural environment, but include other external variables which have had significant consequences for the households and communities. At the most macro level, apartheid came out of the surrounding political economy and impacted especially heavily on the ordinary people of the former Ciskei. At the more local level, the retrenchments in the surrounding agricultural, manufacturing and services industries which were caused by the recession of the 1980s/1990s in South Africa had serious consequences for households especially in Gcinisa. It would be hard to say whether the non-natural phenomena of apartheid or the retrenchments were a lesser or greater disaster for the households of Gwabeni and Gcinisa than the great drought of the 1980s, a natural phenomenon which decimated herds and flocks and made cultivation unfeasible. It would also be a pointless exercise; for it has been in the interplay of extraneous natural and non-natural influences that the underdevelopment of the communities of the former Ciskei has been realised.

This report does not stint on describing the natural environments of the two villages, or on detailing the involvement of the inhabitants with the natural environment (see especially Part 3), but it is also committed to the emic perspective. That is to say, it takes its cue from the people themselves. In Gwabeni and Gcinisa, as in the former Ciskei and other former 'Homelands' more generally, the natural environment has been playing a diminishing role in the economic lives of the rural population over decades. The natural environment continues to have cognitive, ritual and social relevance in the lives of the rural population, as will be amply demonstrated in Part 3. However, the extent that it has been superseded by other sources of economic support, we feel bound to document those other aspects as well as to sketch the historical process whereby people who originally lived entirely off their herds and gardens and from hunting and gathering have found themselves largely dependent on other sources of sustenance and influence (chapter 1).

Field method

Fieldwork commenced on 1 February 1994. We began with Gwabeni, the non-bettered community at the highest point of the district. Permission to do the research was readily granted by the responsible authorities (the Magistrate and Police) as well as the local community, and the team was accommodated at a small hotel owned by a local man and conveniently sited on the edge of the village. Mr Cakwe, the landlord, did his utmost to make the researchers comfortable and protect the two (white) female members from any unwelcome attentions from the men of the community. The four researchers were accepted rapidly and enjoyed a high level of access throughout the five weeks they

spent in the village. Under these favourable conditions, they were able to collect a great deal of data in a short space of time.

The team prudently withdrew from the field during the run-up to elections and devoted themselves to analysing their data and writing preliminary reports. Fieldwork was resumed in June, following a procedure of permission-seeking and community consultation similar to that undertaken in Gwabeni. This time, emboldened by their previous experience, and in the absence of a hotel, Michelle and Nicky boarded with a family for four weeks, while Dumisani commuted from his family homestead a few kilometres away. In July the team returned to the two villages to tie up loose ends and to introduce Karen prior to her undertaking the ecological surveys.

As everyone in the team except Karen had a background in anthropology, the research design was orientated towards a qualitative approach (cf Burgess 1984), but we were aware of the severe time constraints and the need to gain a general understanding of the demographic and socioeconomic characteristics of Gwabeni and Gcinisa. A survey in three parts was thus designed and administered (the schedules used are reproduced in appendix I). The first part consisted of a general survey designed to elicit the demographic structure of households and their socioeconomic characteristics. The second part addressed the division of labour by sex and age in relation to household tasks and the third part was concerned with cultivation and animal husbandry. Included in the general survey were some specialised questions on health and attitudes to the game reserve (in the case of Gwabeni) and the shoreline and surrounding farms (in the case of Gcinisa).

While nothing about the data collected was in any way a priori, everything in the sections of this report devoted to the people of Gwabeni and Gcinisa (i.e., parts 2 and 3) is from and about the people themselves, the approach was participatory more in the classical anthropological sense than in accordance with the formulaic approach of participatory rural appraisals (cf. McCracken *et al.* 1988; Van Vlaenderen and Nkwinti 1993). Having a gender-mixed team, it was possible for the researchers themselves to adopt a sexual division of labour. The two men, Dumisani and Andrew, tended to investigate such male-sector spheres as land allocation, cultivation of fields, animal husbandry, hunting, male sociability, the game reserve, and so on, while Michelle and Nicky became absorbed in women's activities, such as cooking, baking, fetching water, caring for children and the sick, gathering wild plants and herbs, and so on. But when it came to the survey, they divided the labour on a non-gendered basis, simply sharing out the households, and Karen's ecological survey could have been done by a person of either sex.

Intermediate statistics

No one in the team had a background in statistics and computer packages such as Statgraphics, and those who were available to educate us in the use of computer packages had no experience of the special needs of the social sciences. The attempt to master Statgraphics for the purposes of analysing such a complex and lengthy questionnaire as the one we employed (appendix I) consumed an inordinate amount of time for an unsatisfactory result.

This abortive exercise reinforced our anthropological bias in favour of qualitative research. However, two months in the field does not produce qualitative research which is sufficiently embracing to be relied on exclusively, so it was still necessary to capture as much data as possible from the questionnaire. Taking our cue from Schumacher's notion of 'intermediate' or 'appropriate' technology (1974), in terms of which the level of technology employed for a given purpose is adapted to local conditions, the quantification employed in this report takes the form of simple tables of frequencies and, where comparison is called for, percentages and means.

With samples of only 37 households from each community, the frequencies in certain instances were sometimes too low to be statistically significant, that is, they did not merit an elaborate statistical analysis. In the event, most of the figures in the many tables which punctuate the text in parts 2 and 3 were hand-calculated by the project leader who, naturally, must take full responsibility for the results.

Spin-offs

It is hoped that the report, when it is published, will draw attention to the plight of the inhabitants of neglected rural communities such as Gwabeni and Gcinisa in South Africa and elsewhere. To some extent it already has. There was considerable local media attention immediately following the fieldwork stage. The linkage with other projects in the same area helped to draw attention to the need for development in this area. The timing was good because the Reconstruction and Development Programme was about to be launched and regional priorities were

not yet fixed. Therefore, the long neglected interests of especially rural women could still be addressed.

As an experience-gaining or training exercise the project has also had spin-offs. Dumisani has gone on to a permanent appointment to a non-governmental organization active in the former Ciskei, partly on the strength of his recent research experience. Andrew is including Gwabeni and other villages on the edge of the adjacent nature reserve in an M A study of the problems of integrating communities with conservation areas. Michelle has won a major two-year bursary to pursue her interest in ethnobotany in the same area. Nicky has furthered her interest in water by making it the subject of her dissertation for the Geography honours degree. She plans to do more research on this vital topic in the former Ciskei for her M A.

Acknowledgements

The spin-offs mentioned, and any others which may result from the dissemination and publication of this report, would not have been, will not be, possible without the opportunity provided by, in the first instance, the Institute of Southern African Studies (ISAS) at the National University of Lesotho, which depended on the generous funding allocated by the McArthur Foundation. Our team would not have become involved had the Institute of Social and Economic Research (ISER) at Rhodes University not mediated the project. Without the cooperation of those who accommodated the research team in Gwabeni and Gcinisa and tolerated their many probing questions during the volatile period of political transition in South Africa no amount of funding or administration would have yielded this report or the other spin-offs. The principal acknowledgement must therefore go to

the people of Gwabeni and Gcinisa who gave so unstintingly of their time and pin so much hope on the capacity of mere academics and students to mediate the advent of those basic resources which they themselves take for granted.

The organization of the report

The substantive chapters of this report are organized into three parts. In Part One the research setting is explored as a necessary prelude to the detailed examination of the socioeconomic circumstances, gender relations and household organisation of the traditional and bettered communities of Gwabeni and Gcinisa which follows in Part Two.

One of the revelations of this study was that changes emanating from or impacting on the immediate natural environment, even those on the scale of the drought which has endured for the last 15 years or the damage done by overgrazing in the past, do not have the radical potential of changes which have originated in non-natural sectors of the total environment such as white encroachment, shifts in government policy affecting land tenure, the advent of labour migration, social pensions, the lifting of Influx Control permitting free migration to the cities, and so on. These changes in the total environment have had profound effects on the natural environment. The resulting population increase, congestion, and relocation leading to deforestation, over-cropping, over-grazing and erosion have wreaked havoc on a fragile ecology, making the prospect of living off the land increasingly unviable in each succeeding generation. The upshot has been that the human environment composed of social pensions, careers beyond the village economy and migrants has become a more important source of subsistence than the natural environment,

which is why Part One is concerned with both forms of environment.

Part Two continues this theme at grassroots level and examines the way both changes emanating from both environments have influenced the socioeconomic structure of Gwabeni and Gcinisa and the division of labour at household level. The result has been considerable gender flexibility as manifested in the division of daily household tasks, but negligible change in the way gender relations are articulated and symbolized in public.

In Part Three the key variables of gender and household are examined in the context of the changing local environment. In dealing with the interaction between the men and women (and children) of the households, on the one hand, and the natural environment, on the other, we have taken cognisance of the emic level, the local people's understanding of the environment. In the ordering of the three chapters which make up Part Three we have drawn on the Cape Nguni classification of the environment for our framework. According to Hammond-Tooke (1975) Cape Nguni cosmology depended heavily on a vernacular classification of the local environment into the forest (*ihlathi*), the grassland (*ithafa*) and the homestead (*umzi*). The advent of field (as opposed to garden) cultivation as a result of peasantization meant that the cultivated domain of the homestead extended well into that of the grassland, and the introduction of browsing animals (goats) in addition to grazing animals (cattle, sheep) led to the 'domestication' of part of the forest, complicating the traditional division.

Recognising these complications to the simple three-fold traditional classification, we have coined the qualifier 'cultivated/domesticated' to denote those sectors of the natural environment which have been earmarked for homesteads and

gardens and have been cleared for ploughing or tillage or are used for grazing. Such areas formerly constituted the principal subsistence base of the communities, before outside employment, remittances and pensions took central stage in this respect.

The cultivated/domesticated environment may be contrasted with the uncultivated environment, which was not only a source of subsistence for domesticated animals: it was also an important domain in which the villagers hunted, gathered wild vegetables and herbs and collected wood for fuel and fencing. In some of these activities they competed with their own animals, in others they did not.

The emic spatial categories granted a special place to water-sources. Rivers were part of the mediating grassland domain, and they were of great importance symbolically just as they are literally in this drought-prone land. Rivers were the domain of the River People, ambiguous, capricious spirits who only the equally ambiguous diviners (*amagqirha*) could interpret (*ibid.*).

The ubiquitous bulldozed earth dam and the wind- or hand-pumped bore-hole are modern additions to the traditional water-sources, but they are nevertheless incorporated into the emic schema. As all water-sources are ultimately dependent on the rainfall pattern which is beyond human control, dams and bore-holes are subject to the same supernatural control as the natural rivers.

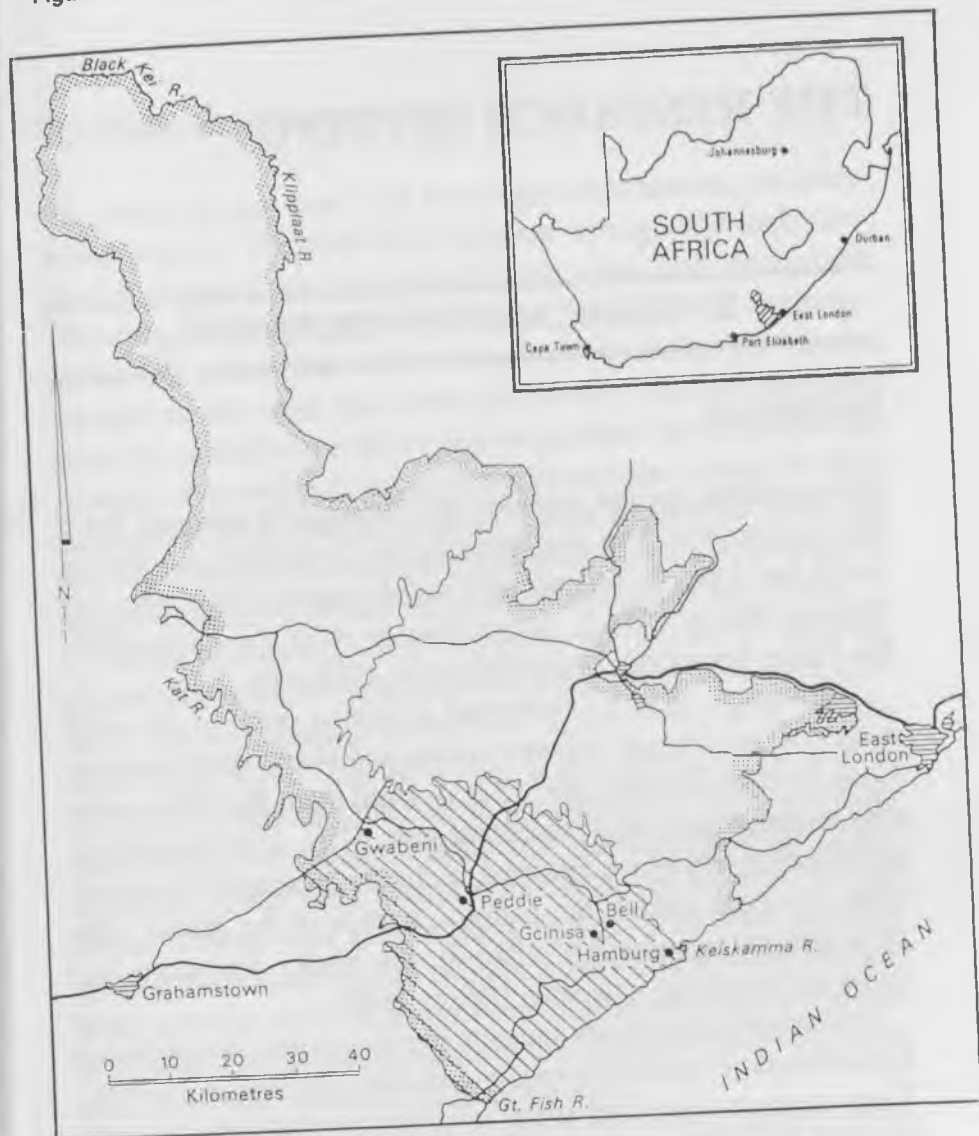
The incorporation of man-made water-sources into the traditional cosmology is a reflection of the importance of water in this region of seasonal and cyclical drought. As a preoccupation of households, water is probably more central now than it used to be in spite of dams and bore-holes. In the depopulating rural villages, there are fewer and less physically-suited people involved in fetching water. They tend to be either too young or too

old for such an arduous task. As field cultivation and animal husbandry have declined, so water-carrying is one of the few categories of heavy work which persists in villages such as Gwabeni and Gcinisa. Water-carrying has a relative as well as an absolute centrality today. On the basis of our study of the contemporary situation in the two villages the concluding chapter 9 contains an assessment of the development status of the two villages and a number of recommendations for sustainable development in key areas.





Endnote

1. The project was later broadened to encompass men as well as women and the relationships between the sexes; the shift was signalled by the replacement of *Women* with *Gender* in the title.

Figure 2.1 Location of the Study Sites



KEY

- Peddie Magisterial District 
- Boundary of Former Ciskei 
- National Roads 
- Tarred Roads 

PART ONE:

THE RESEARCH SETTING

2. THE HUMAN ENVIRONMENT

Introduction

The apartheid regime moulded the Ciskei to its purpose, but it did not create it. The area between the Great Fish and the Kei rivers had been associated with native reserves ever since the Frontier War of 1834-5. These reserves were consolidated into the Ciskei homeland, beginning in the 1960s (fig. 2.1).

The war of 1834-5 represented a turning point in the early stages of the struggle between whites and blacks on the eastern Cape frontier (Switzer 1993, 52-3). Until then, the Xhosa were able to continue in their traditional way of life. After that defeat, and the disasters which followed, including subsequent wars and what has been called 'the national suicide of the Xhosa' (the cattle-killing movement of 1856-7), the former adaptation became progressively untenable (Peires 1989).

Present-day households and communities in the area represent a syncretism of traditional and long-standing Western influences. Their rural economy and social relations have been transformed by more than 150 years of conquest, repression, congestion and impoverishment. To gain any understanding of the contemporary situation in the villages it necessary to briefly examine the history of the society between the Great Fish and the Kei before and since the 1830s.

The Xhosa before subjugation

The Xhosa always were, and to a large extent remain, a kinship-based society. They reckoned descent through the male line, though relatives on the mother's side were also recognized. Genealogical as well as chronological seniority were important organizing principles. The chiefs and the heads of aligned lineages in the royal clan were paramount; but they delegated authority to their councillors and other elders of the commoner lineages who were in charge of the commoner masses in their homestead-based production units. David Hammond-Tooke has described the political organization of the Xhosa as consisting of agnatic clusters of related but independent chiefdoms (1985).

Xhosa households were frequently polygynous in the past, and the higher their rank the more polygynous they were. The wives were organised into two houses, the Great House and the Right-Hand house. The eldest son of the highest ranked wife of the Great House was the heir to the chiefdom, *ceteris paribus*; the eldest son of the Right-hand wife was the next in line. (Any additional wives were allocated to one or the other of the two houses in turn and ranked accordingly). This dual structure divided the household into two potentially-independent political units, and any of a whole repertoire of disputes could cause one or other of the household segments to seek its own territory, along with other like-minded households (*ibid.*).

The twin themes of agnation and seniority were present within as well as beyond the homesteads of the Xhosa. Married men controlled the means of production (cattle and land) as well as the labour power of their wives and unmarried children. The men hunted, administered the household, tended the large stock and undertook periodic laborious tasks such as clearing new gardens

or fields; the women and children were the cultivators, foragers and cooks. Each household was allotted land to cultivate that was commensurate with its needs.

Although cattle were seldom eaten outside of a ritual context they were treasured above everything else produced. They were a form of currency (the only form of currency in the precolonial period) and a marker of status, as well as a source of meat, milk and hides. The role of cattle in exchange may have diminished as the incorporation of the Xhosa into the cash economy ensued, but they continue to be a form of capital accumulation and to have a central role in ritual (Sansom 1974; McAllister 1979).

The homestead, or *umzi* was seldom coterminous with a single household comprising a man, his wife or wives and their children. The homestead could include a number of households. Indeed, it was very much in the senior agnate's interests to acquire a number of dependent households and thus control a larger portion of labour and production than his rivals. Such economic rivalry among the Xhosa could and did lead to conflict, but it never produced the levels of social stratification found in the eventual kingdoms of the Zulu or the Swazi. So long as there was always land to the west of them that could be occupied, that awareness provided a safety valve against potential friction between households (Switzer 1993, Part 1). To pastoralists with few material possessions and no concept of individual ownership of land, there were few barriers and many incentives for moving outwards and onwards.

Despite the relative independence of Xhosa local groupings, they all shared a common language, allegiance to a royal lineage and identification with a common geographical area. This potential for nationhood, when combined with numbers and con-

centrations which the settlers had not encountered among the San and the Khoikhoi made the Xhosa a force to be reckoned with.

The process of subjugation

The first encounter between the Xhosa and the settlers, in this instance, the Dutch trekboers, took place to the west of the Great Fish River as early as 1702. Initially peaceful and characterised by trade, relations between the two groups degenerated into conflict by the 1770s. The British government, which inherited the deteriorating situation on the eastern frontier from the Dutch in the early 1800s, sought to confine the Xhosa to the area beyond the Fish River. To give the policy teeth, they moved soldiers and settlers into the area in increasing numbers in the course of the nineteenth century, provoking (in the view of Switzer 1993,52-56) three wars in fairly rapid succession. The third war severely disrupted the subsistence economy of the Xhosa, and after 1835 it became increasingly difficult for them to provide for themselves.

There was also more competition for resources in the area following the war. Apart from the settlers, there were refugee groups which had sided with the British to be accommodated. Among these were the Mfengu, perhaps originally refugees from the expanding Zulu kingdom who settled in Xhosa territory, but the term was later applied to any African who adopted Western ways.¹

The advent of the reserves

The idea of reserving parcels of land for settlement by Africans originated with the perceived need on the part of the colonial

government to accommodate these loyal Mfengu, but was soon extended to all Africans in the area. On the face of it, the preservation of traditional laws and tenure in these reserve areas accorded well with the precolonial communal understanding of land as a form of security, a source of food and a place to live rather than a negotiable commodity. However, communal tenure and its associated stock management and agricultural methods work only so long as the continuous expansion of land holdings ensues. Under such conditions the Xhosa-Mfengu form of mixed farming employing homestead labour can be highly productive. Without territorial expansion, population increase cannot be accommodated and land which has become too unproductive for cultivation cannot be left for a period of time to recover.

With the introduction of the reserves and segregation, expansion into new areas came to be restricted and the land soon became overstocked and overpopulated. These negative trends were discernible as early as 1850, but instead of identifying restrictions on expansion as the cause, traditional forms of land tenure were blamed for the deterioration of the environment. A campaign to introduce individual title for crop land in the Ciskei area was initiated by the British government.

Individual, or freehold tenure, involving the private ownership of land, has the potential to encourage private improvements and counter the deterioration of the environment. It was also the dominant form of tenure in Britain, and its imposition, from 1850 onwards, was as much a part of the civilizing process as conversion to Christianity, education and European dress. Land tenure in the Ciskei became a complex patchwork quilt of communal, freehold and other forms of landholding, as the populace and the legislators tried to accommodate a rapidly expanding population in a finite area (Branch 1994).

From now on the reserves came to be regarded not so much as repositories of tradition or as a way of rewarding the Mfengu but more as a method of controlling all Africans on the Frontier, both Xhosa and Mfengu. The Cattle-Killing Movement of 1856-7, sometimes known as the national suicide of the Xhosa, produced many thousands survivors desperate for land or sustenance under any conditions. This profound trauma led to the deaths of up to 50 000 people and the displacement of 150 000. By the end of 1858, just twenty months after Nongqawuse had the vision which began the movement, there were only 26 000 Xhosa left in the area (Peires 1989; Switzer 1993,72). The cattle-killing broke the power of the Xhosa more comprehensively than any military campaign. In spite of the sudden influx, the reserves were kept relatively small and interspersed with garrisons and European settlements and farms whose adult male inhabitants were expected to support the military when necessary.

Containment and segregation

In 1913 the Native Land Act became the first legislative attempt to divide the Union of South Africa into separate areas (Letsoala 1988). The purpose of the Act was to maintain the existing position of land occupation by Africans and whites and to ensure that there were no changes without the knowledge of the government so that the state could control the conditions under which expansion occurred (Branch 1994, 10-13). This legislation granted white farmers ten times as much land as black cultivators, thereby satisfying a powerful section of the white electorate. It simultaneously met the labour needs of both the farming sector and the mining and other industries because traditional methods of farming could not provide subsistence in such a restricted area,

and only labour migration or moving onto the farms could provide the alternative of a cash income (Letscala 1989).

The Land Act was only a temporary measure; twenty-three years later the Native Trust and Land Act of 1936 completed the process. It established the South African Native Trust (SANT) to acquire and develop additional land which was to be added to the former reserve areas (about 7% of the land). The total amount of land set aside for Africans in South Africa almost doubled, to 13%. Even so, it could hardly be expected to accommodate the mainly rural black three-quarters of the population.

The new Trust tenure was far more conditional than the old communal tenure. Areas of land were allocated by the headman, as in communal tenure, but he was doing so on behalf of the SANT. The community did not own the trust land, a rent had to be paid each year. There were many restrictions such as the ban on sub-division, the leasing of arable lands and share-cropping, and the limitations of cattle numbers. Such restrictions contradicted all the basic principles of traditional farming systems and made any development of the Trust land by the farmer most unlikely (Cross 1991).

Despite the unpopularity of Trust tenure, it was all there was, and in the Ciskei the allocation was fragmented and insufficient besides. Here as elsewhere the land purchased by the SANT had not solved the problems of congestion being experienced in the reserves.

After 1948 the National Party government, with its apartheid policies, shifted the focus from land to administration. The Bantu Authorities Act No. 68 of 1951 was a manipulation of the traditional African system through the establishment of tribal, regional and territorial authorities with limited powers of local government. A strong emphasis was placed on appointment in

accordance with custom, as opposed to election by taxpayers and landowners which had been a feature of the previous council system (Peckham 1994). This anti-democratic Act was the first step in the conversion of the reserves into homelands for black South Africans.

The Promotion of Bantu Self-Government Act No.46 of 1959 addressed the issue of self-government for entire homelands, making a homeland-based ethnic franchise a substitute for a vote at national level (Richings 1980, 60). The Act identified politically independent homelands which would remain economically interdependent with South Africa.

Consolidation and resettlement

The National States Act No. 21 of 1971, prepared the Ciskei for independence by making the territory self-governing (Freeman 1981). But there was a major obstacle to viable self-government of the territory, the inadequate land allocation. The Ciskei consisted of nineteen separate blocks of land totalling 918 643 ha. Only 12% of that land was arable (Tapson 1990). As such, the territory lacked the carrying capacity to support a rapidly growing population. In April 1972 a new consolidation proposal was tabled in parliament (*ibid.*). The 19 areas of the Ciskei were now to be rationalized into five areas, but it would involve the removal of fourteen black spots or areas of land under African Freehold rights beyond the homeland boundaries (Mare 1980, 2).

In 1974 a number of formerly white towns and their farmlands were incorporated, but whatever territorial or economic advantage this move offered was wiped out the very next year when the Herschel and Glen Grey districts were ceded to the Transkei

(a loss of 420 000 ha) and 40 000 Africans had to be relocated as a result. Theoretically, the 310 000 ha of potentially more valuable land in the south which was offered in compensation would balance that which had been lost to Transkei, but in practice, most of the land was been retained as large commercial farms, so it had no role in easing the increased congestion of the homeland.

The ideological imperative to remove black communities from white areas also contributed to overpopulating of the Ciskei, despite consolidation.² In most cases, relocated communities were simply dumped in badly constructed camps in inhospitable areas, with little chance of making a living from the land and small hope of employment. The process ensued from the 1960s through the 1980s and contradicted all previous advice and warnings as to the already desperate environmental and agricultural situation in the area (Charton 1980).

'Independence'

By 1981, on the eve of 'independence', the Ciskei consisted of 830 000 ha and the area was expected to support an official population of 635 631. The unofficial and more accurate estimate was 2 099 000 (Platzky and Walker 1985). In even the most favourable agrarian environments, 253 people per square kilometre is a high density for a mainly rural population. When the land is already overcropped, over-grazed, subject to erosion and devastating droughts, such densities represent an almost impossible situation.

In spite of the poor agricultural prospects of a homeland for a principally agrarian population, Pretoria did not experience any difficulty in finding a puppet to run it, in the shape of former

President-for-Life Lennox Sebe (succeeded, in a coup, by Brigadier Oupa Gcozo in 1990). Nor was it difficult for Sebe, in his turn, to stock a parliament with mainly traditional leaders and generate an administration headed partly by expatriate whites and staffed by local people for whom there were few alternative sources of employment and none as comfortable and undemanding as the Ciskei Government Service.

Until recently, the tribal authorities were responsible for local administration in all rural locations. Typically, tribal authorities were composed of a chief and counsellors and headmen, extending to sub-headmen if necessary. The tribal authority was answerable to the district magistrate of the area and the magistrate was responsible to the Department of Rural Development of the Ciskei government, eventually based in the purpose-built capital of Bisho, near King William's Town. Chiefs and headmen were responsible for ensuring that the provision of services available from government departments was effectively carried out in rural areas. Other functions included endorsing applications for old age pensions and disability grants and submitting them to the local magistrate for processing in Bisho; the allocation of land in consultation with the relevant government department; the collection of taxes; and the hearing of minor local disputes (Branch 1994). As rural production declined and migrant remittances dwindled, so pensions increasingly became the major source of cash income for many households. This tendency simply increased their dependency on the tribal authorities and, ultimately, the Ciskei government.

When Gcozo replaced Sebe, he initially curried favour with the democratic movement by suspending the frequently unpopular, inefficient and corrupt tribal authorities and having their powers transferred to the ANC-aligned Residents' Associations,

or civics.³ But the civics did not have the institutional capacity to offer a viable alternative to the tribal authority system despite its inadequacies. Also, the chiefs, headmen and sub-headmen of the tribal authorities system, being effectively government officials were, as such, much more controllable than the civics with their ultimate loyalty to the ANC. It was not long before recognition was restored to the tribal authorities and Gcozo began actively recruiting the chiefs, headmen, etc, into his African Democratic Movement (ADM), to the outrage of the civics.

From now on, Ciskei government-funded community projects, such as those aimed at eradicating noxious weeds or combatting soil erosion, came to be linked increasingly to membership of the ADM.⁴ In response, the civics intensified their anti-tribal authority campaign in the rural areas. Matters came to a head in many villages with the unbanning of the ANC in 1990. The polarisation of the ANC-aligned residents' associations and ADM-supporting tribal authorities became acute, resulting in violent clashes in some villages. But the capitulation of Gcozo and the overwhelming electoral success of the ANC in April 1994 led to the collapse of the ADM, and with it the *de facto* replacement of the tribal authorities with the Residents' Associations in the rural areas.

At the time of writing, the former Ciskei is undergoing transition from its former self-governing independent status to full incorporation in the new province of Eastern Cape, a vast area incorporating the eastern and border sections of the former Cape Province as well as the former bantustans of Transkei and Ciskei (see fig. 2.1). But the replacement of the administrative structures of the old Ciskei government is a politically-fraught as well as a complex administrative process, and it has only begun to be implemented since the local government elections in

November 1995. In the meantime, the many urban and rural settlements of the two former homelands have continued to exist in an administrative vacuum.

Peddie district

Most of what can be said about the former Ciskei in general also applies to Peddie district, though the people of this area tended to experience most of the developments already discussed earlier and more intensely, for better and worse, than other districts. Being in the front line, on the western boundary of the former Ciskei, along the eastern bank of the Great Fish River (fig. 2.1), the district tended to bear the brunt of conflict and change.

During the Frontier Wars the area between the Keiskamma and Fish Rivers, which is dominated by Peddie district, came to be regarded as a ceded territory. This is a military euphemism for an area from which the defenders have been driven by force of arms (Freeman 1981). This vacant area, allocated to the friendly Fingo, was the first of the many native locations to be established in the Ciskei (Christopher 1982). Fort Peddie, named after Lieutenant-Colonel John Peddie of the 72nd regiment, was built in 1835 in the centre of the new Fingo location (Kirby 1960).

The Mfengu response to having an ample grant of land of their own was to inaugurate a remarkable agricultural synthesis, combining traditional and western techniques instilled by the missionaries who became very active in the area during the nineteenth century. Under the influence of a Victorian Christian ideology which emphasized agriculture over pastoralism and individualism over collectivism, and employing such novelties as literacy, numeracy and the plough, the Mfengu farmers of the

Peddie area began to out-produce all comers in the eastern Cape (Bundy 1979; Switzer 1993, ch 4).

The settlers of Albany district and other areas beyond the reserves could not tolerate the competition from the African farmers of Peddie, however, and so they lobbied strenuously for government to restrict the ability of Africans to accumulate land. Over a period of 50 years, the individually owned land units allocated to Africans shrank from the 40-80 acres given to the Mfengu in the 1850s, to the eight acres, as stipulated by the Glen Grey Act of 1894 (Bundy *op. cit.*). The Native Locations Act in 1874 authorized the principle of one-man-one-plot making it impossible for the black farmers to accumulate additional land and get around the Glen Grey Act on that basis (Branch 1994, 8). The brief flowering of African commercial farming came to a sudden end in the face of this legislative onslaught, culminating in the 1913 Land Act.

As Peddie was the most accessible district of the former Ciskei to the old Cape Colony, the people were extensively involved in migrant labour at an early stage. By 1890 four thousand men and women were absent out of a total population of 18 500. They were away working on the gold fields, laying railway lines, labouring on white farms and in service. Unable to adjust to such a haemorrhage of their youngest and strongest adults the rural African population of Peddie underwent a rapid transformation from pastoralist-cultivators to sub-subsistence inhabitants of the locations, dependent on migratory labour and wages earned on the white farms as well as whatever could be gleaned from the land (Bundy 1979). Environmental crises such as the Rinderpest outbreak in 1895-6 and the periodic droughts exacerbated an already difficult situation. Unlike the white farmers, Africans received little state assistance to recover from crises which

readily wiped out their capacity for significant agricultural production (Peckham 1994).

In Peddie district there was no expansion of the scheduled areas in the twenty-three years between the Land Acts of 1913 and 1936, yet the population grew by over 5 000 people, to 25 379, over the same period. By 1941 less than 10 000 acres of Trust land, of which only 800 acres were arable, had been added. Congestion was not alleviated. In 1967 the carrying capacity of Peddie district, which had a total grazing area of 142 800 acres was estimated at 17 850 stock units. The actual number of stock units on the land was almost double this at 35 387 (Els 1971).

Government's solution to problems of congestion in Peddie District, as elsewhere in the reserves/homelands, was to minimise the release of white land and maximise tampering with traditional agricultural arrangements by means of Betterment Planning. Had the land allocations advocated by the Tomlinson Commission in 1955 been implemented, there might have been some hope of success for the scheme, but this was impossible without further released land. In Nyaniso, a Betterment village near Peddie town, only 6% of households were given land which conformed to the Tomlinson proposal while the rest had to make do with much smaller plots or no land at all (Daniel and Webb 1980). Without a significant expansion in the land allocation, Betterment was foredoomed to failure.

The other form of Betterment, involving irrigation schemes, was also attempted in Peddie district. In Tyefu Location and Sheshegu, in the south-west, the population density, at 70 persons/square kilometre, is the highest in the District, yet the resource base is one of the poorest. Unfortunately, the brackish water limits the range of crops grown and there have been other

obstacles in the way of realising the scheme's potential (Holbrook 1992).

With the transition to self-government in the Ciskei, Peddie district initially stood to benefit from a disproportionate share of the consolidated land. Where the Ciskei was to gain 185 385 ha overall, more than half of the allocation (97 643ha) was to be included in Peddie district in addition to the former white town of Peddie and its commonage (Freeman 1981). But the new land could not meet the needs of a population already in excess of 43 300 people so long as the formerly white farms were maintained intact as commercial farms or converted into nature reserves.

Congestion in the district was not simply a matter of natural increase outstripping the allocation of new land. As noted previously the consolidation of the Ciskei involved massive population movements from so-called black spots outside the designated homelands as well as illegal squatter communities and redundant farm labourers and their families. Five major resettlement camps were established namely, Glenmore, Kammaskraal, Zweledinga, Bell and Bingqala. Relocations to these areas in the early 1980s supplemented almost 2 000 people already resettled into the district in the previous decade (SPP 1983).

If conditions were difficult in the villages, they were often far worse in the resettlement camps. Relocates were forced to live in the most basic houses, sometimes tented camps, without the means of making a living. Nor did they have rights of tenure in the new places. Residents of Glenmore and Kammaskraal were, at different times, under threat of removal by the Ciskeian authorities to Peddie (Platzky and Walker 1985). The descent into administrative chaos of the closing years of independent Ciskei affected the grassroots communities of whatever deriva-

tion as negatively in Peddie district as anywhere else in the territory.

Conclusion

Two hundred years of conflict, congestion and control at the hands of a succession of white regimes have deeply affected the ordinary people of the former Ciskei. As Les Switzer has observed:

No other African society in southern Africa fought harder to maintain their independence...no other region in the subcontinent was as thoroughly subjected to the economic, social and political practices of the new cultural order... These were the first Africans in the subcontinent to enter the migrant labour force in large numbers. They were also among the first to live permanently in town...(Switzer 1993, 351-2).

The failure of Betterment Planning to address the depressed rural economy and the lack of alternatives to agriculture by way of employment in the rural areas has meant that large numbers of migrants, initially men, but increasingly women as well, have had to leave their villages and migrate to the industrialised towns and cities beyond the Ciskei. The efforts of the South African and Ciskeian governments to establish border industries within the Ciskei might have deflected this outflow, permitting rural dwellers to commute to work or to contribute to the urbanization of the Ciskei's industrial areas⁵ But for reasons too complex to consider here, the attempt at industrial development had disappointing results and did little to stem the flow of migration out of the territory.

For all its deleterious effects on the rural economy and social fabric, old-style oscillating migrant labour at least maintained the link between urban and rural sectors; the men came home once a year and channelled remittances, however inadequate, to their rural dependants (Wilson 1972). Yet labour migration on this classic model was never as widespread in the Ciskei as in other areas, and such migration as did occur was being replaced by other forms of migration from the 1970's onwards. The mining houses were recruiting from further afield, including other countries and favouring more dependent and politically docile groups than the Ciskeians. In response, increasingly tended to flout influx control legislation in the towns and cities where they were employed (until it became unenforceable, unenforced and then, in 1990, abandoned altogether).

The environment, long under severe population pressure, did not recover with the increase of out-migration, as might have been predicted, but tended to deteriorate further. The reason for this paradoxical situation (besides the appalling drought which has persisted since 1981) was that such control of natural resource utilisation as there was at village level became problematical in the leadership vacuum which resulted from the haemorrhage of people who were capable of making and enforcing decisions at household and village level, to say nothing of their potential labour contribution.⁶ A situation in which the residual population of the rural communities of the former Ciskei consists largely of elderly or unemployed men, house-keeping women and young children living under conditions of extreme hardship is not conducive to the maintenance of former standards of local subsistence, let alone their improvement.

Under these parlous conditions, social pensions have been the key to survival in South Africa's rural areas, including the former

homelands such as Ciskei. The crucial role of pensions for the survival of whole households in the rural areas has been recognised by the administrations, to the extent that pensions, like health services, continued to be delivered, albeit inefficiently, where less crucial services such as agricultural extension have been early casualties of the institutional collapse in the former homelands.

Not only have social pensions continued to be paid, but their value in real terms has tended to increase. For nearly thirty years spending on welfare directed at blacks has been increasing at a faster rate than for any other group. The 1967 Aged Persons Act and the 1973 Social Pensions Act extended social pensions to every man over 65 and every woman over 60. In 1992 black social pensions achieved parity with whites and other colour groups formerly distinguished under apartheid (Patel 1992). Pensions, however, are not index-linked to the cost of living as in other countries, even though South Africa has had for the best part of two decades an inflation rate of 15-20% in the commodities that poor people spend most of their income on groceries. In spite of this shortcoming, the South African universal, non-contributory social pension paid out every two months is unique in Africa and the only bulwark against starvation for millions of people. It has become the basis for subsistence in countless rural communities of the former Ciskei and beyond.

The possibility of migration and the steadily-improving social pensions helped to maintain a measure of stability in the former Ciskei during the transition in spite of the neglect, incompetence and corruption of the Sebe and Gcozo regimes which left almost the entire Ciskei underdeveloped in terms of infrastructure, agricultural development and extension, and especially the management of natural resources. The rise of the Residents' Asso-

ciations in most of the villages of Peddie district was a response to grass-roots indignation. Although these Associations represented a serious challenge to the tribal authority system, they have not been able to replace the old undemocratic system. That will have to wait until the first local government elections of the post-apartheid era in November 1995.

Meanwhile, the allocation and registration of residential sites and lands for cultivation, the maintenance of the fencing around grazing camps, the dipping of cattle, natural resource management such as controls on fuelwood extraction and the maintenance of livestock grazing camps, all crucial rural responsibilities which came under the purview of the authorities, remained in a state of suspension during the political transition, and the people and the natural environment continued to suffer.

Endnotes

1. The process by which a section of the inhabitants of the area came to be known as 'fingoes' or 'Mfengu' is a matter of ongoing debate among South African historians (see Switzer 1993, 59-60 for a summary of the debate).
2. The unofficial figure was far higher, at about 3.5 million (Surplus People Project 1983).
3. The term comes from the title of the national organisation: the South African National Civics Association (SANCO).
4. The work parties for such village projects were drawn from lists submitted by the local headman, and usually excluded prominent ANC supporters.
5. These include Fort Jackson-Mdantsane and Bisho-King William's Town-Zwelitsha, with some tourists infrastructure near the Fish River mouth.

6. Bank (1993), Moodie and Ndatshe (1992) and Saphire (1992) have reported from various urban settlements in South Africa the rapid increase in the last ten years of virtual economic refugees, mostly female, who have fled the drought-stricken rural areas of the Ciskei for the cities.

3. THE NATURAL ENVIRONMENT

Introduction

The natural environment has been playing a diminishing role in the household economies of the rural inhabitants of the former Ciskei over many years. It is no longer the sole or even the most important source of subsistence. Rural communities in this area are no longer territorial entities meeting all their needs from the cultivated and uncultivated environs of their settlements. They have become peri-urban settlements, drawing their subsistence from the following (singly or in combination): residents and commuters with jobs in the nearby towns; migrants employed further afield; state pensions; casual labour; and the informal sector. This lifeway is in part the legacy of the history of colonialism, apartheid, underdevelopment and maladministration outlined in the previous chapter; in part the local manifestation of the global process of modernization.

In spite of the decline in the importance of the natural environment as a source of subsistence, the little that is still cultivated in gardens or hunted and gathered from the uncultivated environment makes for savings in household expenditure. Also, what is extracted from the natural environment continues to play a significant part in other aspects of the lifeways of the inhabitants of Gwabeni and Gcinisa, such as healing, rituals, gender identity and sociability (cf McNeillie 1994).

Before the relationship that rural households and their male and female members have with the environment, particularly the

Figure 3.1 Gwabeni: The Settlement Pattern

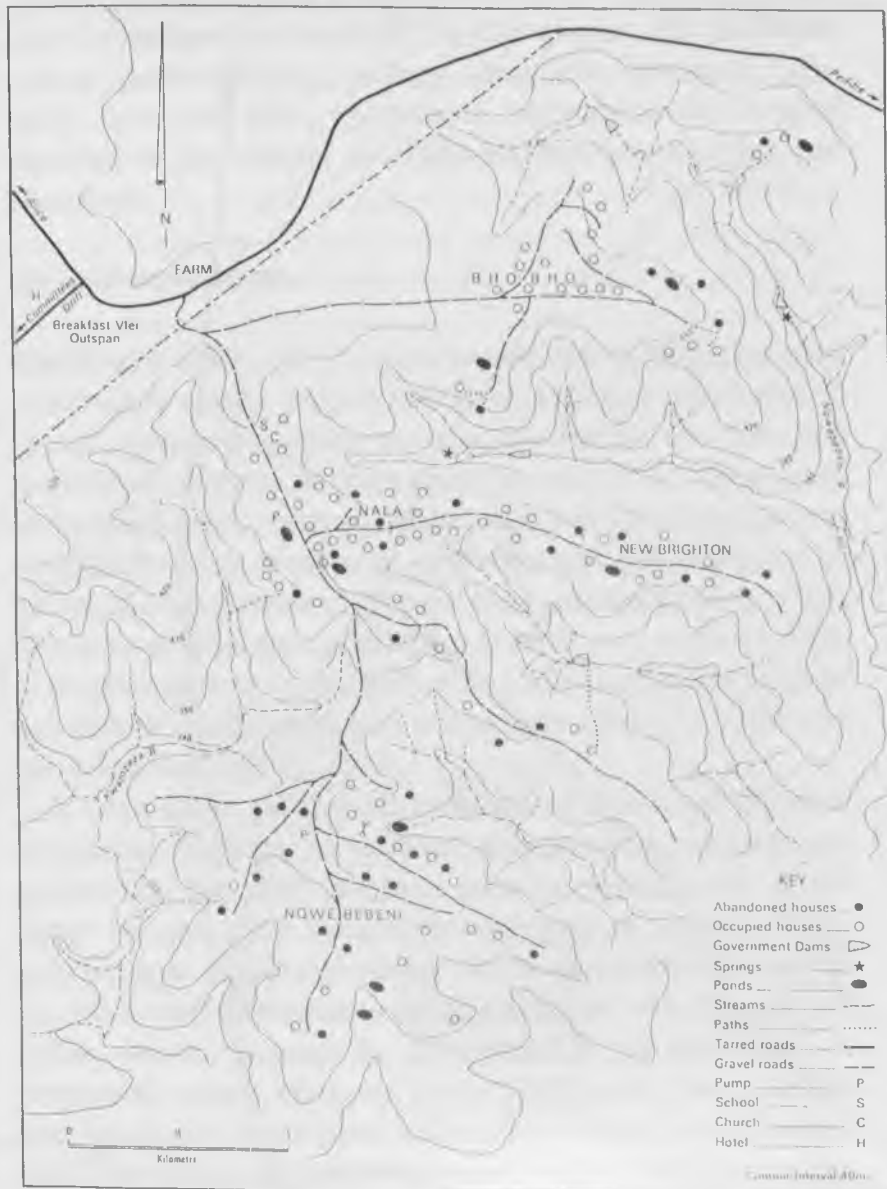
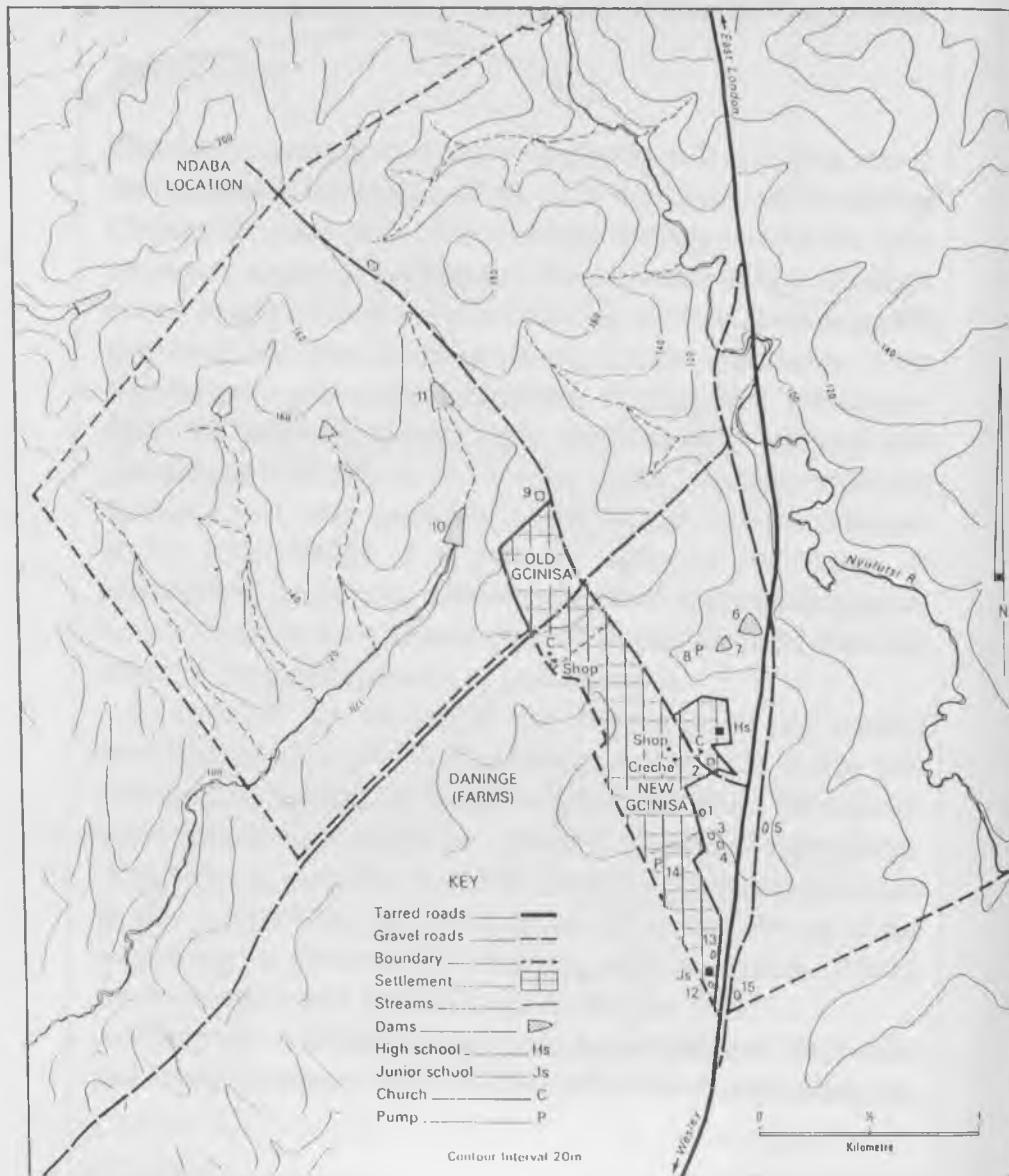


Figure 3.2 Gcinisa: The Settlement Pattern and Water Sources



natural environment, can be addressed (in part 3), it is necessary to describe the physical dimensions of the two communities and their immediate environment. In this chapter the settlement pattern, geomorphology, geology, topography, hydrology, vegetation, land use, soils, soil erosion, agricultural and foraging potential of the villages and their environs are described and compared.

Settlement patterns

The former Ciskei (fig. 2.1) is characterised by small dispersed settlements, mostly lacking sanitation, sufficient water supply, means of communication, and adequate health, education and commercial services. In many cases, the lack of services extends to the small towns, such as Peddie, which do not always present a sufficient range of services - either as agricultural support or to meet the basic needs of the rural communities (Erschine 1985). Yet the rural areas remain heavily populated: approximately 80% of the contemporary population of the Ciskei is classified as rural and almost half the populace is under the age of 15 (Fabricius and McWilliams 1991, 55-7).

In some areas, usually due to Betterment Planning, the rural population has been consolidated into relatively concentrated settlements, but there has been no urban development in the larger villages even though services such as trading stores, schools, post offices and clinics which are extensively used by the local rural population may be associated with them (Cook 1980). Indeed, beyond the parameters of the two kinds of betterment scheme discussed in the Introduction, there has not been much rural development of any kind. These generalizations about the settlement pattern apply to Gwabeni, representing the

non-‘bettered’ pattern, and Gcinisa, representing the ‘bettered’ pattern.

To the north of the town of Peddie is an area of rural locations and released former white farms. One of them, Glenmore, was allocated to a resettlement community. Other released farms were incorporated as The L L Sebe Nature Reserve (subsequently renamed as The Double Drift Nature Reserve). Gwabeni is situated at 33°06’S, 26°58’E, on the southern boundary of the nature reserve, opposite an area known as Breakfast Vlei which is situated at the highest point of the district, to the east of the Great Fish River (fig.2.1) . The village is 22 kms from Peddie and 70 kms from Grahamstown.

Gwabeni has an aerial cover of about 15 km², but the land area is substantially greater due to the steep topography. The Double Drift Nature Reserve and the road from Committees Drift to Peddie form the northern boundary. The Keiskamma River and the released citrus farm of Ripplemead lie to the east, along with the community of Mankone and the associated mission station of Horton; to the south and west is the Location of Qamnyaha.

The scattered homesteads of Gwabeni cover three ridges dissected by steep valleys (fig. 3.1). During the fieldwork period, only 68 homesteads were found to be permanently occupied, but there were about 150 additional homesteads that served as the holiday and eventual retirement homes of the community’s many migrants. The few services available in Gwabeni included: a crèche, a primary school, a church, a sub-clinic and the Breakfast Vlei hotel, with its bar and store. Electricity or running water have not yet been extended to this village.

Between the town of Peddie and the coast is an area of relatively flat, relatively well-watered land which used to be the site of black locations and white farms. Since then, it has been

the focus of much internal and external resettlement and Betterment Planning. Gcinisa is to be found in this area, located at 33°17'S, 27°21'S, about 15 km from the coast by road (much closer as the crow flies), and about 45 km from Gwabeni (fig. 2.1).

Gcinisa covers an area of about 20 km² (2000 ha). Thus Gcinisa's land area is not much greater than Gwabeni's, if allowance is made for the latter's undulating topography compared with Gcinisa's flatter site (fig. 3.2). The village is bordered on the western side by the Nyulutsi River, to the east by Ndaba Location, and to the south and west by farms. The land immediately west of Gcinisa consists of released farms.

Gcinisa, with its western-style grid-like layout, concentrated houses, community hall and large primary and secondary schools, is a conspicuously different settlement from Gwabeni, besides being larger. But the physical difference between the traditional scattered settlement and the betterment village may not endure for very much longer. An unoccupied section of Gwabeni close to the Breakfast Vlei Hotel and the through road has been surveyed and divided into seven to which householders from the more far-flung village-sections who can afford a new house may relocate. The motive? Those who no longer cultivate or keep stock in any numbers have no need to live after the traditional pattern, and there is the hope that if sufficient people move to the new sites something will be done about supplying them with piped water and electricity.

Climate

Gwabeni and Gcinisa are sufficiently close to each other to share the same basic climate, with its overwhelming characteristic of

both seasonal and cyclical drought. Altitude and distance from the coast are significant variables, however, here as elsewhere.

Gwabeni has a climate described as subarid to mild subarid (Loxton *et al.* 1979) or steppe (Kopke 1988), and falls within a region prone to severe periodic droughts. It has a mean annual rainfall of about 466 mm¹, which is less than the minimum considered viable for growing crops without irrigation. Most of the rain falls from October to March, and winters are very dry [fig. 3.3 (a)]. The rainfall is highly variable, with annual rainfall below the mean being more common than that above the mean (De Lange *et al.* 1994). There has been no long-term change in the amount of annual rainfall over the last century, although there may be a recurrent cycle with a period of about 23 years (Youthed 1994; based on records for Peddie). The decade from 1983-1993 has been the driest on record in the area.

The nearest temperature records available are from Tyefu weather station (CCWR, records from 1977-1984), where it is expected to be slightly hotter than in Gwabeni. Mean monthly maximum temperatures range from 21.8°C in June to 30.1°C in February, with extremes of up to 40°C. These high summer temperatures are expected to cause heat stress to crops (De Lange *et al.* 1994). Winters are mild, with mean monthly minima ranging from 7.3°C in July to 18.5°C in February (CCWR). The region experiences between 31 and 50 days of light frosts in winter, although these are less common in the higher areas such as Gwabeni (Loxton *et al.* 1979, Page 1982, De Lange *et al.* 1994), and temperatures hardly ever fall below 0°C (CCWR). Diurnal temperature fluctuations are often large, which poses an additional stress to crops and livestock (De Lange *et al.* 1994).

The average amount of evapotranspiration for a typical crop is greater than the average rainfall for every month of the year in

the Gwabeni area (Loxton *et al.* 1979), leading to severe water deficits year round. At the Tyefu weather station, the annual expected effective rainfall is 130mm, while a typical actively growing crop requires more than 1500mm (*ibid.*). This fact alone means that normal dryland cropping is likely to be unviable (De Lange *et al.* 1994).

There are no wind stations in the area, but winds can be of high velocity throughout Peddie District, causing an additional stress to plants (*ibid.*). Gwabeni's high altitude in relation to surrounding areas would exacerbate this problem.

Gcinisa has a climate described as subtropical (Kopke 1988) or subhumid-mild subarid (Page 1978). Although it is subject to droughts, these are less frequent than in Gwabeni (Kopke 1988).

Mean annual rainfall at the adjacent village of Bell is 571 mm (CCWR), which is slightly higher than that in Gwabeni. The most significant difference between the seasonal rainfall patterns of Gwabeni and Gcinisa is that rainfall is spread more evenly throughout the year in Gcinisa (fig. 3.3 (b)). Summer rainfall is lower than that in Gwabeni, while rainfall throughout the rest of the year is higher. The peak rainfall in this area occurs in spring (Kopke 1988).

Climatic conditions in this area are favourable with no frost occurring, and with annual rainfall ranging between 700 mm near the Fish River mouth to more than 700 mm near Hamburg (Report on Peddie Coast Rural Development Project, Vol 1, 1983, 61-62). Gcinisa lies between the Fish River and Hamburg, but close enough to Hamburg to share its climatic characteristics.

Daily temperature ranges should be less extreme in Gcinisa than in Gwabeni (Page 1978), but as there are no reliable temperature records for stations close to Gcinisa this is hard to

demonstrate. Another contrast with Gwabeni is that Gcinisa is virtually frost free (*ibid.*).

Although no evaporation figures exist for sites close to Gcinisa, evapotranspiration exceeds rainfall in every month throughout Ciskei (Loxton *et al.* 1979) and Gcinisa is unlikely to be an exception. Given the more evenly distributed rainfall and milder temperatures, however, it can be assumed that the water deficit is generally lower in Gcinisa than in Gwabeni.

According to local residents, strong winds are a common problem at times in Gcinisa, probably even more so than in Gwabeni. They lead to dusty conditions, and sometimes damage buildings.

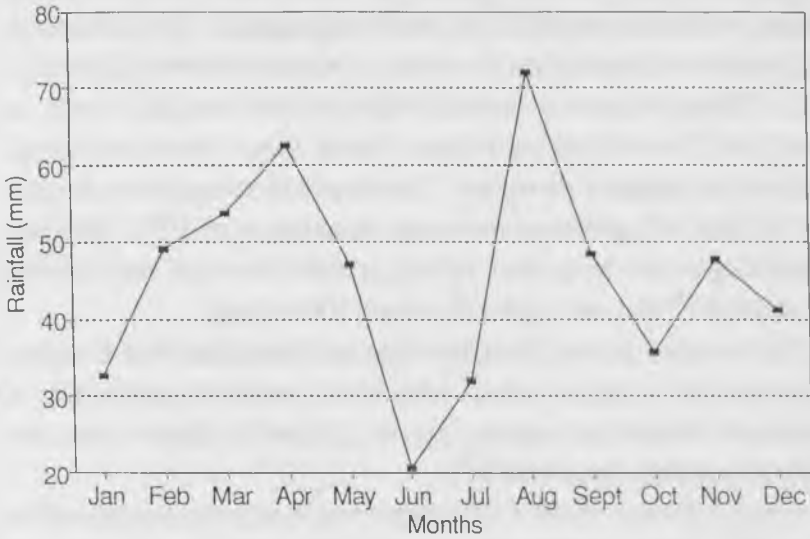
The climatic conditions for purposes of water supply, crop cultivation and human comfort are much more amenable in Gcinisa than they are in Gwabeni.

Geomorphology, geology and topography

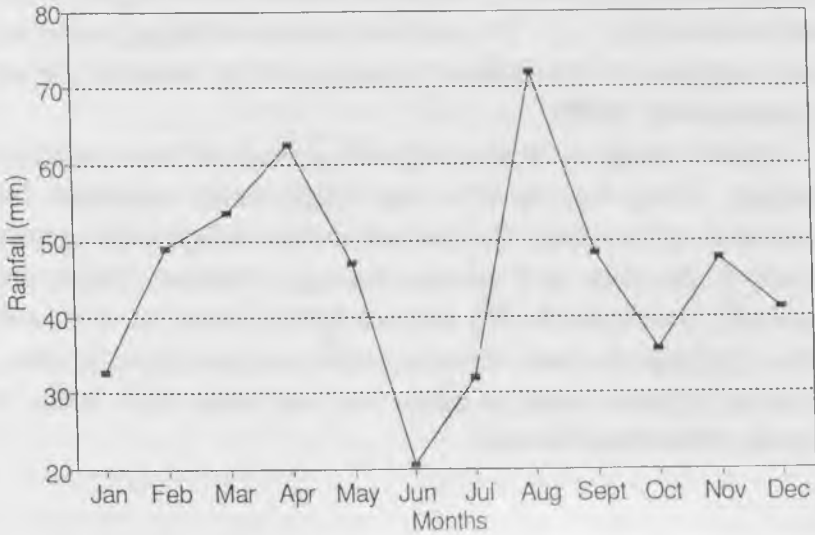
The differences between the two villages are even greater where geomorphology, geology and topography are concerned, for Gwabeni has essentially highland characteristics while Gwabeni has those of the coastal plane. At about 500m above sea level, Gwabeni is the highest settlement in the area. It is on the inland plateau (Page 1978) and forms part of the basin of the Great Fish River. The landscape has been deeply incised by the downcutting of river tributaries (fig. 3.1). The bedrock consists of shale and

Figure 3.3 Mean Monthly Rainfall

(a) Breakfast Vlei (1938-52)



(b) Bell (1967-82)



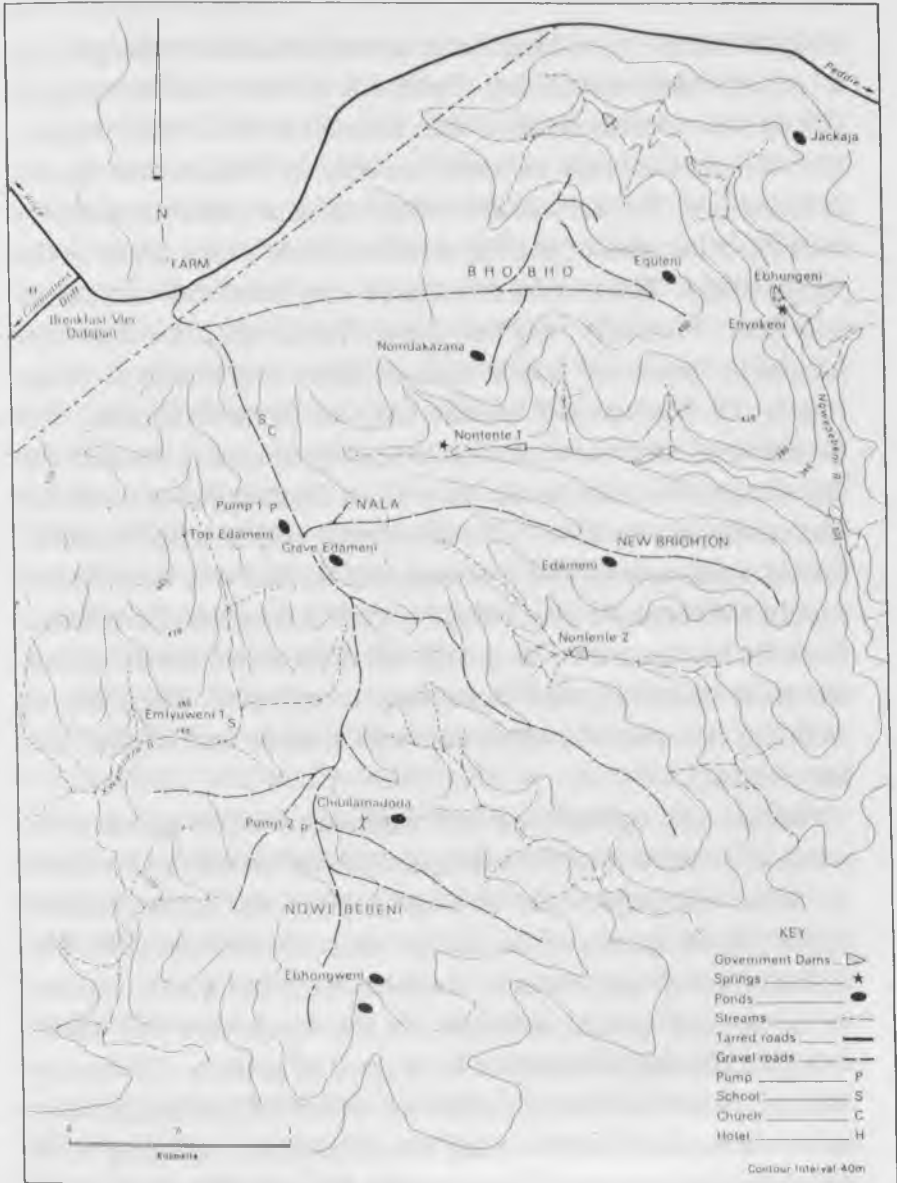
sandstone in the Middleton formation of the Beaufort Group (Loxton *et al.* 1979). Based on surface samples of rock collected during this study, shale appears to occur mostly on the valley slopes, whereas sandstone is more widespread. The settlement of Gwabeni is situated on the crests of several narrow ridges (fig. 3.1). These include a central ridge oriented roughly north to south and four adjoining ridges sloping down from the central ridge in an easterly direction. The slopes in areas where houses are located are gentle to moderate (maximum of 10°). Between these ridges are deep river valleys which have very steep slopes of about 45° and are typically about 100m deep.

The western part of Bhubho ridge and Breakfast Vlei Outspan form part of a large plateau area which extends northwards of Gwabeni towards a nature reserve. Slopes in these areas are typically gentle (less than 6°).

Gcinisa is only about 130m above sea level and situated on the coastal belt (Page 1978). The topography in this area consists of gently undulating country, in sharp contrast to the rugged terrain of Gwabeni (fig. 3.2). The bedrock consists of shale, sandstone and mudstone in the Balfour formation of the Beaufort Group (Loxton *et al.* 1979).

Gcinisa village is of an elongated rectangular form stretched roughly along the top of a low ridge which overlooks the surrounding Location. The land around the village slopes gently down to the river and various drainage channels. Slopes are typically moderate ($6-10^{\circ}$) and are steepest near the river and other drainage channels. On topographic and geological grounds, Gcinisa is better suited to agriculture and most other forms of development than Gwabeni.

Figure 3.4 Gwabeni: Water Sources



Hydrology

In spite of the two villages' common experience of drought and a lack of water reticulation Gwabeni's position and topography places it in a worse position than Gcinisa *vis à vis* water supply. The different sources of water available in Gwabeni are shown in figure 3.4. The only natural water bodies are the intermittently flowing tributaries of the Nqwebebini River which occur in the deep valleys. These tributaries have very localised catchments and flow eventually into the Great Fish River. The dearth of accessible perennial water courses poses a problem of water supply for human and animal use, let alone irrigation. The Keiskamma River provides a source of good quality water in the dry season, but it is too far away from Gwabeni to be a regular source of water for livestock or the mostly pedestrian population. Spring water is brackish and unpalatable, and it is restricted in supply and located in the valley bottoms at considerable distance from the homesteads. The springs are unprotected from livestock and must be re-dug each time water is collected. There are, in addition, non-natural communal water sources such as dams and bore-holes.

Neither the natural nor the engineered water sources are adequate, however, and the struggle of both humans and animals to obtain adequate water in Gwabeni has had a considerable impact on the quality of the surface water (Rowntree 1994). The unfenced communal dams of Gwabeni are continuously exposed to human and animal activities. In the dry season and during droughts the dams become a focal point of activity. Clothes are washed, livestock watered, and water collected, putting pressure on the immediate environment. The continuous trampling of the areas inhibits root development and lead to a significant reduction

in plant growth and soil erosion, which in turn muddy the water and silt up the dams.

The only natural sources of water in Gcinisa are the Nyulutsi River which dry up during severe droughts and several water courses which flow only after heavy rains and are thus mostly dry in winter. During August 1994, the only drainage channels containing water were the Nyulutsi River and the main channel entering the northernmost of the 12 dams which, in addition to boreholes, tanks and two taps in the next village represent the non-natural supply (fig. 3.2, see chapter 7 for further details).

The flatter terrain, slightly higher rainfall, closer river and proximity of clean, reliable tap water at Wesley make for a better overall water supply in Gcinisa than Gwabeni. In addition, Gcinisa participated in a reticulation scheme linking several coastal villages which would see seven standpipes along the main routes if sufficient volunteers could be found to dig the trenches.²

Although access to water is better in Gcinisa than Gwabeni, it should be apparent from the above that the water situation is unsatisfactory in both communities. Where all or part of household needs has to be met from open sources making both communities potentially vulnerable to water-borne diseases. Water-carrying itself can be a health hazard, with old women and young children carrying quantities of water which are much too heavy for them along steep and rocky paths on which they frequently stumble.

Vegetation

The vegetation around both villages is a combination of original and secondary indigenous, varying somewhat in relation to altitude and climate. But the main difference is that Gcinisa's

vegetation was cleared for commercial farming and Gwabeni's was not.

The vegetation in the area surrounding Gwabeni consists of two main veld types: Valley Bushveld (Southern Variation) in the river valleys and False Thornveld of the Eastern Province on the plateau (Acocks 1975). These vegetation types have been further divided and classified by subsequent authors (e.g. Loxton *et al.* 1979, Palmer and Avis 1994), but the simpler classification of Acocks is sufficient for present purposes.

Valley Bushveld in its natural state consists of a dense succulent thicket or scrub-forest with a very sparse grass cover. However, in this part of the Fish River basin (the communal rangelands) it has often been severely degraded such that trees are virtually absent, the dominant plants are karroid sub-shrubs, and much of the soil surface is bare (cf Loxton *et al.* 1979, Acocks 1975). In fact, Palmer and Avis (1994) state that in the Gwabeni area cover of perennial shrubs and grass ... is low to very low, with extreme transformation in the species composition. Productive perennial grasses have been replaced by annual species and unpalatable dwarf shrubs. This veld degradation is believed to have been caused by the high number of domestic stock foraging in an uncontrolled manner (*ibid.*).

False Thornveld of the Eastern Province in its climax form consists of a savanna or thicket of short thorn trees (*Acacia karroo*) and various evergreen trees, with a grassland understorey. The current distribution of vegetation in Gwabeni location is shown in figure 3.5, and the vegetation is described in more detail in appendix II.

The vegetation of the Gwabeni area before intensive human settlement would have consisted of fully developed Valley Bushveld throughout the river valleys and ridges, and of False

Thornveld of the Eastern Province on parts of Bhubho Ridge and on the Breakfast Vlei Outspan. Intact Valley Bushveld is now found only on the lower slopes and steeper parts of the river valley.

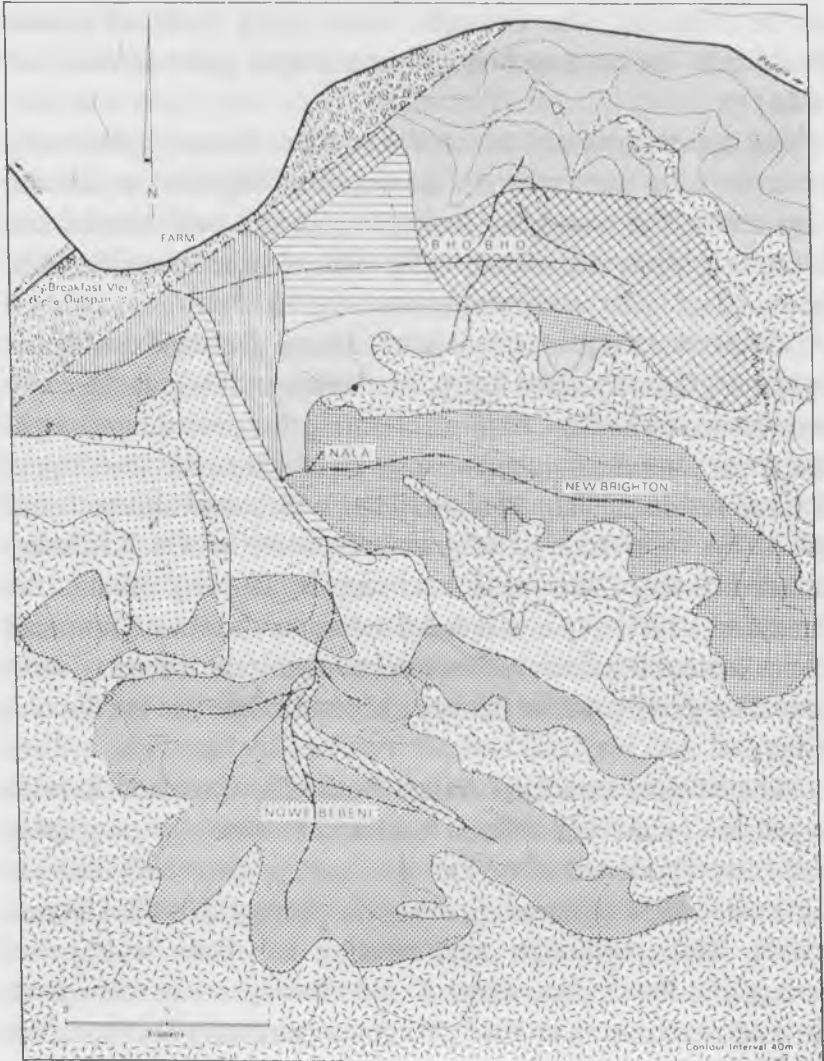
The upper slopes and crests of the ridges, from which virtually all trees have been cleared, have mostly degraded to karroid vegetation. This consists of largely unpalatable small shrubs, and a larger proportion of bare soil. This degree of degradation implies that heavy overgrazing has occurred.³

Some of the ridge tops consist of a sparse grassland dominated by quick grass (*Cynodon dactylon*). However, this grass has only recently colonised the bare soil. During the preceding drought there was virtually no plant cover at all in these areas (confirmed by local residents). The Bhubho Ridge, which was cultivated until the 1970s, now consists of grassland, some of which is being invaded by thorn trees or karroid species. The vegetation of the Breakfast Vlei Outspan is a savanna form of the False Thornveld of the Eastern Province with several co-dominant species of short tree. The grass cover in this area is denser than that on Bhubho ridge.

The relative extents of Valley Bushveld, Grassland/Karroid vegetation (which are difficult to tell apart on aerial photographs) and False Thornveld of the Eastern Cape appear to have changed little since 1954 (comparing the aerial photographs of 1954 and 1990). Thus, although tree clearing has been widespread throughout the region, most of this clearing in Gwabeni must have occurred prior to 1954. The only detectable change in the vegetation is that there has been some encroachment of trees (mostly thorn trees) onto the old fields on Bhubho Ridge.

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Figure 3.5 Vegetation Types at Gwabeni Location



KEY

	Grassland		Valley Bushveld
	Grassland with Karroid invasion		Karroid veld
	Grassland with <i>Aloe ferox</i>		Karroid veld with <i>Aloe ferox</i>
	Savanna		Valley Bushveld/Karroid veld transitional

An elderly resident confirmed that when he was young there were many large trees on the ridge crests. He said that in about the 1920s the area became overpopulated and people chopped down most of the trees in close proximity to their houses for constructing fences and kraals, and to create space for fields. He also reported that as the trees were cleared, the numbers of bitter aloes (*Aloe ferox*) and bobossies (*Pteronia incana* and *Chrysocoma ciliata*) increased, such that by about the 1950s the karroid form of vegetation had become common.

Gcinisa is situated in an area classified by Lubke *et al.* (1988) as consisting of False Thornveld Grassland. The vegetation of the north-west part of Gcinisa Location has been mapped in more detail as part of a study by Loxton *et al.* (1979). This area consisted mostly of short deciduous *Acacia karroo* grassland or shrubland (thought to be transitional between grassland and moist thicket) and in the southern parts of coastal grassland. The potential climax vegetation in both cases is thought to be thicket. The grass in both areas is described as sour mixed. The vegetation types in Gcinisa Location are mapped in figure 3.6 and described in appendix II. Most of the area consists of grassland. This grassland is either almost entirely devoid of trees or has a very sparse cover of short (< 50cm) thorn trees (*Acacia karroo*). The only significant tree cover is in a strip of riverine vegetation along the Nyultsi river. This extends no more than 20m from the river except in the north east corner of the Location, where it is several hectares in size. The reason why trees in this area are still standing is probably that they are far from human settlement.

During the drought-stricken 1980s and early 1990s it is reported by residents that much of the grassland at Gcinisa Location was reduced to bare soil, particularly east of the main

road where there used to be fields. Many of these areas have only recently been recolonised by quick grass (*Cynodon dactylon*).

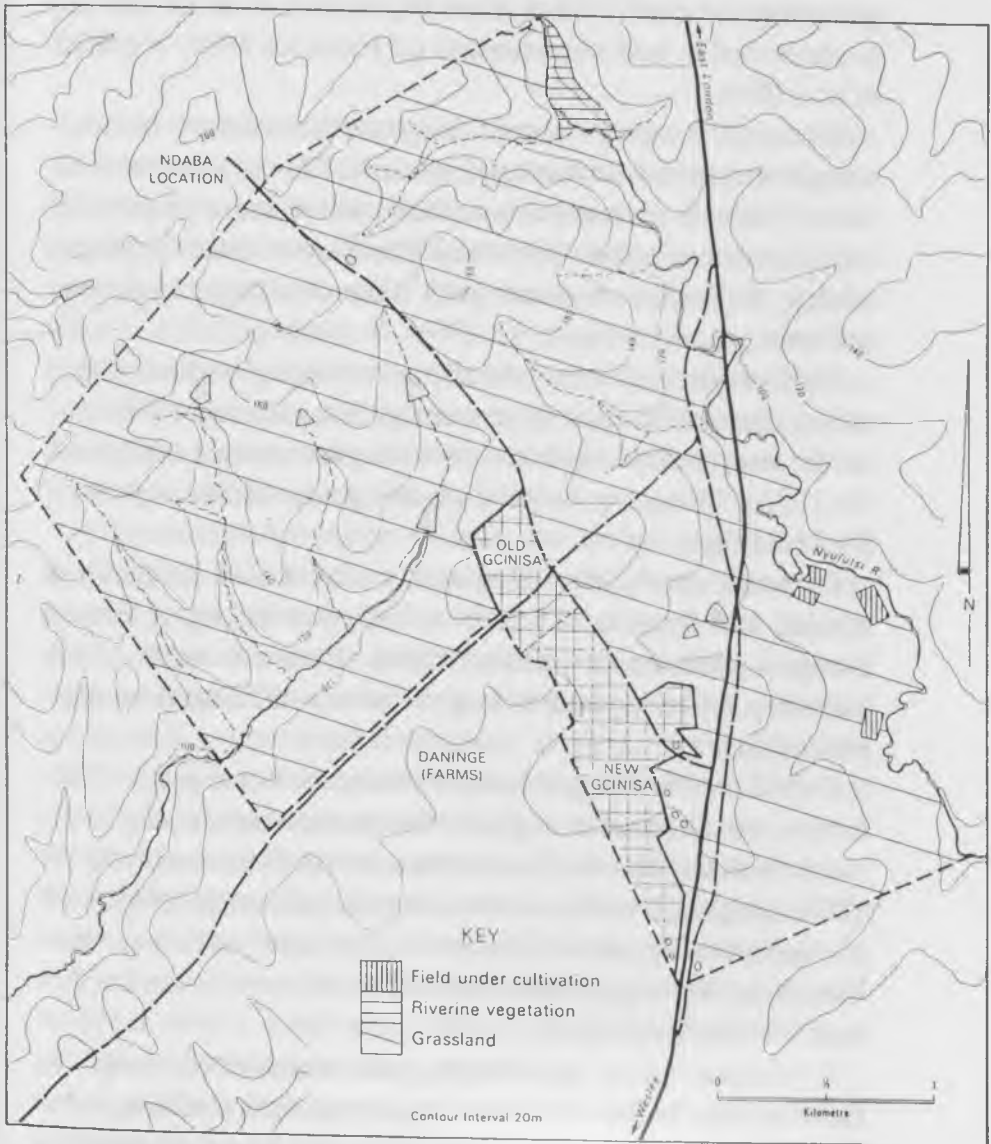
According to aerial photograph interpretation, there have been no major changes in the structure of the vegetation since 1965. Most of the tree cover had already been removed prior to that date, although some areas which had a sparse tree cover in 1965 appeared to have become completely devoid of trees by 1990. This was confirmed by verbal reports. In particular, the last trees from the area between Gcinisa and the main road are said to have been removed about 10 years ago. The woody area in the north-west also appears to have become less dense. Termite mounds (*isithuli*), which often develop on the stumps of chopped trees, can be seen as evidence of the past chopping down of trees in many areas.

While the plant composition around both villages has been dramatically affected by people and their livestock, the types of vegetation in the two areas are very different. In the open arable farming country around Gcinisa most of the trees and shrubs were cleared long ago, so wood and other plants for gathering are scarce. In Gwabeni, until the advent of the nature reserve at least, there was plenty of scope for hunting and gathering, and to an extent there still is; it was good land for planting and grazing that was always at a premium (hence the long-standing dispute over the Breakfast Vlei Outspan, the best agricultural land in the vicinity).

Land Use

The residential aspect of land use in Gwabeni and Gcinisa has already been outlined. Other uses, involving field cultivation and cattle farming, may be in steep decline (see chapter 5), particul

Figure 3.6 Vegetation Types at Gcinisa Location



arly in Gwabeni, but herding the hardier foraging animals and gardening continue to have some importance as far as land use is concerned in both communities (cf Fabricius 1994; Fabricius *et al.* 1994).

Livestock foraging occurs throughout the Gwabeni area, although some areas are used preferentially. The only fences which limit livestock movements are those which are still partially standing on the northern boundary. There are no fences to prevent mixing of Gwabeni livestock with those of villages to the east and west.

Field cultivation is not currently occurring in Gwabeni. Crops were grown on Bhubho ridge (see fig. 3.1) until the 1970s, and on the steep valley slopes and western plateau areas until about the 1930s. Ploughing furrows are still easily visible on parts of Bhubho ridge.

Currently nearly all of Gcinisa Location is used for livestock grazing and foraging. There is no effective fencing to control livestock movements within Gcinisa. However, some of the boundary fences prevent mixing of cattle with those from adjacent villages.

Only a few fields have been cultivated in recent years. Cultivation used to occur throughout the area between the east of the main road and in other areas close to the settlement until the 1960s (judging by evidence of recent cultivation in the 1965 aerial photographs) but as in Gwabeni it has tailed off since then. Ploughing furrows are still visible in these areas, as are contour banks in the steeper parts.

Cultivation on an appreciable scale continued far longer in Gcinisa than Gwabeni, but even there it has been declining in the last thirty years. Animal husbandry is equally uncontrolled in either community in spite of Betterment Planning's commitment

to reserving certain areas for livestock and to rotational grazing.

Soils

Consistent with its altitude and climate, Gwabeni has not been endowed with good soils, and generations of trying to wrest a living from them has led to further deterioration. Gcinisa is much better-off in this respect. Gwabeni falls within an area described as having mostly eutrophic⁴ greyish brown and brown shallow litholic⁵ soils (Loxton *et al.* 1979). On the plateau areas, common soil forms are expected to include Mispah, Glenrosa and Hutton. The steep slopes are said to have mostly very shallow soils, while the valley bottoms occasionally contain deeper more fertile patches of soil (De Lange *et al.* 1994).

A reconnaissance survey of soils was undertaken at the residential parts of Gwabeni, where garden cultivation is desirable; the relatively flat areas of Breakfast Vlei Outspan and Bhubho ridge, where level terrain makes field cultivation viable; a typical erosion donga. The survey showed that very shallow and often rocky soils are common throughout the area, especially in the residential areas, thereby severely limiting cultivation. There are often dense concretions in the subsoil, which may further inhibit root penetration. The most common soils are of the Mispah form. The topsoils have high organic matter contents and are mildly acidic, which is expected to be ideal for crop growth. Topsoils and subsoils cover the whole textural range, with substantial variation over a small area. Salinity levels are low, and thus provide no limitation to crop growth.

Soil nutrient status was not measured due to the expense involved. However, since the fields which used to be cultivated were apparently cropped for many successive years without

fertilising it is expected that deficiencies of nutrients, particularly phosphorus, would be a problem (De Lange *et al.* 1994). If it was a problem, it was not recognised as one by the men who had cultivated these lands.

Gcinisa falls within an area described by Hartmann (1988) as having weakly developed and solonchic⁶ soils. Loxton *et al.* (1979) have mapped the soils around Gcinisa in some detail, but do not include the area east of the main road. According to these authors, the dominant soil types in the settlement and between the settlement and the main road are Rietvlei and Bluebank, which correspond respectively to Westleigh and Kroonstad forms under the current classification (Soil Classification Working Group 1991). These soil types have subsoils which inhibit root penetration or are poorly drained, so they are not suitable for deep rooted crops. Soils in the north-western area are described as eutrophic greyish brown and shallow litholic soils which are mostly infertile. The topsoils are said to be fairly shallow, and the subsoils to have a high proportion of concretions or gravel. The dominant soils are given as Jozini and Williamson, corresponding to Oakleaf and Glenrosa forms under the current classification.

A reconnaissance survey of soils was undertaken at the residential parts of Gcinisa, where garden cultivation is occurring and scattered around the location to further investigate potential for cultivation.

Most of the Gcinisa Location, including the settlement area, appears to be dominated by one soil type provisionally identified as Westleigh Form, Helena family (this classification needs to be confirmed using soil pits). In this soil type, the subsoil has been periodically saturated with water, and allows little plant root development (D. Dekker, Dohne Agricultural Development In-

stitute, pers. comm.). The major exception to the predominance of this soil type is a strip of less than a few hundred metres along the Nyulutsi River where soils are very deep, of little or no structure, and have a sandy or loamy texture. These soils are expected to be well suited to cropping. Clay content increases as one moves away from the river.

Soils are generally much deeper than in Gwabeni, without the problem of rocks near the surface. However, effective soil depth is fairly shallow (300-400 mm) throughout most of Gcinisa Location, excluding the river floodplain.

Organic matter content is generally lower than in Gwabeni, although still moderate. The topsoils are generally slightly acidic (and all non-calcareous), which is suitable for the growth of most crops. Salinity levels do not pose any problem. The soils at Gcinisa are generally more suitable for crop growth than those in Gwabeni, though they are of limited potential in areas other than the Nyulutsi floodplain.

Soil erosion

Gwabeni is vulnerable to soil erosion in a way that Gcinisa is not. According to Loxton *et al.*'s (1979) survey, Gwabeni at that time fell within an area where 25 -50% of the topsoil had been entirely lost, erosion gullies were common, and urgent rehabilitation was required. This situation can be expected to have worsened subsequently. The area is naturally susceptible to erosion because of steep slopes and highly erodible soils which are found on shales and sandstones (Beckedahl *et al.* 1988; Palmer and Avis 1994) such that when the plant cover is reduced (e.g. by clearing or heavy grazing) erosion is likely. Indeed, the vegetation in areas where the worst erosion occurs at Gwabeni

consists of karroid vegetation, which predominates in areas where the original vegetation has been almost completely removed.

The most conspicuous evidence of accelerated soil erosion in the Gwabeni area is in the form of erosion gullies, commonly called dongas. The location of the dongas which can be seen from the ridgetops is shown in figure 3.7. More than 5% of the land area of Gwabeni Location is occupied by dongas. These occur on the steep slopes of the river valleys, and are typically about 1m deep, 1m wide and 15m long. In most cases dongas are clustered into areas of parallel or interlocking gullies. These clusters occur mostly on the lower valley slopes, where the velocity of runoff water (and thus the erosion hazard) is greatest. There also appears to be a tendency for dongas to occur in those parts of the valley slopes which have been cultivated in the past. The area occupied by dongas can be expected to continue to increase under current conditions.

Although less conspicuous, sheet⁷ and rill⁸ erosion at Gwabeni cover a larger area and involve more loss of topsoil than gully erosion. These forms of erosion are evident on all slopes where there is, or has been, a substantial amount of bare soil exposed. This applies to most of the areas of Karroid vegetation (see fig. 3.5). It also applies to the sparsely grassed areas on the ridgetops which, according to locals, had virtually no plant cover during the recent drought. They report that the air was often filled with dust from the soil on windy days during that period (i.e. wind erosion was occurring).

The dams in the river valleys are suffering from siltation as a result of soil erosion in their catchment areas. The gravel roads and dirt tracks running through the settlements contain ruts as a result of water erosion and the lack or inappropriate design of

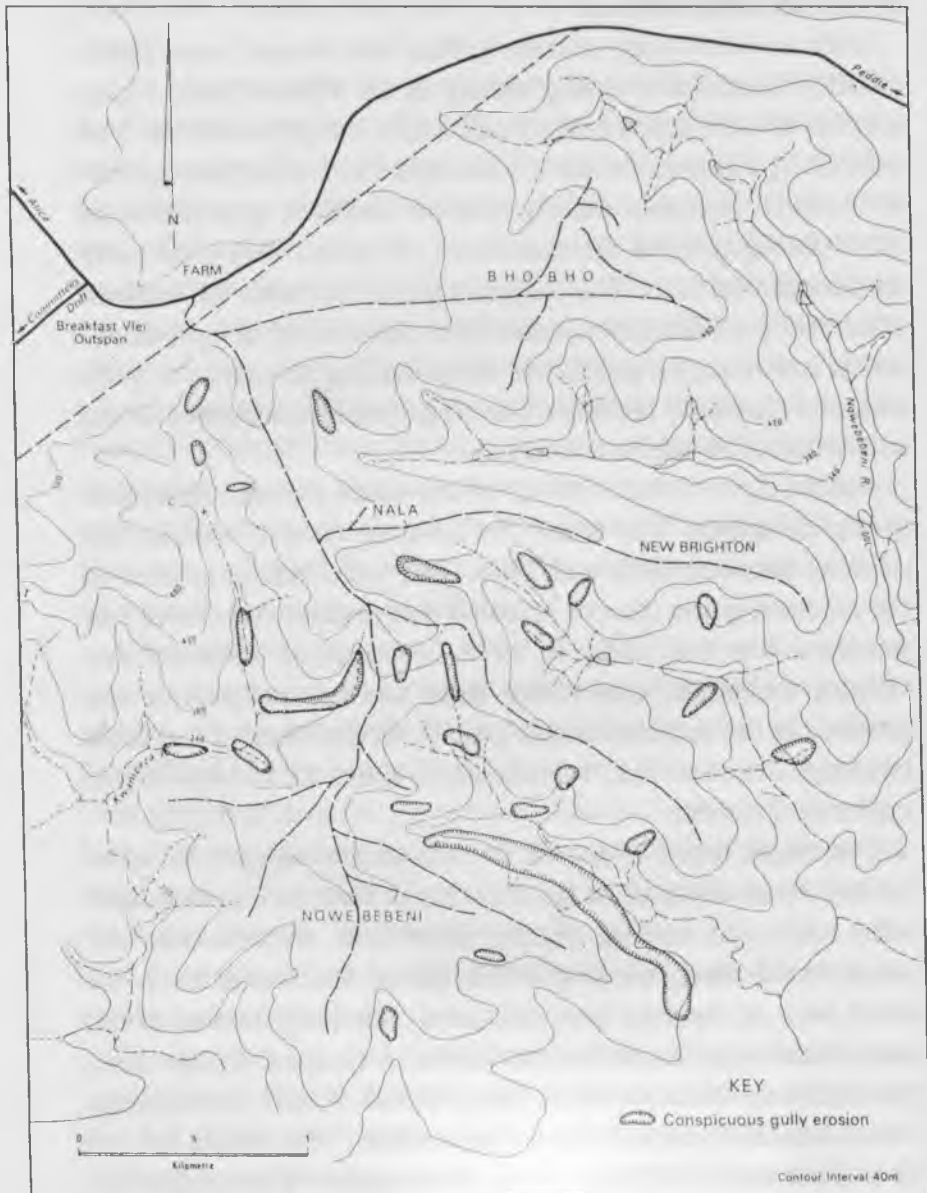
drainage spillways. However, most of these are still negotiable by conventional vehicles.

Soils in which deep erosion gullies have formed were provisionally identified as being mostly of the Hutton form, which consists of unstructured sandy soil which is highly erodible. The extensive gully erosion identified on the 1990 aerial photographs of Gwabeni contrasts sharply with the situation apparent in the 1954 photographs of the same area, in which very little gully erosion can be seen. This suggests that it has been the removal of herbaceous plant cover, rather than tree clearing or cultivation, which has been the proximate factor leading to extensive gully erosion. However, the latter factors probably contributed to the susceptibility of the land to erosion.

According to Tanser (1994), whose study focused on erosion in the Breakfast Vlei area, the severely eroded section had doubled between 1979 and 1994. The same indices applied to the adjacent game reserve revealed that erosion rates there had remained low and static. In 1979 Loxton *et al.* recorded that Gcinisa was in an area where there was no conspicuous soil erosion. In the current study, a ground survey revealed that there is conspicuous erosion, but that this is restricted to small areas, unlike in Gwabeni.

The major areas with serious erosion are adjacent to water bodies. Most of the drainage channels in Gcinisa Location have been subject to varying degrees of erosion. In particular, the streambanks along much of the length of the tributaries in the north west of the area have collapsed. Similarly, several of the dams have experienced severe headward erosion. In one case, this has been exacerbated by the removal of soil for building, which has led to considerable sheet erosion. This in turn has led to an increase in sediment in the water course. The removal of

Figure 3.7 Gully Erosion at Gwabeni



woody vegetation over the years and overgrazing during droughts are probably the ultimate causes of these problems. There is only minor erosion along the banks of the Nyulutsi River. The preservation of much of the vegetation here has maintained the stability of the banks.

Minor sheet or rill erosion has occurred in patches throughout those areas where there used to be fields with slopes of more than a few degrees, including those in the east and north west. These are all areas where the bare soil is now or has recently been completely exposed. However, in general field cultivation of the gentle slopes of Gcinisa has not caused a significant erosion problem.

Dirt roads, especially those in the settlement itself, are badly eroded, often with deep ruts. These are sometimes sufficient to make the roads impassable. No drainage spillways have been constructed to divert this water.

According to aerial photograph interpretation, the extent of visible gully and streambank erosion changed little between 1965 and 1990. This suggests that the removal of trees and/or high grazing levels prior to 1965 are the main causes of the observable erosion. However, it is likely that sheet and wind erosion have subsequently led to loss of topsoil once the soil has become exposed.

When assessed in terms of Smith and Stamey's (1965) schema for 'tolerable' erosion, erosion emerges clearly as a major problem in Gwabeni, along with its correlate, the siltation of dams; whereas neither is of great concern in Gcinisa. This is not to suggest that the experience of Gwabeni in terms of erosion is particularly unusual in the former Ciskei (cf Weaver 1989).

Agricultural potential of the land

With its poor soil and difficult topography Gwabeni has very limited agricultural potential so long as much of its traditional grazing land is off-limits within the Double Drift Nature Reserve. Gcinisa has more potential than the resettled inhabitants have been able to realise thus far. According to Loxton *et al.* (1979), Gwabeni fell within an area which at that time was suited only to extensive and semi-intensive livestock production, rather than cultivation.

The general area was described as having a moderately to very low potential for crop production because of low rainfall and shallow soils (*ibid*). It is no accident that none of the white farmers in the area cultivate rainfed crops, despite their greater access to capital (De Lange *et al.* 1994). The valley slopes and ridges are expected to be particularly unsuited to cultivation because of the additional hazards of high erosion susceptibility and rocky patches. Irrigation of crops is not recommended even in the flatter areas (in the unlikely event of sufficient water being obtained) because of the shallow effective depth of the soils, which would not allow adequate drainage. In any case, irrigation generally requires an assured supply of easily and economically accessible water, neither of which conditions have been or may ever be met in this area.

A preliminary land capability assessment for Gwabeni (following Scotney *et al.* 1993) carried out as part of this study confirms and extends the above conclusions (details in appendix IV). The southerly part of Gwabeni Location is considered to be unsuitable for field cultivation because of shallow and stoney soils and high erosion hazards. Some of the northern plateau area is considered suitable for cropping, but with severe limitations

because of the low, unpredictable rainfall. The patchy nature of the deeper, less stoney soils would also seem to preclude cultivation on a commercial scale, though a more detailed survey is needed to verify this.

The potential for livestock production was graded by Loxton *et al.* in 1979 as very low in an area which includes most of Gwabeni Location, with a recommended stocking rate of only 11-15 ha/LSU⁹, and the bottom of the river valleys recommended only for emergency grazing. The number of stock which the area can sustainably support can be expected to have declined further in the subsequent 15 years. Indeed, Palmer and Avis (1994) state the current carrying capacity of Tyefu Location as 20-35 ha/LSU.

The shrubs which dominate the karroid vegetation are virtually never eaten by domestic stock (confirmed by Gwabeni residents), and therefore these areas are assumed to have a negligible carrying capacity. The following descriptions of foraging potential relate only to the grassland and savanna areas for cattle, and to savanna for goats.

The Outspan area consists mainly of sweetveld, whereas the ridgetops, including Bhubho, consist mostly of mixed veld. Sweetveld in this area has a lower carrying capacity than mixed veld, but is more nutritious in winter. In all surveyed areas, the results (full details in appendix IV) indicate that severe overstocking has occurred in the past resulting in a decline in the proportion of the most nutritious species as a result of high grazing pressure. The overstocking has been most serious on the ridges (where the carrying capacity ranged from 10-35% of its potential) and least so on the Outspan (about 56% of potential carrying capacity).

The carrying capacity of Gwabeni land is much lower than that on the adjacent game reserve, which has not been subjected to

overgrazing and has vegetation of relatively high potential, which is one of the reasons why residents of Gwabeni lay claim to it. The forestry potential of the area is classified by Loxton *et al.* (1979) as low to very low, with only woodlots (as opposed to commercial forests) of eucalypts and black wattles (*Acacia mearnsii*) expected to be viable.

Alternative and more ecologically sustainable land uses for this area are game farming, conservation and tourism, and indeed these are practised at the nearby game reserve. The carrying capacity for wild herbivores, however, is also well below its potential level in the Gwabeni area. A switch from domestic livestock towards harvesting of indigenous game would require overcoming many environmental, cultural and socio-economic obstacles.

According to Loxton *et al.* (1979), Gcinisa is in an area which is best suited to semi-intensive livestock production on natural veld, with low-intensity subsistence crop production involving drought resistant crops on certain sites. These sites apparently correspond to the deeper soils in the flat areas near the Nyulutsi River.

The potential for crop production in Gcinisa Location is described as mostly moderately low (*ibid*) because of low soil moisture efficiency throughout, limited effective depths and high erosion hazards in the westerly areas. Irrigation is not recommended, even if sufficient water were available (which it is not), because of the need for artificial drainage in the easterly areas (due to the high clay content of the subsoils), insufficient effective soil depth in the westerly areas, and erosion hazards throughout.

A preliminary land capability assessment (following Scotney *et al.* 1993) determined that most of Gcinisa Location is suited to crop production but with moderate to severe limitations,

relating mainly to effectively shallow and poorly drained soils along with fairly low rainfall (see appendix IV for details). The river floodplain, however, seems to be of high potential if it could be irrigated or when soil moisture content is otherwise high.

Loxton *et al.* (1979) classify most of Gcinisa Location as having a moderately high potential for livestock production, with a recommended stocking rate of about 3-4 ha/LSU. Conventional veld condition assessments (Beckerling *et al.* 1993) are applicable throughout Gcinisa Location (see appendix III for results). Given the virtual absence of woody vegetation, an assessment of browse potential was not considered applicable, and it is expected that a negligible number of goats can be maintained in good condition at Gcinisa.

The composition of the grass layer at Gcinisa differs markedly between the northern parts of the Location and those close to the settlement and east of the main road. The former areas consist mostly of sourveld dominated by nutritious grasses, while the latter consist mainly of mixed veld where relatively unpalatable grasses dominate because of overgrazing.

Most of the area to the north of the settlement is in close to optimal condition, indicating that appropriate numbers of stock have been grazed there in the past. These areas consist of typical Sourveld of the Coastal Forest and Thornveld. Sourveld is less sensitive to overgrazing than Sweetveld, but provides poor nutrition during winter.

In contrast, the veld condition scores indicate that the rest of Gcinisa Location has been severely overgrazed in the past (appendix V). The land can support less than half the number of stock than would have been the case if the area had been managed to maintain optimal grass composition. The forestry potential in

this area is classified as low (Loxton *et al.* 1979). As in Gwabeni, eucalypts and black wattles are the recommended species.

Gcinisa may not have enormous productive potential for either arable or stock farming, but it is a farmer's paradise in comparison with Gwabeni. Where beyond gardening, communal participation in nature conservation, game-farming and ecotourism probably hold the best prospects so long as the nature reserve is off-limits to the community's stock farmers.

Potential for hunting and gathering

In an environment as inhospitable to agriculture on a small scale as the former Ciskei, where cash earnings tend to be the most valued yet scarcest resource of all, hunting or gathering, or both, are potentially significant household-economic activities. These activities, their role in the households and gender implications are discussed in detail in chapter 6.

In Gwabeni, even more than Gcinisa, the environment is an important source of sustenance. Until the Game Reserve was proclaimed, and particularly until it was fenced, hunting antelopes, bush-pigs, hares, etc., with dogs was a favourite pastime among the men as well as an important source of protein. The local term for any edible wild plant is *imifino*. These are quite common both within the Location and in the Game Reserve; *imifino* plants are often highly nutritious, and thus an important supplement to an otherwise high carbohydrate daily diet¹⁰ (Mbangata *et al.* 1).

Although it is not an indigenous plant, the prickly pear *itolofya* (*Opuntia ficus-indica*) has long been valued by the local people as a foodstuff, the fruit for human use, the leaves as animal fodder (after the spines had been burned off). In times of extreme need,

the burned leaves were consumed by humans. Thus the prickly pear was a versatile resource for the people of Gwabeni, and the youths guarded their clumps of prickly pear against encroachment by neighbours. Unfortunately, they were powerless when, during the 1960s, the prickly pear was destroyed by 'an orange powder sprayed over the area from an aeroplane' (according to a witness) followed up by the order from the Tribal Authority that one man from each household was to participate on the ground in the pear destruction project. People did this reluctantly, and whilst livestock enjoyed the burnt prickly pear leaves, which after burning are said to be nice and succulent for livestock, this was a temporary advantage. An important resource was destroyed for a time (though it has since grown back). Biological control (by an insect) was also introduced to control the prickly pear, and continues to be effective in keeping the plant at low densities.

The people of Gwabeni are also enthusiastic collectors of wood which they use for fuel and in the construction of houses. Fuel-wood is available for sale and paraffin and gas are used by those who can afford them, but most people are not in that league and are prepared to walk considerable distances and carry heavy loads to obtain free fuel. As noted above, wood is becoming scarce everywhere except in the Nature Reserve.

The natural resources around Gcinisa which appeal to the villagers include wood for fuel and building, clay for brickmaking, *imifino*, medicinal plants and fruit, especially prickly pears. Fish and shellfish are available from the nearby seashore, but this tends to be a holiday activity of the returned migrants. There is little scope for hunting close to Gcinisa because of the shortage of cover.

There are virtually no trees in a wide radius around the village, so very little fire wood is available nearby. The poorer people (i.e., those who cannot afford paraffin or gas) walk to neighbouring farms to obtain fire wood. Building material also has to be collected further afield. Gum poles have to be collected from Nyongwane near Wesley, three to four kms away. The wood is free for the taking, but the hire of transport works out at R120 a load. Reeds for thatching and the making of mats may be gathered from the banks of the Nyulutsi River. In or around the village building materials such as gravel, stones, clay and mud (for bricks) are the only natural resources available.

Imifino can be obtained from the commonage, but it only grows after rain: there is no permanent supply of *imifino* in Gcinisa, unlike Gwabeni, because the natural vegetation has been largely replaced by grasslands. Similarly, medicinal plants are seldom collected for household remedies by ordinary folk, because they are hard to find in this area, but the many local diviners (*amaggira*) and herbalists (*amaxwela*) have more incentive and range further afield, into the coastal environment such as Mqwalana near Bira or the local farms.

Some of the former white farms were never re-allocated, and over the last 15 -20 years they have reverted to the indigenous vegetation. They are thus a valuable store of edible and medicinal plants. But there is a risk of over-exploitation: one *iggira* boasted of taking out 50 kilograms of such plants in a single day.

The natural environment of Gwabeni offers greater opportunities for hunting and gathering than that of Gcinisa. In both communities there is plenty of interest in obtaining whatever is available to sustain or heal. In this endeavour, as we shall see in chapter 7, they are motivated in part by a desire to offset household expenditure, in part by a traditional cosmology which

has resisted all attempts by missionaries and western materialism to deny the centrality of the natural environment in the ordering of spiritual and social relations.

Conclusion

A detailed inspection of the natural environment in the vicinity of the two villages has revealed that Gcinisa is better-endowed than Gwabeni from the point of view of cattle-rearing and crop-growing. On the other hand, Gwabeni's environment is more 'natural', and therefore provides a greater supply of wood, plants and wild animals. What the study also reveals is that neither territory is particularly bountiful, and would challenge even the most motivated, fit young farmer with plenty of land and labour and capital at his/her disposal. Yet this land of low potential is being confronted by communities in which land, labour, capital, technical knowledge, equipment and motivation are in such limited supply that the most viable and widely practised form of agriculture in Gwabeni and Gcinisa is also the most elementary and individualistic, gardening. Even more primal is the reliance on the uncultivated sections of the environment for resources that may be obtained without expenditure of the severely limited incomes of most of the inhabitants and therefore enhance the standard of living -- water from rivers and dams, wood for building and fuel, thatching grass, wild fruits and vegetables, herbs and edible wild animals.

Just why the relationship of the environment should have declined from that of above-subsistence, surplus-producing peasant farmers in the Peddie District of the last century to a dependent peri-urban lifeway with a little gardening and sporadic hunter-gathering on the side was discussed in the previous

chapter. How it has become a correlate of the socioeconomic set-up specifically in Gwabeni and Gcinisa is yet to be broached.

Endnotes

1. Computing Centre for Water Research (CCWR), Pietermaritzburg, records from 1938-1952.
2. Six months after the completion of fieldwork the standpipes were in place, but the community was unimpressed with the quality of water the taps delivered and continued to use the alternative sources for domestic purposes.
3. Overgrazing is here defined as grazing pressure which has been sufficient to cause a long-term reduction in the number of grazing stock that can be supported in a certain area. At low levels, this involves an increase in the proportion of plant species which are of low nutritive value (due to selective grazing of the more nutritious species). At high levels, it leads to exposure of bare soil and high rates of soil erosion.
4. Euthopic soil has a high base status due to a low level of teaching (Soil Classification Working Group 1991).
5. Litholic soil consists of freshly and imperfectly weathered rock or rock fragments with no clearly expressed soil morphology (Soil Classification Working Group (1991).
6. Solonetic soil is sodic with natric subsoil; alkaline reaction (Landon 1991).
7. Sheet erosion describes the removal of thin layers of soil by water acting over the whole soil surface (Troeh *et al.* 1980).
8. Rill erosion describes the formation of channels as a result of the scouring action of water on the soil (Troeh *et al.* 1980).

9. LSU = large stock unit, equivalent to one non-breeding adult cow or ox. Note that these figures refer to the recommended average stocking rate - the appropriate stocking rate will vary over time, particularly according to climatic conditions.
10. The national Food Research Institute in Pretoria has demonstrated that *imifino* plants contain carbohydrates, proteins, vitamins and minerals which are all essential to a healthy diet.

PART TWO:

GWABENI AND GCINISA

4. SOCIOECONOMIC CHARACTERISTICS OF GWABENI AND GCINISA

Introduction

In terms of ethnicity and class the people of Gwabeni and Gcinisa have very similar origins. There is even a geographical connection. The first of those who were resettled in Gcinisa came from a community, also named Gcinisa, which is situated not far from Gwabeni. They are all Xhosa-speakers, mainly of Mfengu descent, and the vast majority are 'post-peasants' (cf. Bailey 1971), that is, people who formerly lived off the land, or the children of peasants who presently follow other occupations or are unemployed, unless they are still of schoolgoing age. But there are socioeconomic differences between the two communities as well, not the least of which is that Gcinisa is much more populous than Gwabeni. These socioeconomic similarities and differences need to be conveyed, in broad strokes, as a necessary prelude to any account of household dynamics.

Characterizing Gwabeni and Gcinisa

The people of Gwabeni still refer to their land as gift land because they were given it by the British in return for support during the frontier wars. The term 'gift land' was employed locally with some irony, as Gwabeni's land is inherently low in agricultural and pastoral potential, and this has been long recognised (see Kruger 1966, 166; Peires 1981, 110). Only 15km from the

village is the historic Mqwashu tree, under which the Mfengu settlers took annual vows of loyalty to the British government.

Gwabeni

Gwabeni is one of 11 villages which fall under the Thyefu chieftainship. Historically a byword for resistance, the first chief to take the name Thyefu (= poison) was a fugitive for 50 years before establishing his Great Place near Horton Mission, to the west of Gwabeni. His son, Chief Alfred Nkebeza Msutu, followed in this tradition and strenuously resisted Betterment in his area (which is why Gwabeni was never 'bettered'). He suffered imprisonment and eventually died destitute. The focus of this tradition of resistance was transferred to the succession of puppet regimes which governed Ciskei before and after 'independence', for which the Thyefu villages, including Gwabeni, paid dearly in terms of deliberate official neglect designed to 'bring them to heel'.

In the case of Gwabeni, the alignment with the Thyefu chiefs was particularly unfortunate because there were other historical circumstances which had retarded its development, such as the encroachment of white farmers on land which was formerly open to the herders of Gwabeni.

In the nineteenth century, oxwagons from the Cape Colony passed through this area *en route* to destinations in the interior such as Fort Willshire, the site of the first trade fairs between colonists and Xhosa-speakers, and to areas beyond the Kei river, for hunting and trading purposes. They used to outspan their oxen overnight, while the travelling party rested nearby. The area came to be known as Breakfast Vlei. In later years the traffic increased sufficiently to warrant the establishment of a hotel at the site.

Gwabeni residents claimed that their fathers gave up the piece of land for the outspan when it was requested by the white people. They could name the Gwabeni people who used to live on the land which makes up the outspan and point out where an earlier Gwabeni school building was situated. A new road from Grahamstown to Fort Beaufort led to a decline in the traffic on the Trompetter's Drift-Gwabeni-Fort Willshire route, but the outspan land was not returned to the people of Gwabeni. White commercial farmers became established on extensive farms bordering the village of Gwabeni, one of which included the old outspan.

In spite of this disappointment the residents of Gwabeni enjoyed a reasonably good, if paternalistic, relationship with some of the white farmers. The white farmers, who farmed beef cattle for the most part, wanted full-grown cattle for slaughter and would give Gwabeni people two calves in exchange for one adult beast. They would also rent out portions of their farms for the grazing of Gwabeni livestock in times of drought and would send their oxen to be trained for ploughing by a Gwabeni resident, payment being made in cattle for this service.

The white farmers would also market sheep's wool shorn in Gwabeni but at a price, residents claim they discovered later, which was well below market value. The white farmers tended to be tolerant of limited hunting by the men of Gwabeni of the game, mostly small antelope but also kudu, which has always been plentiful in this area. In return, the people from the village would help the farmers by driving the kudu out of the thick valley bushveld and onto the farmers' guns. The beaters were also rewarded for their efforts with meat from the hunt.

Nevertheless, rights to the Breakfast Vlei Outspan was always a bone of contention between the residents of Gwabeni and these

farmers. The white farmers, who had extensive grazing lands on the flatter, higher-lying areas, were seen to be encroaching on the one piece of good grazing land available to the Gwabeni livestock. Eventually, as with most issues between white and black in this area in the colonial, union and apartheid eras, the disagreement was finally resolved by the white farmers evicting Gwabeni residents from the area and barring any Gwabeni livestock from grazing there by fencing the Outspan. (One farmer, Hendrik Ackerman did subsequently allow the ploughing oxen of Gwabeni residents to graze on the Outspan overnight on condition that they were removed early in the morning).

By 1979 all the white farmers in the Breakfast Vlei/Gwabeni area had had their land expropriated in accordance with the policy of homeland consolidation and had left the area. Their farms had become 'released land' and people who had been in the employ of these farmers and who were now left without work and an income, continued to reside on the farms, naïvely assuming that the ownership of this land reverted to them. The people of Gwabeni and their livestock enjoyed unlimited access to these released areas for the purposes of hunting, prickly-pear, wood and medicine collection and for the grazing of livestock during the period preceding Ciskeian independence, except for those portions rented out as grazing lands to larger Ciskeian stock-farmers.

The situation changed in 1983, when the Ciskeian government announced the establishment of The Lennox Sebe Nature Reserve, (later to be renamed The Double Drift Nature Reserve). Some of the people still resident on released farms were initially employed on the Reserve while the rest were offered compensation to relocate to areas beyond the borders of the Game Reserve. Most accepted the latter arrangement; some offered more resis-

tance and were forcibly removed; others effectively resisted removal and had to be accommodated to some extent by the game reserve staff. None of these removals directly affected the people in Gwabeni, but this familiar, heavy-handed approach by a Bantustan government, gave the people in surrounding communities, most of which are highly politicised, their cue regarding the way they would interact with the Reserve management authorities. The non-consultative, top-down approach of the Conservation authorities immediately put them at odds with the people around the Reserve boundary.

The Game Reserve initially made use of the fences left by farmers, which meant that game could easily spill over onto the lands outside the Reserve. More significantly, areas which now fell within the Reserve and were officially out of bounds for people in neighbouring villages, were in fact still accessible to villagers, who continued to extract natural resources from this area as they had in the past, albeit now illegally.

By 1989, the Reserve management deemed that poaching had reached unacceptably high levels and government funds were requested to upgrade and replace the Reserve's boundary fences. The task was completed in 1991. Villagers who were committed to hunting or other resource utilisation on the land now within the Reserve were obliged to cut holes in the fence to gain access. The Reserve staff, for their part, having made a substantial investment of time and money in their new fence, were not prepared to accept trespassing where the fence was damaged in the process.

The local people might have had more respect for the fence had half that long-contested area of the Breakfast Vlei Outspan not been incorporated into the fenced game reserve, without reference to the historic claim that Gwabeni residents have made

to that land. Yet even if part of the Outspan had been excluded it would have been hard for the residents of the useless gift land to understand why 20 000 hectares of excellent grazing and browsing land should be reserved for wild animals. The dispute between the conservationists and the local people is far from resolved.

Gcinisa

Gcinisa is divided into two distinct parts, 'Old Gcinisa' and 'New Gcinisa'. Most of the inhabitants of Old Gcinisa moved from a settlement, also named Gcinisa on the extreme north-east border of Peddie District, which is adjacent to Middledrift. About 30 families pioneered the move from the original Gcinisa to the new settlement in the 1940s. According to oral testimony, the people who moved to the second Gcinisa were younger sons of patriarchal households who wanted to set up homesteads of their own. Their departure from the original Gcinisa was precipitated by the introduction of Betterment Planning in the Middledrift area which also affected the original Gcinisa community. The re-arrangement of land in line with Betterment in the area meant there was no room for expansion on the part of the original Gcinisa. By way of compensation to the community, and to promote the idea of Betterment which was being actively resisted in Peddie District, officials of the Department of Agriculture allocated good grazing and large arable plots (16 acres) to those prepared to move to the site near the coast.

On arrival at the new settlement they would name Gcinisa after their former home, the pioneers were joined by six families, of which four were former labourers of the white farmers who inhabited this land, and two were families from neighbouring

communities who were attracted by the good land that was being offered. As such, 36 families constituted the original second Gcinisa community on the coast.

From 1975 onwards, in accordance with the Ciskei Proclamation of 1972, a number of white farms, mainly livestock and pineapple farms, were consolidated. The majority of these farms were then taken over by the Ciskeian government and run by organizations such as the parastatal, Ulimocor. The labourers and their families formerly employed or living on these farms were removed to nearby villages, such as Gcinisa, Bell and Wesley. The numbers involved were considerable because labourers on white farms in this region tended to live with their extended families, sometimes as many as sixty to a hundred per farmer. Many of them had fields on the farm which they could plough, and some even owned their own livestock. The arrival of the resettled farm families increased the population of Gcinisa tenfold, to some 300 households (according to the Census, though we could only identify 233).

In 1978, 300 residential sites were surveyed on Rietfontein farm where New Gcinisa now stands. Subsequently, ten sites were made available every two months. Twenty rand and a bottle of brandy paid to the headman gave a family the right to a site, but on the day of the allocation of the sites, they would have to run to and stand on their choice of site. Under this monthly free-for-all form of allocation, clusters of families from the same clan or farm stood little chance of reconstructing their communities. For example, in 1982, six families from the same clan Gatyani moved from Selina farm to Gcinisa. They all moved at the same time; they would have preferred to live close to each other, but they are scattered throughout the village.

The original Gcinisa fell within the jurisdiction of Chief Thyefu, like Gwabeni. But the move to the new coastal site took the community beyond Chief Thyefu's sphere of influence and into an administrative vacuum, in terms of tribal authority. The fact that chief Mrwebo of the Tuku area neighbouring Gcinisa was never recognised by the colonial authorities, thus weakening his following and ultimately his power, was the likely source of the problem. In the event, Gcinisa has been adopted by three chiefs in succession, each shift requiring a change of headman, with negative implications for organisational continuity, among other problems.

The disadvantages of Gcinisa's combination of betterment community and relocation camp were offset by three positive factors: its population was at least collected from agrarian communities in the same district; its grazing is quite good; and the original land allocations were reasonably generous. Gcinisa is also close to a main road, and there were some employment opportunities on nearby commercial farms, at a carpet factory and in a large tourist resort a few kilometres away, until the recession led to lay-offs. The involvement of Gcinisa in a cooperative water reticulation scheme involving several neighbouring villages offered the possibility of an improvement in the quality of life.

Two key socioeconomic factors: migrations and pensions

The households of Gwabeni and Gcinisa were simultaneously the dwelling units of those who lived permanently or semi-permanently within the physical boundaries of the two villages and the rural bases of household members who commuted to or permanently inhabited the towns and cities of the region. The members

of these rural-based networks did not regard absence, even long-term absence counted in decades, as a disqualifier from membership of the household, so long as remittances continued to flow and visits occurred as tokens of continued involvement in the household. Keeping in touch seemed to be a more important criterion than physical distance, for all the poverty of many households, maintaining a relationship was defined less in terms of a willingness to remit regularly than in a preparedness to visit and participate in household activities and rituals. The shift from male migrant labour to the urbanization of whole families had made it unlikely that remitting would be financially possible for most of their urban-based members, and those left behind whom we interviewed understand this unfortunate fact of life very well.

Long-standing out-migration, was one of the principal factors structuring households in Gwabeni and Gcinisa. The other was the heavy dependency on social pensions. In neither variable were the two communities unusual among others in the former Ciskei (cf. e.g. Bekker *et al.* 1981; Erwee and Radder 1984; Fabricius and McWilliams 1991; Deliwe *et al.* 1994). The implications of migration and pensions for household economies and organisation should be examined before we proceed any further.

Weyland describes migration as "a means of securing economic stabilization" at the household level (1993,172). This is certainly the object of the exercise; but it is not always its consequence. Migration removes labour. The members who remain behind confront the resultant challenge of "reorganizing the household fabric and redistributing tasks and roles" (*ibid.* 1993, 174). If they cannot compensate for the absentees, 'economic stabilization' may be hard to achieve.

The impact of migration on the household varies with the structure of the household. For example, if the migrant is still unmarried and living in his father's household, or if he is a subordinate member of an extended household his tasks and obligations are relatively unimportant and may be substituted by other members. But if he is the head of the household, or if whole age or gender categories are removed through migration, the impact on household structure and organisation can be profound and detrimental.

For example, implicit in Weyland's suggestion claim that the absence of a subordinate married male in the extended family situation seldom destabilizes households is the assumption that the wife remains contentedly with her in-laws. It may have been that most wives accepted the combination of patrilocal residence after marriage and a migrant husband in the past in Gwabeni and Gcinisa but this appears to be no longer the case. The case of a young wife from Gwabeni is not atypical.

Sindiswa was married at the age of nineteen to a local man who was employed in Natal, and custom dictated that she live with her in-laws in nearby Ripplemead. She did not enjoy living with her in-laws as she had to do all the work in the house, such as the cooking, cleaning, washing, fetching of the wood and water. Sindiswa described this time of her life as 'very difficult':

I did not know my husband's family before I married and did not like the way they treated me. I felt very lonely and isolated. I seldom saw my husband and my own parents' home was too far away to visit regularly.

The obvious solution to the difficulties faced by the young wife left behind was to join her husband in town, and many in

Sindiswa's position exercised that option, which explains the paucity of younger adult women in, especially, Gwabeni. But joining her husband was not an option for Sindiswa, as she discovered that her husband, now a security guard in Cape Town, was living with another woman there.

Women of the older generation confronted legal barriers when trying to join their husbands in town, but if they managed to obtain a pass or avoid the authorities they had a better chance than their daughters of being welcomed by their husbands. Consider the testimony of Maud Manona (80):

I grew up in Bhobho Section with seven brothers and one sister. Unlike most girls in those days, I went to school, but money was short and I had to leave school to find work outside Gwabeni. In 1935 I joined my sister in Grahamstown to find work. Two years after that I got married. The bride-price of eight cattle proved my husband's sincerity. In accordance with our custom, I moved immediately into my husband's household. I was happy there. I liked his mother like my mother because she bore him. What I did not like was that my husband worked at a bank in Cape Town and I only saw him every three years. But he came as often as he could and he sent money back every month. And it did mean that my children did not come too soon after each other. When my mother-in-law died my husband suggested that I join him in Cape Town. So I came and found a job as a maid for a Mrs Joel.

My husband died in 1966. I used his pension to build my house in Gwabeni, but I continued to work for Mrs Joel because I liked them and besides I needed the

money. But as soon as I reached pensionable age [60] I moved back permanently to my house among the other Manonas in Nala. My children remain in Cape Town -- there is nothing for them here. But I visit them quite frequently -- though I have to time my visits carefully so as not to miss my pension days every two months! I use these visits to take a grandchild back to Cape Town or bring another one home with me as I rely on them to help me with household tasks now that I am too old to do everything for myself.

Those wives who could not go to their husbands (because they did not want them there, or lacked suitable accommodation), and did not want to live with their in-laws or their own parents, had the option of setting up households on their own, and many did, especially in Gwabeni.¹ Matrilocality is a difficult way of life in the rural areas, as Nonkuleko, who lived alone with her three children in single roomed house when her husband was working on the mines, attested.

I have to work too hard. The children try to help, but they are too young. There is no money. It has been months since I had any money from my husband in Johannesburg. I have not been able to contact him. It is difficult for me since the accident. The house fell on me in that terrible storm last year and broke my pelvis and legs. I was in the hospital in East London three months. If my neighbours had not looked after my children I do not know what we would have done.

The argument that labour migration from the basis of an extended family has few costs and impressive benefits in terms of economic

security and enhanced social status (cf Weyland 1933, 178) does not seem to apply in the rural areas of the former Ciskei. In the few cases in which the migrants remitted significantly and regularly, there were obvious financial advantages for their rural-based relatives. But the cost of these advantages was the removal of the migrants' labour from the household, which placed a greater burden on those who remained behind. Where their remittances were to be discontinued through retrenchment or estrangement, as frequently occurred, there was no benefit of a return to the labour force to offset the cost because (a) the redundant did not necessarily return home and (b) they did not necessarily offset the cost of their 'keep' if they did return. The thesis that migration is more of an agent of underdevelopment than development found plenty of empirical support in the demographically distorted and inadequately supported communities of Gwabeni and Gcinisa (fig. 4.2)

Social pensions have become increasingly the key to survival in South Africa's black rural areas ever since they were introduced in 1967, and especially when black pensions were brought into parity with those of whites in 1992. As demonstrated in the previous chapter, pensions are almost as important as earnings as a source of income for the entire non-territorial community, and they are the most reliable source for the rural component. Women are as eligible as men for pensions, and there is no discrimination on grounds of gender in the calculation of the social pension; moreover, women are eligible for pensions earlier than men (at 60 as opposed to 65) and tend to live longer than men. On the grounds of economic importance to the household, then, a pensioned woman is as eligible as a pensioned man for the status of major contributor to household income, if not chief earner, and she achieves this status five years earlier than he does.

The social pension thus had the potential to increase the already considerable authority of the post-menopausal woman in male-headed households and to make female-headed households more viable than ever before, leading to the rapid increase of the latter in recent years. In Gwabeni and Gcinisa female-headed households (FHHs) were far more frequently headed by pensioners than male-headed households (MHHs) (see Table 4.1).

Table 4.1 Pensioned Heads of Male - and Female-headed Households in the Sample (Percentages)

Household Type	MHH	FHH
Gwabeni (MHH:FHH = 16:21)	50.0	66.7
Gcinisa (MHH:FHH = 27:10)	37.1	70.0

In neither community did the improvement in social pensions offset the socioeconomic disadvantages of migration except in the case of a few households which had more than one pensioner and/or actively remitting migrants. The usual pattern was for pensions to replace the dwindling or non-existent contributions of the new, permanent out-migrants. This tendency affected the households of Gwabeni rather more than Gcinisa because households in neither community were in a position to substitute dependence on the cash economy for labour-intensive, environment-dependent sources of subsistence and Gwabeni had a relative dearth of individuals of both sexes in the younger able-bodied categories. For their part, the Gcinisa households were under more pressure than those of Gwabeni to purchase basic resources with their scant means because of environmental scarcities as well as the greater local availability of commercial sources of supply.

In both communities, households confronted the problems of subsistence in the face of a declining agricultural sector, limited resources flowing in from beyond the community, and a various constraints in the immediate natural and human environment. Against this background the households organised themselves for survival as best they could.

The socioeconomic comparison

The two communities are readily stereotyped. Gwabeni as the archetypical emigrant community with a preponderance of older women and children under 12, heavily dependant on the remittances of migrant males and urbanised family members in Port Elizabeth. Gcinisa as the peri-urban resettlement village in which the employed few support the unemployed and unemployable majority. In gross socioeconomic terms, however, the two villages are not as different as one might expect, and not readily reducible to stereotypes, either. The following socioeconomic double portrait has been generated from the findings of the socioeconomic sections of our survey of the two communities.

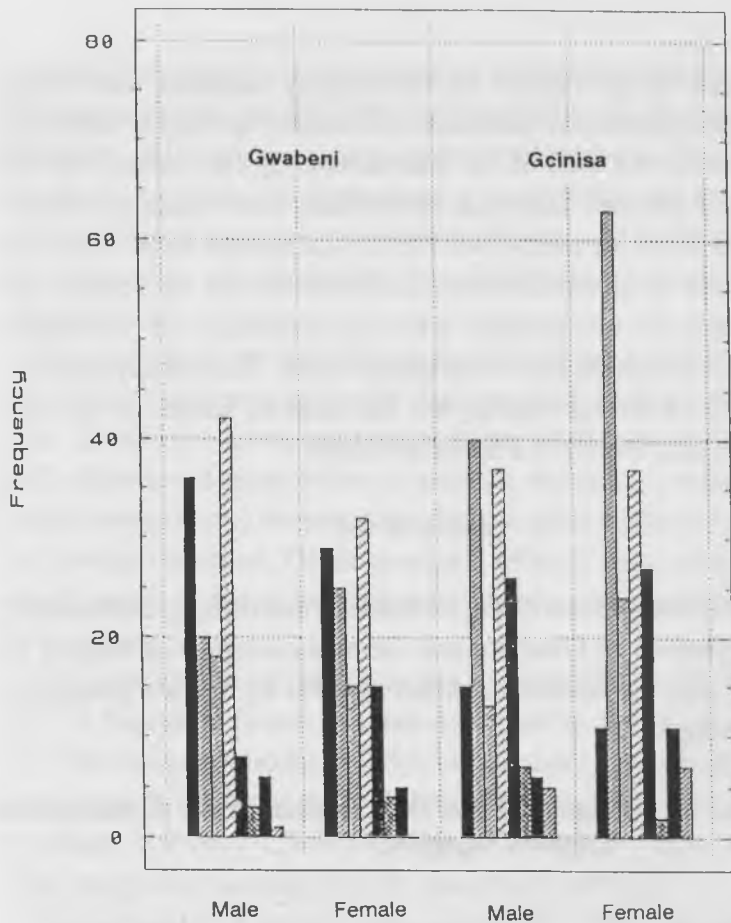
Population

Although Gcinisa had a projected population nearly six times that of Gwabeni, both communities are relatively small and close-knit. And they kept in close touch with relatives and friends who reside elsewhere. As mentioned in the Introduction Gwabeni and Gcinisa were essentially non-territorial communities or rural-based networks, their social and economic relationships transcending their territorial boundaries. In the case of Gwabeni, householders cited more members living beyond the household

than at home; in the case of Gcinisa absent household members were only two thirds of the number of those at home (see Table 4.2).

Table 4.2 **Number of Households, Population Size and Distribution: Gwabeni and Gcinisa**

Variables	Gwabeni	Gcinisa
Actual no. households	68	233
No. households surveyed	37	37
Surveyed population present	152	259
Projected population present	279	1 631
Surveyed population absent	176	169
Projected population absent	323	1 064
Projected total network	602	2 695
Mean no. present per surveyed h-h	4.1	7.0
Mean no. absent per surveyed h-h	4.8	4.6
Mean non-territorial h-h size (pop. present + pop. absent)	8.9	11.6



- 1 Adult who had never migrated
- 2 Adult who had formerly lived elsewhere
- 3 Adult who visited occasionally
- 4 Adult who visited frequently
- 5 Child with parents in village
- 6 Child with parents elsewhere
- 7 Child who had never left village
- 8 Child who lived permanently elsewhere

Figure 4.1 Aggregate Whereabouts of Members of Surveyed Non-Territorial Household

When not being visited by their many relatives who lived elsewhere population densities in Gwabeni are light, with 152 people were to a total of 187 rooms making for a density of 1.2 rooms per person. Gcinisa's homesteads were more populous, with 3 persons to every two rooms. In neither case could the settlements be considered overcrowded by any standards, but particularly in comparison with the conditions in the urban townships in which the out-migrants lived. This happy circumstance has a strong bearing on the state of health of the two communities, which is discussed below.

Age and sex

In Table 4.3 some interesting similarities and differences between the populations of Gwabeni and Gcinisa emerge with respect to age and sex. To facilitate comparison the figures are presented in percentages.

Table 4.3 Age and Sex Distribution in the Gwabeni and Gcinisa Samples

Variable		At home		Elsewhere	
		Gwa %	Gci %	Gwa %	Gci %
Retired persons (Over 65)	M	5.3	3.5	-	1.2
	F	13.8	6.6	-	1.7
Active persons (21 - 64)	M	9.2	15.1	40.3	27.2
	F	25.0	22.8	27.8	34.3
The Youth (13 - 20)	M	7.9	12.4	10.2	5.3
	F	8.6	10.0	11.9	10.1
Children (Under 12)	M	15.8	14.7	5.7	10.7
	F	14.5	15.1	4.0	10.7

In both communities the proportions of resident children under 12 are similar, at around 30%. Gcinisa had twice the percentage of absent children in this age-group as Gwabeni. But whether absent or present the sexes were evenly balanced among the young children (except for the absent children of Gwabeni, whose numbers were so small that the difference is not significant anyway).

The lack of a high school in or near Gwabeni may be reflected in the fact that the community had appreciably fewer teenagers ("the Youth") at home and rather more absent youth compared with Gcinisa. Among older teenagers, obtaining secondary or (much more rarely) tertiary education may not be the only motive for leaving Gwabeni. Older teenagers of both sexes with a slight female predominance had either obtained or were seeking work in the cities.

The proportion of people in the active category (between 21 and 64 years) at home was not appreciably higher in Gcinisa (37.8%) than Gwabeni (34.2%), but the sex ratios are different: there were 2.7 women for every man in the active age group in Gwabeni, but only 1.5 in Gcinisa, reflecting the higher rate of male emigration among mature household members.

This situation of nearly three women for every man at home in Gwabeni was more than balanced by a sex ratio of 4.1:1 away from home in this age-bracket, more than four men to every woman. Gcinisa had a much smaller female majority at home (1:1.5) than Gwabeni and an appreciable female majority in its diaspora (1:1.3). This finding does not make Gcinisa appreciably less of an emigrant community than Gwabeni. There is only a slight difference between the percentages of their absent active populations of both sexes and hardly any difference in the youth category. However, it does mean that Gwabeni conformed to the

classic type of emigrant community in which the men tend to leave and the women and children remain behind, whereas Gcinisa had a less gendered approach to the issue of who went and who stayed behind.

Neither community had large numbers of retired persons at home, Gwabeni's sample had only 3 more than Gcinisa's. But the elderly are a proportionately more in Gwabeni than Gcinisa. There were other differences too. While the Gwabeni households had two and a half old women to every man at home and no retired folk living elsewhere, Gcinisa had a smaller female majority at home (1:1.9) and two old men and an old woman living elsewhere.

Education

In keeping with Mfengu tradition, education was given as much priority in the two communities as finance and distance would allow. In practice this meant that primary education had been attained by most people, whether in the village or living in the city. Those with secondary education and beyond tended to be found in the urban 'diaspora' of each village. Figure 4.2 does not differentiate between those who are home and away, but it does reveal a marked gender difference between the surveyed households of Gwabeni and Gcinisa.

In the Gwabeni sample male and female profiles were strikingly similar, with only slightly fewer women and girls in all categories having received education than men and boys. The Gcinisa sample was less consistent: while more men and boys had completed or are involved in primary school, more women and girls have completed or were going through secondary and tertiary level education. This contrast is probably due to the

presence of a secondary school to Gcinisa but not in Gwabeni. It could also help to explain why girls and young women were such a strong presence in Gcinisa's emigrant diaspora.

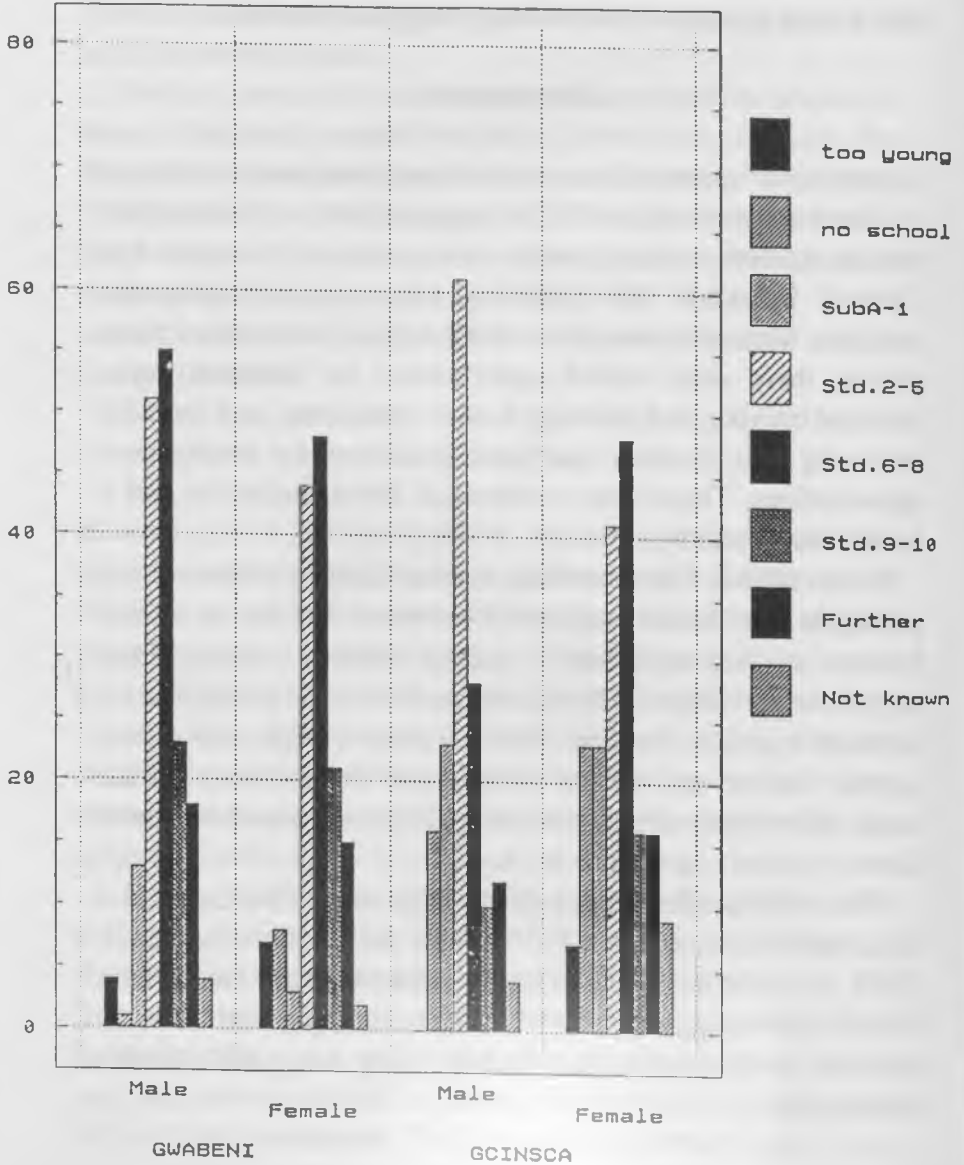
Employment

Employment opportunities in the immediate environment of Gwabeni were virtually nil. The large staff of the Double Drift Nature Reserve included only one man from Gwabeni. Mr Cakwe's Breakfast Vlei Hotel did not count as a potential employer because it was just a small family-run business. Otherwise, there were limited opportunities for domestic work, informal building and painting, a small *spaza* shop, and sporadic labouring jobs. Gcinisa was better positioned for employment opportunities. There were commercial farms, industries and a tourist resort nearby.

Cresto farm is a former white, former Ciskei government-run pineapple farm which employed five women and two men from Gcinisa as well as others -- mainly women -- drawn from neighbouring villages. They planted and harvested pineapples for R400.00 a month, working from at 6 am to 4.30pm. Cornfield, another farm employed six others from Gcinisa on a similar basis. Before the international pineapple glut of recent years these farms employs many more workers.

The only manufacturing industry in the area is Kei Carpet and Sculptor Design, which had 100 employees when it opened in 1983, many of them from Gcinisa. The recession hit the firm severely, however, and in 1994 there were only 11 on the staff, only two of whom were from Gcinisa. They were paid R300.80, fortnightly.

Figure 4.2 Education Levels of Members of Sampled Households



The Fish River Sun Hotel and Casino and the linked Mpekweni Hotel about 30 kms west along the coast road were no more recession-proof than the other local employers. The twin resorts had recruited staff from Gcinisa in the capacities of security guards in the case of the men or as laundry workers in the case of the women, but in 1992 the security staff and the laundry staff was reduced by half. Previously, there had been about 10 people from Gcinisa in each category, earning R800 and R700 a month, respectively. The only consolation was that some of the black staff of the hotel from farther afield (for whom no accommodation is supplied) boarded in Gciniso, paying R20 a week for an unfurnished mud hut.

It had not been easy for the many retrenched workers of Gcinisa to find alternative employment, and most of them did not succeed. Marvis, who formerly worked at the Fish River Sun as a housemaid and was retrenched in 1992, now runs a small shebeen from her rented room. She buys (twice a week) two cases of beer and two bottles of brandy, and sells the bottles and tots at 100% mark-up to cover the payments for furniture she bought on hire-purchase when she was still employed.

Marvis' is not the only shebeen in Gcinisa. Indeed, with so much retrenchment in the last ten years, and so few alternatives, many small business or informal services sprang up in the village. In the period of the research the number of shebeens, small stores and shops operating from individual households in the village was out of all proportion to the size and affluence of the community.

The employment situation in both villages can be discerned in more detail from the survey results. Table 4.4 summarises employment beyond the household and the rural domestic economy, that is, it excludes unpaid housework, own garden and/or

field cultivation, care of sick relatives, and so on. The table covers the whole household network, members both absent and present.

Table 4.4 Occupations of Employed Members of the Sampled Households

Employment Categories	Gwabeni	Gcinisa
Agricultural	1	4
Artisan (electrician, mechanic)	-	2
Clerical	5	3
Construction/painting	4	9
Domestic	11	10
Driver	3	1
Education (school teacher)	8	8
Industrial	22	14
Informal sector	2	3
Mining	4	7
Railways/docks	2	1
Services	11	15
Uniform (nurses, shops)	17	3
Totals	90	80

The active population² of the Gwabeni households comprised 52 men and women at home and 120 away. With 90 in employment that means 52.4% of those of working age were in employment, taking account of five who had recently been retrenched and a further five who were actively seeking work in Port Elizabeth, as well as those who were voluntarily unemployed and the unemployable. In the case of the Gcinisa households, the active

population consisted of 98 at home and 104 away. Only 39.6% of them were in employment.

In qualitative terms, the employment pattern in Table 4.4 reflects the differences in orientation between the two communities. Gcinisa, being partly recruited from former farmworkers, had more agricultural officers than Gwabeni, as well as the only artisans. Gwabeni's long association with the industrial city of Port Elizabeth is reflected in its far greater proportion of industrial workers. Gcinisa's more eclectic migrants have headed for the mines, a variety of construction sites and the services sector to a greater degree than those of Gwabeni. Services jobs are, of course, more proximal to Gcinisa, with the Fish River Sun Hotel and Casino and the linked Empekweni Resort a few kilometres down the coast road.

Informal sector activities such as running spaza shops, casual building, casual labouring, selling produce or wood, hiring equipment, sewing to order, selling clothes and sweets occurred in both Gwabeni and Gcinisa, but such activities are not regarded as 'employment' by community members in the same way as these activities are not officially recognised. Only two or three household members in either community were thus identified with this form of employment when the question was posed. It was only when the question about sources of income other than salaries or wages or pensions was asked later that it emerged that 10 households in Gwabeni and 15 in Gcinisa were partly financed through informal activities directed within the community.

It then emerged that several inhabitants had specific skills for which there was some local demand, but it tended to be seasonal or sporadic. Thus, in Gwabeni the casual builders, the fixers of water tanks and the odd-job men only work when their clients had the money to pay them, which was not necessarily every

month; those who sold fuel and water, or prickly pears, were locked into the seasons and the drought cycle. The spaza shop-keepers did some trade every day, but the volume was dependent on local competition as well as external economic fluctuations affecting the local community. The most enterprising of these was Nomelumzi Mthongana, according to Nicky Motteux:

Nomelumzi came to Gwabeni after she lost her job as a domestic when her Scottish employers emigrated. Other employment was hard to come by and yet university, technicon and school fees had to be paid. With the use of her husband's truck to transport groceries from Port Elizabeth she opened up a shop in her house in Gwabeni. It was ideally located near the pre-school, church, school and the top dam. Her clientele consisted mainly of pensioners and those who were unable to pay at the time of purchase. All creditors were recorded in a book. Most customers honoured their debts but those who proved to be bad debtors had their credit facilities withdrawn. Although, given Gwabeni's poverty and the competition from the shop at the Breakfast Vlei hotel, Nomelumzi's shop could not ever be a great commercial success, it was an occupation in the broad sense of the term. With the exception of a six year old grandchild Nomelumzi was separated from all other members of her family, who were either working or receiving education in Port Elizabeth. The shop kept her occupied and helped to alleviate her loneliness. The little enterprise served as a meeting place for the women of Gwabeni.

The acute shortage of capital in Gwabeni meant that cooperative ventures, such as the sewing group which had recently been

formed, might fail to realise their potential because of the inability to obtain a knitting machine. The sewing group made pin-money by hand-sewing clothes and hand-knitting jerseys. Perceiving a local demand for inexpensive jerseys which went beyond their capacity to make by hand, they were trying to raise R1 000 for a knitting machine, but they were going to miss the 1994 winter season and possibly the season after that, so difficult was it to reach such a target in Gwabeni.

The larger population of Gcinisa provided more scope for informal sector activities, but this was largely neutralised by the competition which the larger population also generated. The local exception was shopkeeping, which provided one family in particular with a good living. Another advantage which was not shared with Gwabeni was a response to Gcinisa's dearth of gatherable fuel-wood and preference for tap water (which was only available from the next-door settlement of Wesley). Entrepreneurs with their own transport supply those who could pay to have these resources delivered to their doors. Otherwise, building and brick-making were expanding activities.

These occupations either involved men exclusively or were dominated by men. There was little in the way of informal employment for women in the area. The main response to this circumstance was to exploit a traditional occupation in which women had never been disadvantaged, that of the diviner (*igqirha*).

The diviners of Gcinisa did not have many patients, indeed, there were too many of them for their profession to be viable from that source. It was clear from their spartan homes and lack of assets such as livestock that they were not thriving. What income or indirect economic or other advantage they obtained from their calling flowed less from their patients or clients and

more from their roles as trainers of apprentice *amagqirha*. In the first place, a trainer gained from the fees of the trainees, which vary according to the prestige of the trainer. Secondly, the trainees' status is traditionally regarded as very low in relation to the trainer: while they are living with their trainer they are expected to do a lot of the household tasks in and around the house. This relationship can endure for many years, until the trainer considers that the trainee is fit for initiation as a qualified *igqirha* in her own right. Having apprentices to look after the homestead releases diviners to pursue their calling by visiting diviners elsewhere for indefinite periods or doing other work beyond the community. Thus the economic benefits of the diviner's role tend to be more indirect than direct.

The most profound contrast between the two communities lies in Gwabeni's far greater penetration of the sought-after government jobs in the uniform services of nursing and the police. It is not as if the people of Gwabeni were better educated (there are as many teachers from Gcinisa as Gwabeni, a career that requires equal if not greater educational qualifications than the uniform occupations). Presumably it has something to do with Gwabeni's being a long settled community not far from Peddie with a good strategic network, while Gcinisa is less settled and has a more ambiguous relationship to the Peddie power structure.

Income

Almost every household in Gwabeni and Gcinisa obtained income from one source or another, usually a variety of sources. Only two households in Gwabeni had the misfortune of having no means of support and had to rely on handouts from relatives, though a household of eight in Gcinisa came close, eking out a

living on a remittance of R160 a month supplemented by handouts. Yet, as Table 3.4 reveals, there were plenty of households which had to manage on very small incomes without the consolation of feeding themselves from their own production. (As we shall see in the next chapter, what little rural production persisted beyond the 1970s was largely obliterated by the 10-year drought.)

The two major sources of income from the point of view of the households of Gwabeni and Gcinisa were wages or salaries and pensions. Government pensions for the superannuated, men over 65, women over 60, and the permanently disabled were introduced for rural populations, including those in the 'homelands' in the late 1960s. They currently stand at R740 per person paid every second month. Remittances benefitted relatively few households, particularly in Gcinisa, and were frequently balanced by the funding these households provided for others, destitute kinsmen, paternity support, support for children at school or tertiary institutions elsewhere.

Other sources of income such as casual work or the sale of agricultural produce, stock, wood, handicrafts, etc., brought in little and could not be relied on. The exception was the spaza shops, which can be very lucrative. Although the spaza shop in Gwabeni returned only R500 a month, the two in Gcinisa made R4 000 and R2 500.

Table 4.5 Monthly Income of Sampled Households from Wages or Salaries, in Rands

Income Brackets	Gwabeni	Gcinisa
0 - 249	11	3
250 - 499	2	8
500 - 999	3	10
1 000 - 1 499	5	3
1 500 - 1999	0	3
2 000 +	1	3
Total earners	22	30

The method of displaying income in Table 4.5 is not the most satisfactory, but the data from Gwabeni was only recorded in income brackets, actual earnings are only known in some cases. But it illustrates the tendency of Gwabeni households to cluster where the earnings from employment are least (below R250), and those in Gcinisa to cluster in the R250 - R1 000 bracket. Only six earners in Gwabeni, compared with nine in Gcinisa brought home more than R1 000. Altogether, Gcinisa's 30 employed (who were found in only 18 households) generated a gross total of R27 308 every month. The figure for Gwabeni is not known precisely, but the 23 earners in 13 households being generally lower paid could not have generated more than about R16 000 a month. The 18 Gcinisa households which had at least one employed member had a mean income from that source of just over R1 500 a month, while the estimated equivalent for Gwabeni was around R1 200.

There was another way of topping R1 000 a month without working or leaving home, however. One household in Gwabeni and three in Gcinisa achieved just that, through accommodating three pensioners, each of whose R740 every two months meant a monthly tax-free income of R1110. Of course, most households had only one pensioner, but even R370 a month made a big difference to the generally small household incomes of the two communities. The 35 pensioners in 29 households in Gwabeni drew a total of R25 900 into the local economy every second month, a monthly mean of R447 per pensioned household. While the 36 pensioners in 24 households in Gcinisa pulled R26 640, which gives a monthly mean of R555.

Except for the shops, the other sources of income generated very little. Indeed, it was hard for both informant and interviewer to produce figures for these activities. In the case of Gwabeni,

the total was only R745 a month. The Gcinisa total was no better, considering the greater size of the community, at R3 303.

Table 4.6 Total Monthly Income of Sampled Households, in Rands

Sources	Gwabeni	Gcinisa
Employment	16 000	27 308
Pensions	12 950	12 240
Remittances	1 727	1 418
Other	745	9 153
Total	31 422	50 119
Mean	849	1 355

The uneven distribution of all these sources of income make for considerable variation in total household income. There was a household in Gcinisa in which two earners generated an income of R6 798 a month; and another in which four earners and a pensioner combined to produce as much as R4 784 a month. The shopkeeper's household had an income of R7 800 a month by adding the income of one employed member to that from the shop. At the other end of the scale were those previously mentioned households without a pensioner or employed member which depended on occasional remittances and/or the charity of relatives. From this wide range of household incomes, the calculated mean for Gcinisa was about R1 350 a month. Regarding Gwabeni, there was less contrast. Only the hotelier/shopkeeper, who lived outside Gwabeni and was not from the village, would have been in the same bracket as his equivalents in Gcinisa. Otherwise, the three households with members earning R1 100 - R1 200 a month, or the household with three pensioners

were the best off. The worst off were a household of three and another which cited a total household network of 22 individuals that had no reliable income, and a nuclear family with four children which somehow survived on a remittance of R50 a month. The mean household income was about R850 a month.

Expenditure

With incomes derived from a variety of sources, some more reliable than others, whose means were close to or below the household subsistence level, how did the households of Gwabeni and Gcinisa allocate their scarce resources? Their responses to the open-ended question "What are the main expenses of this household" are summarised in Table 4.7.

As might be expected at this level of subsistence, all the households which were prepared to answer the question (36 in Gwabeni, 33 in Gcinisa) cited food, and almost all the households spent more on food than any other item. Five households in Gcinisa spent more on maintaining a vehicle than on food, two spent more on hire purchase payments for furniture, and two of these same more affluent households spent slightly more on clothes than they did on food, but these were very much the exceptions. In Gwabeni, no one cited vehicles or furniture, but there were nine households allocating a mean of R94 a month to clothing.

In both communities nearly half the households (17 in each) included school fees and uniforms among their major items of expenditure, but the households of Gwabeni spent a good deal more than those of Gcinisa (probably because the former were surveyed closer to the beginning of the school year, when uniforms were still being paid off). Those four households

supporting college or university students in Gwabeni were spending nearly as much on expenses associated with education as they did on food; whereas the five Gcinisa households supporting students were not nearly as heavily committed.

Potential expenditure which was either absent or considered unimportant in Gwabeni, such as agricultural inputs on feed, dip, seed, tractor hire, and so on, the purchase of building materials and water, were quite significant to some of the households in Gcinisa, particularly agricultural inputs. Fuel, including paraffin, gas and wood, were significant budgetary items for far more people in Gcinisa than in Gwabeni, because in the latter community wood could be had for free. By way of compensation, household in Gcinisa paid rent: two Gwabeni households did, but for flats in Port Elizabeth, not their own dwellings.

While transport and medical expenses were significant items in the budgets of large minorities of the households in both communities, expenses associated with sociability or leisure (alcohol, tobacco) were mentioned by very few households and did not amount to much, except in the case of two chain-smokers. Expenses associated with church membership were not regarded as a key item for the majority, but those who did direct funds this way, particularly in Gcinisa, where a church was under construction, tended to divert large amounts in this direction. Traditional rituals were more of an occasional expense, rather than the regular item it appears to be in Table 4.7, where every item is broken down to a monthly rate; which is probably why so few households mentioned it.

Table 4.7 Monthly Expenditure, in Rands

Items	Gwabeni			Gcinisa		
	H-H	Total	Mean	H-H	Total	Mean
Agriculture: tractor hire, feed, seed, medicines	1	2	2	9	1 693	188
Building supplies	-	-	-	4	1 238	135
Car payments & maintenance	-	-	-	5	3 944	986
Church	4	26	7	6	447	75
Clothing, linen, blankets	9	843	94	2	650	325
Education: school fees & uniforms	17	700	41	17	517	24
Education: college or uni- versity fees	4	1023	56	5	405	81
Food	36	10 972	305	33	10 656	322
Fuel: paraf- fin, gas, wood	9	282	31	21	285	14
Furniture pay- ments	-	-	-	2	1200	600
Medical	12	394	33	12	478	40
Rent	2	130	65	-	-	-
Rituals	3	55	18	4	101	25
Socializing	5	99	20	4	90	22
Tobacco	1	12	12	2	119	60
Transport	13	335	26	16	581	36
Water	-	-	-	4	65	16

After balancing income and expenditure some of the households had sufficient left over for some of the items that the Western middle class regards as essentials. These are itemized in Table 4.8. Note how access to the media is given priority over labour-saving devices in these households of (usually) many helpers.

Table 4.8 Consumer Durables Owned by Sampled Households

Item	Gwabeni	Gcinisa
Refrigerator	5 working, 1 out of order	10 (one h/h had 3)
Deep-freeze	-	1
Washing machine	-	2
Radio	31	27
Stereo equipment	7	5
Television	13	17 (one h/h had 2)
Motor vehicle	4 in Gwabeni, 9 in Port Elizabeth	11 (one h/h had 2)

Health

In both Gwabeni and Gcinisa, in spite of the poverty, inadequate services and institutional decline documented in chapter 1, the standard of health was relatively high. Minor ailments such as fevers, coughs, sore throats and stomach aches were naturally quite frequent in both villages, especially during the winter months, as they are everywhere. But epidemics were very rare and the incidence of tuberculosis was low. Clinic records contained no cases of T.B., polio, diphtheria, measles or tetanus.

This positive finding must have been due in part to a long-standing immunization programme in the region which reached even the remotest locations (see Segar 1992), but also to excellent natural resistance. In spite of the problems of access to clean water in both communities (see chapter 7 for further details), water-borne diseases such as diarrhoea and cholera were uncommon in the Gwabeni and virtually unknown in Gcinisa. Other communities of the former Ciskei have not been so fortunate (Englebrect *et al.* 1978).

The most frequent illnesses reported in the household surveys in the two communities included fevers, stomach aches, diabetes and hypertension. Among the elderly back pains, painful legs, heart conditions and rheumatism were not uncommon, as is the case among the elderly everywhere.

Besides the illnesses which were common to both communities and, indeed, most populations, there were specific localized health problems which were found in one of the two communities but not the other. In Gwabeni scabies³ was an affliction that reached near-epidemic proportions during the winter months. Scabies is generally associated with a lack of personal cleanliness and hygiene. As will be discussed further in chapter 7, the difficulties in obtaining clean water for drinking and cooking, let alone washing make clean clothing every day something of a practical impossibility in Gwabeni, hence the scabies outbreaks. Interestingly, the people blame it on the pigs which tend to wallow in the dams, but mites are closely tuned to their hosts and are not transferable from species to species.

In Gcinisa there were few reported cases of scabies. The area has a higher rainfall and better access to clean water. Instead, sexually transmitted diseases (STDs) are Gcinisa's most serious health problem, particularly during December and January. In

1993 over 200 cases of STDs were reported in the village. The actual figure would have been far higher, as not all cases are reported or are only reported once the infection is very severe. The highest number of cases were reported amongst males between the ages of 25 and 37. Infected patients did not bring their partners with them to the clinic. There was thus no means of breaking the cycle of reinfection, especially as condoms are seldom used by sexually active couples.

Granted the relatively low level of labour migrancy in Gcinisa, the source of the problem was probably the nearby tourist resort of the Fish River Sun and Impekweneni, where a number of the local inhabitants were employed. Another possibility might be the large infusion of relatives into the community for the June and December holidays. But even without external sources the relatively high proportion of sexually active men and women in the village, many of the men, at least, having multiple partners, was enough to keep the STDs in circulation. Where a high level of STDs in a population tend to increase the rate at which AIDS spreads and AIDS is at any rate spreading rapidly in South Africa at this time, Gcinisa must be considered to be a community at risk to this infection.

The reasonably good health record of the populace of the two villages, in spite of poor living conditions, should not be taken to imply that everyone eventually dies of natural causes. This may have been the case in Gwabeni, but the more populous and divided community of Gcinisa had a high male mortality rate as a result of violence and stress-related heart disease. Adult male deaths relative to adult female deaths were in the ratio of 14 : 6, according to the household survey. This would help to explain the demographic pattern recorded in Table 4.3 .

Conclusion

In gross socioeconomic terms, the households of Gwabeni and Gcinisa emerge as fairly similar. Both provided rural bases for networks of kin, affines and friends working or living elsewhere. As such, the residents did not find the bulk of their subsistence through the exploitation of local economic opportunities (such as they were); and the eligibility of at least one member of most households for pensions provided another external source of support.

Gwabeni, the non-bettered community, was not as internally divided as Gcinisa, which was the product of the relocation of households from various locations. Gcinisa, being much larger as well as less remote, had a more varied population in terms of age and sex distribution. There was very little difference between the two communities as far as education is concerned: little technical illiteracy, but relatively few having proceeded to secondary, let alone tertiary education. Occupations in both populations tended to be at the same level, and overlapped heavily between the two villages, though the employed of Gcinisa were slightly more eclectic in their choices than those of Gwabeni, probably because they had had more options 'on their doorstep' (though the recession had put paid to many of these).

Because of its larger active population and better employment opportunities the households in Gcinisa had larger disposable incomes than those in Gwabeni, which were more reliant on pensions. But this only applied to the Gcinisa households which had one or more employed members, or those who ran viable local businesses, such as shops. The others had to manage as best they could, taking advantage in the case of Gcinisa households of the greater opportunities for informal sector activities that

their larger, more nucleated population provided compared with Gwabeni. What Gwabeni conspicuously lacked relative to Gcinisa in the socioeconomic field was a resident class of people who were able to invest in agriculture and buildings, buy hire-purchase clothing and furniture and maintain cars. With one or two exceptions the few from Gwabeni who could support a middle-class life-style were to be found in town.

In sum, labour migration and out-migration, commuting, social pensions and sporadic remittances have underwritten a post-peasant way of life in Peddie district, softening the contrasts between the formerly 'traditional' and formerly 'bettered' types of settlement from the perspective of the households of which they are comprised. Granted the changed and changing, circumstances of the rural communities of the Eastern Cape, the anticipated contrast between Gwabeni and Gcinisa is not strongly manifested in the foregoing socioeconomic survey. The two communities emerge less as representatives of the 'bettered'/non-'bettered' dichotomy than as sociologically comparable settlements of different sizes and concentrations in two contrasted geographical areas within the same Magisterial District and former homeland.

Endnotes

1. Matrilocality was not always voluntary: among the older women, widowhood was the most common avenue to the female-headed household.
2. The active population in the tables covers an age-range from 21 to 64. The very few older women in employment tend to retire at 60, so they are omitted but then, at the other end of the scale, the few under 21 year olds who are employed rather than studying are also omitted: they cancel each other out.

3. Scabies (*Sarcoptes scabiei*) is caused by the itch mite or mange mite. These mites tunnel into the epidermis of the skin, where the secretions from the mite cause an irritation (Barnes 1987, 545).

5. GENDER AND HOUSEHOLD IN GWABENI AND GCINISA

Introduction

In this chapter the structure of the households in Gwabeni and Gcinisa and, in particular, the division of labour by sex and age within them, are examined. The socioeconomic overview in the previous chapter demonstrated that while the two communities differ considerably in population size and other demographic variables, households in both communities were heavily affected by migration and the almost complete transition from a semi-independent agrarian to an entirely dependent peri-urban form of economy in which social pensions provided the subsistence mainstay of most households. Continuing with the focus on households this chapter is less concerned with the economic and more with the social, in particular the role of gender in the household division of labour (cf. Bay 1982; Beharia 1983; Brydon and Chant 1989).

Traditionally, the inhabitants of both Gwabeni and Gcinisa can be presumed to have practised a fairly rigid division of labour based on age, seniority and gender and sanctified by the ancestor religion, in terms of both the general characterization of gender relations in South Africa provided in the Introduction and the more localized account in chapter 2 (see also Sansom 1974; Hammond-Tooke 1985). Beyond the almost universal inside-outside dichotomy whereby women tend to be associated with the home and its immediate environs and men with the outside world

(cf. Ortner and Whitehead 1981), women were expected to defer to men and avoid the cattle kraal, particularly when menstruating, post-partum or otherwise manifesting their fertility. These strictures applied most rigidly to young wives, for they were outsiders as well as being junior in status and fertile. Gradually, the strictures would relax until the post-menopausal wife enjoyed almost as much authority and freedom as a man (cf. Liebenberg 1994).

The traditional system depended heavily on the continuance of the patriarchal order. Yet the old mutually-reinforcing combination of the male household head, agnation, communal land tenure and emphasis on stock farming had been losing its economic base over a lengthy period in the former Ciskei, under pressure from the historical processes discussed in chapter 2. In Gwabeni and Gcinisa the two agricultural sectors most associated with the men, field cultivation and stock farming, were in decline before the drought and were almost eradicated by it (see chapter 6). The removal of the economic base of the patriarchal household and its at least partial replacement with women-favouring pensions (to the extent that women received them earlier and for longer than men) posed a severe threat to the old social order. Increasingly, rural households in the former Ciskei and elsewhere are headed by women.

The altered material circumstances and the changing social composition of the individual settlements and the households within them have implications for the division of labour within the households. New sources of income or increases in income mean that fuel wood, which might take one member a day to collect is substituted by paraffin or bottle-gas. The absence of able-bodied adults in the household through out-migration puts pressure on the younger and older members to perform tasks

which might be beyond their strength, such as carrying heavy buckets of water long distances. But beyond such practical considerations, traditional considerations of gender, age and custom, reinforced in rituals which are as popular as ever, die hard. Old ideas of what is appropriate to the genders at different stages in the cycle of life continue to form the cultural framework of household organisation.

In the following, data on gender and the household division of labour under these changing conditions are provided in a three-stage presentation designed to explore both the qualitative and the quantitative dimensions of the topic. Sandwich-like, the quantitative 'meat' yielded from the answers to a question in the household survey on the division of labour by sex and age is enfolded by the qualitative 'bread' obtained through interviews and participant-observation. The first 'slice' deals with actual examples of functioning households of the two major types, male-headed and female-headed, the second with the symbolization of gender roles in the still male-dominated community beyond the household.

Initial insights from cases

This first of three approaches to the internal structuring of the households of Gwabeni and Gcinisa draws on qualitative data to present three cases which are indicative of relations based on gender (as well as that other important variable, age). The cases have another function as well: they further the distinction between male-headed and female-headed households (MHHs and FHHs) which is a running theme not only in this chapter but throughout the report. As cases, the following cannot claim to

be representative in the way that the statistical study which follows (the 'meat' in the sandwich) does.

A male-headed household

Amos was the head of a household in Gcinisa which included his wife and three of their four children as well as his wife's sister-in-law (on a temporary basis). She was separated from her husband and was living with her sister-in-law until the divorce case could be settled. Amos was employed by the Ciskeian Agricultural Corporation (ULIMOCOR) at Wesley. He had been working there for the last ten years.

Amos's wife ran a spaza shop from the house. Most of her time was taken up with running and acquiring stock for the store from Peddie and King Williams Town. A number of their close kin also lived in Gcinisa, and they visited especially his wife's sister and her children regularly.

Three of their children attended the nearby Baninge school. Their son of fifteen and his wife's sister-in-law were responsible for doing the majority of the household tasks on a daily basis. For instance, the son was responsible for putting the animals into the kraal in the evening, doing the washing up after the evening meal and fetching the water to do the dishes. At any time of the day when he was present, he was expected to make the tea and coffee. On certain days after school he cleaned the house and polished the floor. If his mother had gone to town he served the customers in the shop.

Amos's wife's sister-in-law was responsible for a number of the daily household tasks. In the morning she prepared her brother-in-law's breakfast and made him tea. She also prepared the evening meal and did the general cleaning around the house

and the ironing. On certain days she also cleaned the windows and polished the floor.

Amos's two youngest daughters of eleven and seven performed very few tasks around the house. Amos explained that his daughters were too young to do much house work. He remarked that his daughter of eleven still needed to be trained to do the work and that she is lazy. However at the age of fourteen she would have to do a lot more. He added that after his son has been circumcised he will not have to do so much work around the house: "For now, the boy must know how it is to work and he must be taught that things are not simply given to you: you have to work hard for them".

His eldest daughter of 27, who is in her second year of Teachers Training Collage, came to visit for a few days. While she was there she spent most of the day doing tasks around the house. For instance, she did the cleaning around the house, the cooking and the washing and the ironing and polished the floors. She also worked in the shop when she had a free moment.

When his sister-in-law and her children came to visit, they also helped around the house. On one occasion, they all assisted with the polishing of the floor. His sister-in-law regularly made him tea and prepared his lunch for him. His wife was primarily responsible for the running of the shop and she seldom engaged in any households tasks. The only task she regularly undertook was the laundry.

Two female-headed households

There were two kinds of FHH in Gwabeni and Gcinisa, so it is necessary to provide two cases. The first was female-headed by default, as a result of the long-absence, absconding or death of

a migrant husband. The FHHs in this category were the direct result of migration. The other kind of FHHs was the product of a more generalized social change than that which had been driven specifically by labour migration. For two generations illegitimacy rates have been on the increase in South Africa. Iliffe recorded an increase from 34 - 43% of black children between 1960-70 and 1980 (1987, 272). Matrifocal families involving at least one single (i.e., never married or divorced) woman and her children, have become pervasive in both urban and rural areas. The FHHs in this second category were, as noted above, far more prevalent in Gwabeni than in Gcinisa.

(i) Sophia's household

Sophia was the recent widow of a migrant. She lived with her eldest son, 45 years of age, who suffered from epilepsy, her four grandchildren, and her great-grandson. Her grand children all attend the local school. Sophia's other eight children were all living either in Port Elizabeth or Peddie. Three were currently unemployed, and the others were employed as domestics. They visited only occasionally, at holiday times and on special occasions such as rituals.

As the *ixhegokazi*, the most senior woman, Sophia was responsible for doing the cooking, cleaning and washing; she also worked in the garden and, while her granddaughters are at school, looked after her great-grand son and her invalid son. Her granddaughter of 17 helped her after school with the cleaning and washing. She was also responsible for fetching the water each day, as they did not have a tank. When he was well enough, her son helped by digging the garden and cleaning the yard. He was also prepared to fetch water, and help his niece when she washed

the clothes. Her younger grandson helped around the house, fetching water and digging the garden before the planting season. In the house he helped by making tea and cooking.

(ii) Didi's household

Didi, who was in her early forties, had never married. Her sisters were all married, but she never had any wish to marry. She maintained that: "a man makes your life too complicated and that they are a nuisance". She had five children by the same man, who was married to another. His wife was aware of the relationship and Didi's children sometimes went to stay at her house. Didi did not have anything to do with the man any more and she did not seek a relationship with any other man. She found it difficult to cope at home, but claimed to enjoy her freedom too much to want to change her single status.

She lived with her four daughters and a grandson. Her sisters and brothers visited her frequently and her mother and sister who live in King William's Town visited her occasionally, so she was not lacking a support network beyond her household, and there were sufficient children within it to share the domestic tasks. Her greatest problem was an insufficient income derived from sewing and running a spaza shop.

Didi's four daughters were responsible for the cleaning, washing, fetching of water, cooking and cleaning of the yard after school and over the week-ends. They were an energetic and efficient labour force, but they were limited by also having to attend school and find time for homework.

During the day Didi helped out at the local creche, which occupied one of the outside buildings in her yard. In the afternoons she did the cooking, cleaning, washing and she also

looked after her grand-child. During planting season she ploughed her garden, which supplied her with some additional income as she sold her surplus produce to the neighbours.

An approach from the household survey

The responses to the question "What are the normal tasks or responsibilities associated with the males/females in the household?" attracted a universal response in the household surveys of Gwabeni and Gcinisa. It was a straight forward, open-ended question which was addressed by one or more representatives of each household without any prompting. The informants considered actual members of the household who fitted the conventional Cape Nguni age and gender categories in relation to the tasks they regularly performed within and beyond the homestead. They thus mentally collapsed the tasks of actual individuals in their household into the following vernacular categories with which they were presented to frame their responses (Table 5.1):

Table 5.1 Age and Gender Categories Employed in the Survey

Xhosa	English	Xhosa	English
inkwenkwe	boy	intombi	girl
umfana	young man	umfazana	young wife
indoda	mature man	umfazi	mature woman
Ixhego	old woman	ixhegokazi	old woman

For example, a household might include two boys, three girls a young man, two mature women and an old man - nine individuals altogether. But the number of age or gender categories would be

only five out of a possible eight. The data obtained by counting categories instead of individuals is no reflection of the actual numbers of persons involved in the various household tasks, but it does form a good basis for comparison between MHHs and FHHs at one level, and Gwabeni and Gcinisa at another.

The range of household tasks identified

Leaving the question open-ended meant it was left to the informant(s) from each household to identify the tasks normally allocated to household members (see Table 5.2). While there was a large measure of overlap between the Gwabeni and Gcinisa samples, there were some points of divergence as well; and the prioritization of tasks in the two communities differed.

Table 5.2 accords well with what has been already established about Gwabeni and Gcinisa in terms of their environments (chapter 3) and socioeconomic profiles (chapter 4). As will be confirmed in the final chapter, fetching water is the most labour-intensive activity in Gwabeni, with its difficult water situation, followed by cleaning and cooking, while in Gcinisa water-carrying is less labour-intensive than either cooking or cleaning, though it is still high on the list. Fetching wood is a higher priority in Gwabeni than in Gcinisa, because it is so much more obtainable there and fewer households can afford other fuels. While with herding and caring for small stock the priorities are reversed, Gcinisa having more stock which survived the drought. With a more accessible water supply, more available labour and a more benign climate, gardening is two-and-a-half times the priority in Gcinisa than it is in Gwabeni.

Table 5.2 **Tasks Identified by the Sampled Households**

Gwabeni		Gcinisa	
Activity	Citations¹	Activity	Citations
Fetch water	62	Cooking	81
Clean house	56	Cleaning	58
Cooking	54	Fetch water	52
Fetch wood	50	Laundry	43
Laundry	44	Herding	27
Make tea/coffee	28	Gardening	25
Herding	18	Make tea/coffee	16
Gardening	10	Fetch wood	16
Maintain house	9	Care/small stock	15
Milking	8	Care/children	14
Care/children	5	Milking	9
Maintain floor	4	"Does nothing"	7
Maintain kraal	4	Maintain floor	7
Stamp mealies	3	Donkey carts	6
"Does nothing"	2	Supervise	5
		Run shop	5
		Care/old/sick	4
		Divining	2
		Sewing	2
		Maintain car	2
		Shopping	1
		Makes reed mats	1
		Building	1

Regarding the categories not held in common: stamping mealies is in complete contrast to maintaining a car, for example, reflecting the different positions of the communities on a 'traditional' - 'modern' continuum. Gcinisa exhibits a much wider range of activities than Gwabeni even though the sample size was exactly the same in each case. These too reflect environment differences between the two settlements: ploughing still occurred and reed mats were made in Gcinisa but not in Gwabeni which was so much worse affected by the drought. But the main source of difference was Gcinisa's more populous, more active and cosmopolitan community, in which sewing, shop keeping, divining, donkey-carting and informal building, (all income generating activities) became part of the household division of labour. Lest the impression be given that Gcinisa was full of hard-headed micro-capitalists who devoted all their time to accumulation, it is instructive to discover that the category 'care of the sick/aged' was allocated to fellow household members in Gcinisa. In Gwabeni the task was delegated to a domestic worker.

The categories listed in Table 5.2 could have been expanded. 'Cleaning' embraces a number of separate activities, as everyone knows and as the case-studies confirmed in the communities we are concerned with, tasks such as sweeping, dusting, washing floors windows, pots and dishes. But as all these activities took place within the same domestic domain and were all equally feminized activities in the past, it was not considered necessary to break them down. 'Making tea or coffee' and 'cooking' were, however, always distinguished by our informants, even though both activities are performed in the same place. This is because they take place at different times and involve different levels of skill, such that the making of tea or coffee may be allocated to quite a young child whereas cooking is generally seen as the

prerogative of a more experienced person. These are also non-indigenous activities, not necessarily subject to the same customary strictures as, for instance, cooking.

'Maintaining the floor' is distinguished from 'maintaining the house' because the traditional task of adding a new surface of dung to the floor was formerly a woman's task, akin to cleaning, whereas construction or repairs to the fabric of the house has tended to be associated with men, particularly when such non-indigenous fixtures as iron roofs, gutters and tanks come to be involved. In short, the 'inside-outside dichotomy', although in decline, was informing the categories people in Gwabeni and Gcinisa invoked and structuring the division of labour by sex and age.

Allocation of tasks

The allocation of tasks by age and gender category varied not only between Gwabeni and Gcinisa, but also between the two major household types, the MHHs and the FHHs. The frequencies with which a particular age/gender category was cited in the two surveys are compared in Table 5.3.

By dividing the frequencies for the separable activities distinguished in Table 5.2 into the overall frequencies listed above (Table 5.3) and expressing the result as a percentage it is possible to compare the division of labour task by task. For each separable activity the citations for a particular age-gender category by at least two households in each MHH/FHH category in each village are expressed as percentages of the figures in Table 5.3. Where there is only a single representative, he/she is indicated by '(1)', no representative by a '-'.

Table 5.3 Age/Gender Categories: Frequencies of Citation

Village	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH (N = 16)	6	1	5	6	6	1	5	4
	FHH (N = 21)	13	1	-	12	1	1	6	10
	BOTH (N = 37)	19	2	5	7	18	2	11	14
Gcinisa	MHH (N = 27)	10	5	7	10	13	7	7	11
	FHH (N = 10)	10	2	1	-	9	5	3	8
	BOTH (N = 37)	20	7	8	10	22	12	10	19

From the crude frequencies provided in Table 5.3 it is already possible to discern the overall pattern. Both the Gwabeni and Gcinisa samples were heavily weighted towards youth and seniority on the age parameter, and femaleness on the gender parameter. Note how the MHHs and FHHs of Gwabeni can only muster one young man and young wife each! As young wives traditionally worked harder than anyone else, all but two Gwabeni households were deprived in a way that Gcinisa, with its 12 representatives of the 'young wife' category was not. Gwabeni was, in fact, lacking relative to Gcinisa in every category except that of mature women and boys, with which both communities were well-endowed.

In terms of the differences between MHHs and FHHs in both communities, it is interesting how Gwabeni and Gcinisa reflect

each other. The FHHs in either case have greater proportions of children and women, particularly old women involved in household tasks relative to the MHHs, but again the situation in Gwabeni was the more extreme, with only one young man and one old man among the 21 FHHs.

In sum, the analysis of the responses to a single question, albeit one that cuts to the heart of the research problem, can be quite revealing of the role of gender as well as other variables in the structuring of households, as the following should demonstrate. First we consider the tasks which are performed in both Gwabeni and Gcinisa and which thus may be compared in terms of the categories of household members who discharge them, and then the tasks which are not held in common.

Tasks held in common: the division of labour

Traditionally in Cape Nguni society, as in most human societies, domestic cooking was associated with adult women. However, beginning about 100 years ago, migrant labour, implying life in single-sex hostels, introduced men to the preparation of food as well as its consumption. Some have continued to cook after their return to Gwabeni, filling the vacuum left by the out-migration of mature and younger women. But the more typical pattern has been for cooking to be retained in the female sector, even if this means that the cooks are much older or younger than hitherto (see fig 5.4)

Table 5.4 The Allocation of 'Cooking'

Village	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH	33	-	60	33	83	(1)	100	100
	FHH	46	(1)	-	(1)	92	(1)	67	70
	BOTH	42	(1)	60	43	89	100	82	79
Gcinisa	MHH	60	40	(1)	(1)	100	100	100	100
	FHH	20	-	(1)	-	100	100	100	100
	BOTH	30	40	25	(1)	100	100	100	100

In Gwabeni more mature or old men were involved in cooking than in Gcinisa, particularly in the MHHs. This did not mean that mature women were more involved in the FHHs, in fact they had less to do with cooking than the women in the MHHs. They simply coopted a greater proportion of the young boys and girls. In Gcinisa it was the other way about, with the boys and young men more involved in cooking in the MHHs than the FHHs. In both kinds of household in Gcinisa cooking was something that every female, regardless of age, undertook. The fact that some girls were excused from cooking in Gwabeni but not in Gcinisa may be explained by the fact that Gwabeni only had girls of primary school age because of the lack of a high school, and some of these were too young to take responsibility for cooking.

In neither Gwabeni nor Gcinisa was poverty regarded as an excuse for squalor. A great deal of time and energy was devoted to sweeping, scrubbing floors and washing windows in the majority of households. As with cooking, cleaning was formerly part of 'women's work'. Nowadays, as Table 5.5 reveals, every

age/gender category was involved in cleaning to at least some extent.

In Gwabeni, at least 40% of each age/gender category helped to clean the house, and in all the female categories the percentage is a good deal higher. In Gcinisa, with the exception of the young men, the males were less involved in cleaning. The striking difference between the two samples is the relative immunity the old women of Gcinisa enjoyed compared to those of Gwabeni. This must be related to a greater proportion of mature and young women in the former community. In general, however, it could be said that cleaning in both communities was shifting from a (female) gendered to a non-gendered activity.

In terms of the inside-outside dichotomy, fetching water is a less unambiguously domestic activity than cooking and cleaning. The water collected is for use inside the house (cooking, cleaning, washing) or in the associated garden, but its source may be far afield, as well as from the proximal rainwater tanks of the homestead. In the case of Gwabeni during the winter months the only source was the distant government dams unless consumers were able to pay for water brought from the Keiskamma River.

Gcinisa had more proximal dams and a river, but there was also the option of the tap at Wesley, 2.5 kms away, for those with wheeled transport. Tradition dictated that fetching water should be an activity of women, who balance the container on the head. However, if the water-collection involved some form of mechanical device, wheelbarrow, donkey-cart, tractor or light delivery vehicle, it could become a male-sector activity. Table 5.6 reflects the resultant broad age/gender spread of water carrying which mechanization has permitted.

Table 5.5 The Allocation of 'Cleaning'

Village	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH	33	(1)	60	33	100	(1)	100	100
	FHH	46	(1)	-	(1)	67	(1)	100	70
	BOTH	42	100	60	43	78	100	100	79
Gcinisa	MHH	30	60	(1)	30	92	100	43	9
	FHH	20	(1)	(1)	-	78	60	100	-
	BOTH	35	57	25	30	86	83	60	5

In Gwabeni, where fetching water was less mechanized and much more arduous than in Gcinisa, the majority of representatives in every age/gender category was involved in water-carrying. In spite of the heavy loads involved, the trend is towards youth, with the boys and girls bearing the brunt, assisted by all of the scarce young men and young women, at least half the mature and old men, and the majority of mature and old women in the households. It was, literally as well as metaphorically, a case of all hands to the pump!

Table 5.6 The Allocation of 'Water-Carrying'

Village	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH	67	(1)	60	50	100	(1)	80	75
	FHH	100	(1)	-	(1)	75	(1)	67	50
	BOTH	89	100	60	67	83	100	73	57
Gcinisa	MHH	90	40	(1)	-	69	71	29	18
	FHH	70	-	(1)	-	89	100	-	25
	BOTH	80	40	25	-	77	83	20	21

In Gcinisa, water was more accessible, not only because the dams are closer, but also because the topography permitted wheelbarrows, donkey-carts and motor vehicles to be used, and more households could afford wheeled transport beyond a barrow. This fact is reflected most palpably in the immunity from water collection granted to most of the young and mature men, all the old men and most of the mature and elderly women.

Between the MHHs and the FHHs in either case there are some suggestive patterns. In Gwabeni, while the MHHs were the most capable of spreading the labour of water collection across the age/gender spectrum, and did so, they were not averse to placing a disproportionate amount of the burden on those physically least able to support it, the girls and the old women. In the FHHs the position is reversed, with the women relieved by the increased involvement of the boys in water collection.

Washing linen and clothes consumed a great deal of the water carried, unless the clothes were transported to the dam or river. As a household activity it was previously heavily associated with the women. Table 5.7 shows how laundering was regarded in contemporary households in Gwabeni and Gcinisa.

As in water-carrying, laundry consumed the energies of representatives of a wider range of age-gender categories in Gwabeni than in Gcinisa, but the percentages of male roles cited in both communities is smaller than for any other task considered so far. The combination of skill and vigour required of hand-washing in cold water seems to have excluded the younger girls of both communities to a greater extent than in other tasks considered thus far, and so the brunt of the work was borne by the older women in Gwabeni (as there were only two young wives) and the young wives in Gcinisa. As in water-carrying, the FHHs of Gwabeni made slightly more use of male labour than the MHHs,

Table 5.7 The Allocation of 'Laundry'

Village	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH	(1)	-	(1)	33	83	(1)	100	100
	FHH	15	(1)	-	(1)	50	(1)	83	80
	BOTH	16	50	(1)	43	61	100	91	86
Gcinisa	MHH	30	-	-	(1)	46	100	43	55
	FHH	(1)	-	(1)	-	78	60	67	25
	BOTH	20	-	(1)	(1)	59	83	50	42

while the reverse was the case in Gcinisa. But generally speaking, the traditional division of labour has been retained almost intact in both communities where laundry is involved.

Traditionally, wood gathering was gendered to the extent that much of it was destined for the cooking fire and, like water, it was most conveniently transported in head-loads (associated with women) before the advent of wheeled transport. But then branches were also used in fencing fields and kraals, an exclusively masculine activity. Thus wood gathering did not have to await the arrival of mechanization to become 'degendered', as was the case with water-carrying. Wood gathering was also more readily replaceable than water-carrying in the two villages. Paraffin and bottled gas have long been alternatives to fuel wood, for those who can afford them, while the aqueous equivalent, filter plants and water reticulation, are still awaited in the rural areas of the former Ciskei.

Table 5.8 The Allocation of 'Wood Gathering'

Village	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH	50	(1)	40	50	67	(1)	60	75
	FHH	77	-	-	(1)	67	(1)	67	70
	BOTH	68	(1)	40	57	67	100	64	71
Gcinisa	MHH	20	-	(1)	-	15	29	43	9
	FHH	-	-	-	-	-	60	-	25
	BOTH	10	-	(1)	-	9	42	30	16

Table 5.8 reveals a stark contrast between Gwabeni and Gcinisa in their respective dependence on wood collected from the environment. Gwabeni, the poorer of the two villages in the bushier ecological zone, made more use of wood for fuel and other purposes than Gcinisa, with its greater access to cash and shops and its more open environment of plains and scarce bush. More than half of the age/gender categories (except for the mature men) were actively engaged in wood gathering in Gwabeni with little gender bias (if the misleading 100% for the two young wives is excluded). There is strikingly less involvement in this activity in Gcinisa, especially among the adult men, the boys/girls and the elderly. In both villages wood gathering involves a larger percentage of available actors as well as a greater

spread over the age/gender spectrum in the MHHs than the FHHs. The reason for this disparity is unclear.

Traditionally, among all African pastoralists including the Mfengu/Xhosa, herding was the prerogative of males, specifically the boys and young men. By 1994, in the aftermath of the longest, hardest drought for 50 years, there was not much in the way of stock in either village, though Gwabeni fared worse than Gcinisa (see Part 6). There was also something of a shortage of young and mature males in both communities. Table 5.9 shows how herding was allocated under these altered circumstances.

Among the FHHs of Gwabeni, 62% of the boys were herders, thereby relieving all but one old man of the duty. The MHHs spread the load more evenly among the available males, permitting only the more responsible boys, and one girl to herd what remains of their stock in this difficult, predator-infested terrain. In Gcinisa it is the opposite case as far as the boys are concerned, with all of them involved in the case of the MHHs while only a fifth of them herded in the FHHs. The paucity of adult men in the FHHs of Gcinisa put pressure on both the young women and men to herd. The MHHs could and did draw on mature and older men, and both household types made limited use of women, though the MHHs were better placed to avoid the fertile years, permitting only girls and young women to herd, while one of the FHHs has to rely on a young wife in this capacity. In general, however, the traditional division of labour in this much-tabooed area seems to be holding, somewhat more so in Gwabeni than in Gcinisa.

Table 5.9 **The Allocation of 'Herding'**

Village	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH	17	(1)	40	50	(1)	-	-	-
	FHH	62	-	-	(1)	-	-	-	-
	BOTH	47	(1)	40	57	(1)	-	-	-
Gcinisa	MHH	10 0	-	29	30	(1)	-	-	27
	FHH	20	10 0	(1)	-	-	(1)	-	38
	BOTH	65	29	38	30	(1)	(1)	-	21

As already noted, 'making tea or coffee' was separated from 'cooking' in the vernacular system. Under the conditions prevailing in the two villages the task was no sinecure: beyond pouring boiling water onto the tea leaves or bags and coffee powder or grounds in a pot or cups and then serving it, the successful performance of the task required access to potable water and wood, unless alternative fuel was available, and making a fire on which to boil water, unless the stove was already hot. Thus, in the households which did not make use of paraffin or gas, the person responsible for making tea or coffee was also the one who made the fire and provided hot water for the household first thing in the morning.

Compared to cooking or cleaning, relatively few roles were involved in this domestic service. Although it is well within the

capacity of the many children in both communities, only the girls of Gwabeni have taken it on to any great extent. There, tea and coffee-making for the household was heavily associated with all women, except for the two young brides who are involved in heavier work. The task appeared to be more gendered than it was: women were more frequently the producers of tea/coffee because they were the more frequent consumers of the beverages, being the more housebound gender: men were often out of doors or taking other forms of liquid refreshment at these times. In Gcinisa making tea and coffee is a task which was quite evenly spread across the age/gender spectrum, reflecting the less distorted demographic profile in this community.

Table 5.10 **The Allocation of 'tea/coffee making'**

Village	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH	(1)	(1)	-	(1)	50	-	40	75
	FHH	(1)	-	-	(1)	50	-	83	30
	BOTH	11	(1)	-	30	50	-	64	43
Gcinisa	MHH	30	(1)	(1)	-	15	29	(1)	18
	FHH	10	-	(1)	-	-	(1)	(1)	-
	BOTH	20	(1)	25	-	9	25	20	11

Garden cultivation has always been an important component of household production among the Mfengu/Xhosa, and this activity along with other aspects of agriculture will be fully discussed in Part 3. Although gardening was severely affected by the drought, particularly in Gwabeni, it continued to be practised in many households, unlike field cultivation, which was already a

thing of the past before the drought, again, particularly in Gwabeni.

Table 5.11 **The Allocation of 'Gardening'**

Village	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH	-	-	(1)	30	-	-	(1)	(1)
	FHH	-	(1)	-	29	-	-	50	(1)
	BOTH	-	(1)	(1)	30	-	-	36	14
Gcinisa	MHH	50	40	-	30	-	43	29	27
	FHH	30	-	-	-	-	(1)	67	(1)
	BOTH	40	29	-	30	-	33	40	21

Of all the tasks considered so far, gardening is the only one in which girls play no role at all. The same is true of the boys in Gwabeni, but not in Gcinisa, where, with the mature women, they are the most active gardeners. Otherwise, in both communities, gardening is the pursuit of a minority of adults, for all that it provided virtually free vegetables and fruit in villages where food is the largest item of expenditure and cash is in short supply. There is no particular gender bias, but the age-groups of those involved suggests that such interest as there is in gardening is waning.

Small stock are domestic animals which do not have to be herded, such as pigs and poultry, but the category also includes the motherless juveniles of herd animals such as cattle, goats and sheep. Small stock were traditionally associated with the homestead and the women. Having no ritual significance, they could be marketed or slaughtered at will. Further, the chickens provided eggs. Considering the economic advantages of keeping small stock, it is remarkable how low a priority it is in the two villages.

Table 5.12 The Allocation of 'Caring For Small Stock'

Age	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH	(1)	-	(1)	(1)	-	-	40	-
	FHH	(1)	(1)	-	-	17	-	33	-
	BOTH	11	(1)	(1)	(1)	11	-	36	-
Gcinisa	MHH	40	-	-	-	(1)	71	29	(1)
	FHH	(1)	-	-	-	-	(1)	-	-
	BOTH	25	-	-	-	(1)	50	20	(1)

The relatively few households in either village which maintained small stock divided the labour along broadly traditional lines. With the exception of two older men in the MHHs of Gwabeni and the only young man among the FHHs, none of the adult males in either community were responsible for the small stock. In Gwabeni it was exclusively a task for mature women, assisted in a few cases by a boy or a girl. In Gcinisa the FHHs, with one exception, had no small stock to care for, while the MHHs placed

considerable emphasis on the activity, again regarding it as the responsibility of adult women assisted by mainly boys.

Considering that reproduction and socialization are such key functions of the family, and households in Gwabeni and Gcinisca, however truncated on the ground, are familistic in orientation, it is odd that 'caring for children' should have been given such a low priority in the allocation of tasks. Unless, of course, it was regarded as so obvious and implicit that most informants could not externalize it sufficiently to regard it as a task, the most likely explanation.

Table 5.13 **The Allocation of 'Caring for Children'**

Village	HH Type	Male				Female			
		BY	YM	MM	OM	GL	YW	MW	OW
Gwabeni	MHH	-	-	(1)	-	-	(1)	40	-
	FHH	-	-	-	-	-	-	-	(1)
	BOTH	-	-	(1)	-	-	(1)	18	(1)
Gcinisa	MHH	-	-	-	-	-	29	14	18
	FHH	-	-	-	-	-	40	100	25
	BOTH	-	-	-	-	-	33	40	21

Those informants who did regard child care as a task like any other were more frequent in Gcinisa than in Gwabeni, for only five persons were assigned to the task in the Gwabeni sample.

All but one of them were women. Among the FHHs there was only one citation, in the old woman category under child care. In Gcinisa, twice as many were assigned child-care, but they were all adult women, and these roles tended to be found more frequently among the FHHs than the MHHs. The fact that only one man between the two villages included child-care in his responsibilities makes this task the most gendered along traditional lines of all that have been considered thus far.

From this point onwards the frequencies become too small and sporadic for meaningful tabulation. When agriculture in these communities was dominated by animal husbandry, milking was a vital and arduous activity. For a time in Gcinisa it was the central activity of a commercial operation. Now it is for household consumption only, and precious little of that after the decimation of the herds. Milking involves sheep and goats as well as cows.

Milking involved almost the same numbers of citations in both villages, eight in Gwabeni, nine in Gcinisa. In Gwabeni almost all the milking involved the FHHs, in which nearly a quarter of the boys, a quarter of the girls and the old man milked regularly. In the MHHs only one actor milked, one of the six boys. It was the opposite situation in Gcinisa where all but one milker, a young man in an FHH, were found in the MHHs. Half of the boys, one of the five young men and a fifth of the old men in this household type did the milking. Adult women were thus excluded, or excluded themselves, from milking in both communities.

'Does nothing' category has nothing to do with unemployment, though high levels of unemployment and underemployment are found in both Gwabeni and Gcinisa. In the present context it can only refer to a lack of capacity or preparedness to

undertake household tasks. In Gwabeni only two individuals were cited in these terms, a boy and a middle-aged man. Four times as many were cited in Gcinisa, with one mature man, two old men and two old women 'doing nothing' in the MHHs and three old women similarly unoccupied in the FHHs. Considering how many elderly people there are in both communities, it is a testament to their health and vigour that such a high proportion of them are active in the household.

'Maintaining the floor/house' are periodic activities, so it is unsurprising that they were allocated to so few household members. The tasks complement each other perfectly, for each is gendered in the opposite direction: no female is involved in home maintenance; and no male is required to maintain the floor. In Gwabeni, four boys, a young man and two old men looked after the fabric of their houses, while three girls and an old woman are responsible for resurfacing the floor. In Gcinisa a representative of each male category, save for that of the old man, maintained their houses, while two girls, a young wife, three mature women and one old woman were responsible for floors. In both villages house maintenance received more attention in the MHHs, but floors were relatively neglected in the MHHs of Gwabeni and the FHHs of Gcinisa, having only one person allocated to the task in each case.

Tasks not held in common

The tasks which were peculiar to either Gwabeni or Gcinisa (cf Table 5.2) were simultaneously those which occupied the fewest representatives of the fewest age/gender categories.

'Maintaining the cattle kraal' was an exclusively male task involving four representatives of all male categories except for

the scarce young men. Traditionally, anything to do with cattle was a male prerogative and in Gwabeni it was still being upheld. The task involved cutting and stacking branches so as to prevent stock escaping from the kraal. It was not found in Gcinisa because there the kraal was part of the yard and was secured with wire.

'Stamping mealies' is as traditional a pursuit in its way as 'maintaining the cattle kraal', only it is associated exclusively with women. It requires considerable strength and stamina, so the girls of Gwabeni did not engage in it, though one representative of each of the other three female age-categories was involved.

The notion of 'supervision' as a task-in-itself was not part of the consciousness of informants in Gwabeni, though doubtless supervision also occurred there. In Gcinisa, it was held to be a task of mature men (two cases) and old men (one case) but only among the MHHs. A mature woman from each household type was also regarded as a supervisor.

Tasks associated with donkey-carts occupied six males of varying ages, because this is a useful means of transporting water in bulk around Gcinisa which is not possible in Gwabeni because of the sloping ground. Anything vaguely mechanical is monopolized by males; this also applied to the two mature men who devoted so much of their time to maintaining and washing their cars. Only one man, in an MHH, still ploughed, while another was a builder. Running shops involved a mature man, three women and a girl, all in MHHs. Sewing and divining, occupied two mature women and two old women, respectively, all from MHHs; but shopping was cited as a task in only one case, that of a boy in a FHH.

Discussion

The household survey has revealed a division of labour by age and sex which could be described as transitional in the cases of both Gwabeni and Gcinisa. The allocation of tasks is definitely influenced by tradition, but it is also in tune with local demographic and socio-economic conditions, which differed considerably between the two communities. Within the homesteads, cooking and cleaning were tasks in which males, particularly uncircumcized boys, were quite heavily involved, relieving adult women for other tasks, including general supervision. This tendency was more discernible in Gwabeni where there was a dearth of younger adult female personnel, than in Gcinisa, where such women are many. This relative and absolute shortage of older girls and younger women explains why the aged of both sexes were also more involved in domestic tasks in Gwabeni than in Gcinisa. It is of course possible that the males of Gcinisa might have been cited more frequently in domestic roles had they not been more heavily involved in herding and gardening in that community, where the drought had not struck as heavily as in Gwabeni.

A similar pattern of cooperation between most age and gender categories was evinced in water-carrying, and wood-gathering, formerly regarded as 'women's work' but now undertaken by both sexes and all age-groups. Fetching water was the single most labour intensive activity in Gwabeni; in Gcinisa where water was easier to fetch, old men and older women were excused. Wood also involved most categories in Gwabeni; insomuch as it was gathered at all in Gcinisa, it was seen as the responsibility of women.

There was one domestic activity in which ecological and socio-economic considerations counted for little: in both communities laundry remained a highly feminized activity. Other instances of rigidity, in which inside-outside dichotomy defined gender roles, included maintenance of the floor *versus* maintenance of the outside of the house, and herding *versus* care of small stock.

Recurring themes in the MHHs when compared with the FHHs in the cases of the prioritized tasks were the former's more advantaged position with respect to age and gender roles across the spectrum and their greater ability or inclination to maintain the traditional division of labour.

Gender and communal sanctions

The preceding statistical analysis provides eloquent evidence of both tradition and change in the division of labour within the households of Gwabeni and Gcinisa, as well as a marked degree of flexibility in relation to changed and changing circumstances. But the findings, being restricted to the household, hardly exhausted the topic of gender. Households in neither community were insulated from their wider social environment, let alone the immediate communities. In this final approach to the general topic of gender and the household division of labour we examine these influences from the wider community.

The roles of able-bodied men

The general inference of the survey findings are that women, old men and children of both sexes are more involved in household tasks than young and mature men. Indeed, the involvement of

the circumcised, able-bodied male in most household tasks is slight to non-existent. If the household is to be regarded as non-territorial, then the role of the adult, able-bodied male is evident. It has been and continues to be in most cases to migrate. But there are in both territorial communities males who are neither boys nor old men. What do they do, if they are not much involved in household tasks?

Andrew Ainslie made the following observation for Gwabeni:

The lack of work opportunities in the area and the relatively assured income from pensions, means that these men have a good deal of leisure time. Many of them pass this time socialising and drinking on the verandah of the Breakfastvlei Hotel. Some older men are enthusiastic gardeners who spend a few hours each day working in their vegetable gardens.

Middle-aged men, not eligible for pensions are perforce more industrious, hiring their labour out to people who need building repairs or alterations done to their houses. They are also employed by those who need their cattle kraal repaired and wood collected for the purposes of performing a ritual.

The younger men are less inclined to engage in any physical work and seem to be disinterested in the local economy such as it is. They usually dress well and spend their time socialising at the Hotel and travelling to adjacent villages to visit girlfriends. They are, however, sometimes called upon to help with the collection of wood for a ritual, which they do by using the pick-up truck of one of their number.

During the fieldwork period in Gwabeni, which coincided with the run-up to the first democratic election, some of the younger men were heavily involved in politics and spent most of their time representing Gwabeni at meetings in Peddie town. Report-back meetings at village level occurred at least once a week and consumed a great deal of time, especially for those members from the outlying homesteads up to three kilometres from the meeting place at kwaNala. As with communal ceremonials of a ritual nature (see below) these secular rituals were highly revealing of the state of gender relations in the community.

At the political meetings, men and women sat in separate groups within earshot of each other, with the men doing all the talking. Occasionally, after a matter had been discussed by the men, one of the younger men would go over to the women and explain what had been said and ask whether they understood or not. Very few women would speak up in these meetings unless a question was directed at them specifically. The political as well as the recreational dimensions of public life were male monopolies. Could it have been that both of these sectors were 'modern' and in that way threatening to more domestic orientated women? Might the women have come into their own on more culturally familiar 'turf'?

Gender and ritual

In Gwabeni beer drinks and the slaughter of goats and cattle for ritual purposes are activities in which large investments of time and money are made. These are the key sacraments in the Nguni ancestor-focused religion, in which both Xhosa and Mfengu participate whether they also belong to Christian congregations or not. Traditional rituals provide occasions when the whole

village community, including those members of the diaspora who can attend, interacts at a formal level, when clan membership and gender relations are emphasised and negotiated. These expressions of communal faith and solidarity evolved under circumstances of technological vulnerability in a harsh environment, which persist, and thus the rituals continue to be relevant.

Adult women are primarily responsible for the preparation of *umqombothi* (traditional beer), and adult men select, slaughter and butcher the beast. There is no restriction on attendance, and guests from neighbouring communities may be invited. Such rituals are held often and are well-attended, particularly by the men of the villages. The first ritual that the research team attended was an *Ukubuyisa* ceremonial.

Ukubuyiso means 'to bring home'. This ritual is performed about a year after the burial of a male member of a household. More than any other factor, this ritual explains why there so many empty homesteads are maintained in Gwabeni, many of which are hardly ever visited. Migrants may spend decades away from the village, yet their homesteads are still considered to be where their ancestors reside, and thus where they will ultimately be 'brought home' (cf. McAllister 1991). An ox is always slaughtered for this important ceremonial, and the ox has to bellow as it is killed. The bellowing of the ox is of key significance as it shows that the deceased has been accepted by the ancestors. The ritual focuses particularly on the cattle-kraal as it is believed that the ancestors reside in the lower left hand side of the kraal.

The lower status of women was apparent at the ritual. It even determines the scale of the ritual. Where a male relative has died a large ox is killed and large amounts of money are spent on food and alcohol. For instance R1 600 for the ox, R1 000 for bottled beer, on top of that which is brewed and a similar amount for

brandy would be an average expenditure on a prominent male. When a female member of a household dies such an elaborate feast is not given. In place of the ox, a large dinner based on chicken is normally served.

At the full-scale *Ukubuyisa* the research team attended both the division of labour and the spatial position of women were highly gendered. Michelle Cocks observed:

Women are not allowed to enter the domain occupied by men, particularly the cattle kraal. The women remained in and around the homestead, preparing and cooking the food and washing the dishes. Among the women there were clear separations, based on age as well as gender. The *abafazana* (young wives) were mainly around the fire cooking or cutting up meat, which was brought to them by the men. The *abafazi* (middling wives) were responsible for washing the dishes, while the *abafazi abakhulu* (the most senior women) congregated on mats within one of the large huts. During the feast *abafazi* were also responsible for seeing to it that each woman was given enough meat to eat. After the eating of the meat, beer was brought by the men for the women to drink.

Similar separations occurred at other rituals. One week-end there were four rituals performed in the various village-sections, each one for a different purpose. The first was an *imbeleko*, the ritual birthday introduction of a person to the ancestors at which a goat was slaughtered and beer brewed. The second was a traditional funeral. The third was to thank the ancestors for the new car that a son of the household had bought, at which a sheep and a goat were slaughtered and beer brewed. At the fourth beer was brewed

and a goat slaughtered to thank the ancestors for the good fortune of having found employment recently.

Although the village sections of Gwabeni are quite far apart (up to one hour's walk from opposite sections) men make an effort to visit as many of the rituals as they can, because they are expected to be present as witnesses of what the particular family and clan are doing at a ritual. At all rituals members of the hosting clan sit together on the right-hand side of the rondavel or kraal. Other villagers sit on the opposite side. No women are allowed into the kraal, except the immediate family of those performing the ritual and close clan relatives. Younger men who are seated give up their seats for older men who arrive later. The senior male member of the agnatic cluster involved in the ritual, introduces the purpose of the ritual to men from the village and from adjacent villages. Once this speech has been made, one of the senior men of the village, who is not a clansman of those performing the ritual, will stand up and thank the hosts for the opportunity to eat and drink at their homestead. He sometimes says a few words in praise of the family performing the ritual and voices his support for the purposes of the occasion. Drinking of *umqombothi* and brandy by the tot starts after these speeches. Michelle also attended these rituals and recorded her observations:

The public visibility of women on these occasions is minimal. As in the case of *ukubuyisa* they are required to prepare beer and food and to clean the house and yard before the ritual. Female visitors congregate with the women of the household in a separate building. The *injoli*, a senior man of the village who is responsible for the orderly portioning out of beer in consultation with the head of the household, usually sends a billy-

can of beer and a bottle of brandy to the women for their consumption. Invariably, the women do not drink the brandy, but would keep it for their sons or for the head of the homestead.

At only one of the four rituals were women beyond the household present. This was a beer drink in Bbobho section, which was held in a large rondavel, with both sexes present. The men dominated the proceedings, as usual, but the women were specially addressed and listened eagerly to what was said. On several occasions between speeches the women broke into song and began dancing. Some of the men would join in. A small child was present and the women and child were eating bread and jam, while the men only drank beer. A billy-can of beer was given to the women, but not many of them drank from it.

Women's involvement in the community beyond the homestead is not confined to political meetings and traditional rituals. Most of them are active Methodists. Every Thursday afternoon women congregate in the small church to sing hymns and hold prayer meetings. At weekends the Burial Club Associations, which are well-supported by women as well as men, hold social gatherings. The women arrive earlier than the men as they are responsible for preparing the food. Probably because the club is not an indigenous institution, two of the women hold positions of responsibility, those of Collector and Auditor, in the association, but authority in the actual proceedings of the association was a male prerogative. During the fieldwork period a self-help sewing circle was set up by a group of women with considerable enthusiasm (and very few resources). This group was not subject

to male intervention or domination because it was regarded as a simple extension of a 'private sector' household activity.

Conclusion

For all that men and male-headed households were in the minority in Gwabeni, the ritual 'public sector' has been seen to be dominated by those few adult males who remained in the community. The 'low profile' of women at political meetings could be explained away by the unprecedented nature of black involvement in a national election, shyness in the face of innovation, particularly affecting the older and less educated, who were frequently women. But the marginalization of women on public occasions also extended to traditional rituals which are by definition entirely familiar to the participants. At both modern secular and traditional sacred forms of ritual men tended to be more publically visible. As the detailed examination of the household division of labour confirmed, they had more leisure time than the women, and the labour vacuum that the virtual extinction of agriculture had left in their lives was only partly filled with other tasks beyond the homestead. Such immunity only applied to initiated males, however. The survey shows that boys, like young girls, were heavily involved with household tasks, particularly in the FHHs and particularly in Gwabeni, where providing for household needs was so arduous and employed as many able-bodied household members as could be recruited.

One of the striking features of the quantitative exercise was the low priority given to rural production in both communities. Cultivation of the family fields was not even mentioned, and herding, caring for small stock and gardening did not consume

much household labour. The decline of agriculture in Gwabeni and Gcinisa and its implications for gender relations, household organization and environmental management is evidently a topic of considerable importance. Accordingly, it is the next problem to be addressed, initiating the final section of the report.

Endnote

1. The numbers are referred to as 'citations' because they do not reflect the labour inputs of each and every member of the sampled households but rather the numbers of times a particular age or gender category rather than an individual was cited. The numbers obtained from these responses do not have a relationship with household or community size, which is why there is no point in providing totals.

PART THREE:

GENDER, HOUSEHOLD AND ENVIRONMENTAL CHANGES

6. THE CULTIVATED/DOMESTICATED SECTOR

Introduction

In common with most of the dryland agricultural communities of the former Ciskei, the households of Gwabeni and Gcinisa have witnessed a marked decline in agricultural activity over the last three or four decades (cf. Daniel and Webb 1980; Magewu 1994). Being so different in terms of their ecology, size and demography, and in the circumstance of their founding, Gwabeni and Gcinisa varied considerably in the ways that their households coped with declining agricultural production exacerbated by the worst drought of the century.

Some hints as to the contrasts between the two communities in the agricultural field were provided in the preceding discussion of the division of labour in the households; in this chapter the historical and current situation at the local level is made explicit. In a comparative nexus, our analysis of the relationship between the households of Gwabeni and Gcinisa and a declining agricultural opportunity structure is taken further, focusing on the implications of this change for the men and women, boys and girls in the households.

The decline of field cultivation

In chapters 2 and 3 it was established that the communities of Peddie District had long been supported by an agro-pastoralist economy which entailed garden cultivation but placed the em-

phasis on animal husbandry. After the coming of the missionaries they were introduced to the plough and became, for a time, highly productive field cultivators as well. But scanty and irregular rainfall made this strategy viable only when the ratio of land to cultivators was relatively high. By causing congestion of the Reserve, the Land Act of 1913 and subsequent legislation did not remove the possibility of the inhabitants becoming anything more than subsistence agriculturalists. Later even this modest goal became problematical in the face of increasing shortages of male labour and, paradoxically, worsening congestion. Ever since the 1950s insufficiencies of land, labour, capital and extension services, to say nothing of droughts, have bedeviled dry land agriculture in the former Ciskei. To these problems, Betterment Planning and relocation have added the disruption of relationships necessary to organise rural production. These problems have been most keenly felt in the sector of field cultivation.

The Experience of Gwabeni

There had been no field cultivation in Gwabeni for some twenty years. Its demise was not caused by the drought, nor did ploughing recommence after the drought broke in 1993. There were other factors at work.

(i) Competition with White farmers

The decline of a range of rural productive activities including field cultivation can be traced back to the arrival of large-scale white farming in the area. This period in the history of Gwabeni, which culminated in the enclosure of the local commonage known as the Breakfast Vlei Outspan, was described briefly when

the village was introduced in Part 3. Its relevance to the agricultural decline which followed now needs to be spelled out.

To this day it is possible to discern from the foundations of their houses and small piles of rubble that black households formerly cultivated and grazed their stock on the land which came to be known as the Breakfast Vlei Outspan. Besides cultivating fields and gardens in the area, the black farmers also used the site as an outspan. Some of them sold wood in Grahamstown, which they conveyed by ox wagon. They would inspan the cattle in the afternoon, collect the wood, outspan at Breakfast Vlei, and keep the oxen there overnight, in preparation for an early journey the following day.

Whites who used Breakfast Vlei as a staging post entered into an agreement with the headman at Gwabeni in terms of which the outspan was regarded as commonage, to be shared by both white and black. Later, white farmers reneged on the old agreement and not only refused the local people access to the outspan but also expelled the former inhabitants of the area. These households lost not only residential sites and partly arable land but also that scarcest of resources in the Gwabeni area, controllable grazing land. For the fields on the Outspan were securely fenced, their crops were secure from grazing animals. Also, the households involved in the firewood trade would have been able to chop wood elsewhere, but managing their teams of oxen without access to the outspan was more difficult, so this lucrative operation had to be curtailed. The expelled households had no choice but to re-establish themselves in an unoccupied part of the settlement, on the far edge of Nqwebeni, the southernmost ridge, and eke out a below-subsistence existence.

Besides the Outspan, there is another area adjacent to Gwabeni which is even now, after a severe drought, well-endowed with grazing, mimosa trees, game and water. It is now part of the Game Reserve, but there was a time when the Gwabeni Mfengu could, and did, farm such land. Dumisani Deliwe recorded the following case:

An elderly descendent of the Jakuja agnatic group recalled that his father together with his five brothers rented a massive tract of land beyond the village which was subsequently bought by white farmers and divided into three farms. The Jakujas had much of the area under cultivation, and on the rest they grazed a large herd of cattle, as well as flocks of sheep and goats. This operation was run by the eldest brother, which meant that the other five had to give him their contributions to the farm rent, and he had to pay it on their behalf to the relevant authorities. This traditional arrangement worked well for a many years but at a certain point the eldest Jakuja become irresponsible, and instead of paying in the rent money, he spent it on drink at the Breakfast Vlei Hotel.

Eventually, the Jakuja brothers were evicted from their farm through failure to pay the rent, and there were other accumulated debts as well which they had to settle by selling their cattle. The quarrelling which resulted from the loss of the farm and most of the stock resulted in the scattering of the Jakuja agnatic cluster through five areas of the former Ciskei.

The local Jakuja descendants admitted to Dumisani that the irresponsibility of the head of the farm-owning cluster brought

about their ruination, but they also cited the hotel owner, who well knew that the senior Jakuja was the tenant of a valuable property, and permitted him to accumulate a massive debt. It is believed that the hotel owner might have conspired with other white people who were interested in the land the family owned.

By these means as well as the land legislation, the best of the arable and grazing land became incorporated into white farms, and later the Game Reserve. Either way, the inhabitants of Gwabeni were excluded from prime land that they claimed as theirs. Having no other choices, the households of Gwabeni did what they could with the steep, barren land adjacent to the white farms/game reserve.

(ii) The state of the land

In spite of their dispossession from the most viable land for cultivation, several Gwabeni residents confirmed that prior to the 1950s people managed to grow enough food to sustain themselves. According to one old man:

We used to grow crops all year round. Wheat and peas were grown in winter only; maize, pumpkins and melons the whole year.¹ In those days there were no restrictions on the size or location of fields. All the land around the location was subject to communal tenure. Since the 1950s, only a few people have cultivated their fields.

The period the old men remember as a 'golden age' of cultivation coincided with a few years of good rains in between periods of drought. The difference between the period of dryness which preceded the seasons of good rains and that which followed it is

that since the late 1960s social pensions have provided an alternative to subsistence from the land or on migrant remittance. It was no longer necessary to risk scarce capital and exhaust scarce labour on dry-land farming which was becoming less and less viable.

The long-uncultivated fields of Gwabeni can be divided into two categories. The first consists of fields on the steep valley slopes which, according to our interpretation of the 1954 aerial photographs, were last cultivated prior to about 1930. However, one elderly man maintained that some of these were still being used until the 1950s. These fields tend to be situated on the lower slopes of the valleys, adjacent to dry drainage channels. There is a reasonable degree of correspondence between the locations of these early fields and of the current erosion gullies (cf. fig. 3.7). The second consists of those on the flatter parts of the Bhubho ridge and adjacent to Breakfast Vlei Outspan. These were cultivated extensively until the 1950s, and sporadically into the 1970s.

The repeated cultivation of fields without application of fertilisers, particularly in soils like these which are known to be highly deficient in phosphorus, would have led to a decrease in fertility, and thus crop production, over time. Yet a decline in fertility was not perceived to be a problem by any of the former cultivators interviewed on these issues. Nevertheless, it is a theoretically likely factor -- though not necessarily a principal one, in the demise of cultivation.

The practise of cultivating on steep valley slopes employed by people in Gwabeni and elsewhere in Ciskei is a more readily identifiable factor, since it accelerates the highly visible erosion in the area. At a workshop involving many of the elderly men in Gwabeni, it was agreed that the severity of erosion was one of

the main reasons why people stopped cultivating, especially on the steep slopes. One of these men commented:

Our people prefer to have their fields on valley slopes away from the sun. That way, the sun does not burn the crop, and the hours of sunlight are fewer. The air is cooler in the valleys, and that too prevents the crop from drying out.

Another reason for cultivating on the lower slopes may have been that the soils there tend to be deeper and more fertile than those higher up the slopes (De Lange *et al.* 1994). Erosion would only have become a barrier to this pattern of cultivation when it became widespread, or when pressure on land constrained people from exploiting new areas. Terracing, in areas where slopes exceeded about 12°, and contour ploughing were strategies for preventing erosion which were employed in the past. In spite of such measures, some of the old fields on the steeper parts of Bhubho ridge show signs of past rill erosion.

(iii) The importance of fencing

Erosion and drought have played an important part in the demise of cultivation, but they are not the only environmental factors involved. Less direct, but possibly even more inhibitory in a community such as Gwabeni, has been the problem of fencing the fields. Where mixed farming is involved, fencing is crucial to protect the crops from grazing animals. Wire fencing around large areas such as fields is out of the question in such a poor community. At current prices for wire and posts a four-strand fence for relatively small field of 600m by 600m would cost

between R4 000 and R5 000, depending on the gauge of wire and kinds of post selected.

Traditionally, branches were used to divide grazing from arable land in Gwabeni. However, the felling of trees for fencing over the decades led to the local environment being almost depleted of trees. When one old man was asked why fields were no longer cultivated, he immediately replied that branches suitable for fencing were unobtainable. A connection between trees in the vicinity and field cultivation is far from obvious, yet in this case the latter was considered quite impossible in the absence of the former. Another dimension of the problem connects with gender and households. Chopping down branches and making up the fence was considered to be 'men's work', and fencing a field was regarded as communal labour, each household had to have a man representing it, or it would be sanctioned by the community in other ways. Communal cooperation in tasks which had a bearing on the life of the community, was a powerful norm in the days when field cultivation was still crucial to subsistence. Thus, deforestation helped not only to bring an end to field cultivation, but also to inter-household cooperation and hence communal life came to an end.

Nor could field cultivation easily be revived, as the experience of would-be cultivator, Sthathu, underlines..

Sthathu came to live in Gwabeni in 1968, when he was 48. Before this, he worked on one of the white farms near Gwabeni. For six years after he had established his household in Gwabeni he worked for a building contractor in Port Elizabeth. He retired in 1974, and came to farm in Gwabeni. At that time, only five men in the whole village were cultivating the fields. So he called a meeting and asked why no cultivation was

taking place. He was told it was because the fences needed repairing. He then pointed out to the local men that he had the machine for tightening the wire, and only needed assistance from other men to complete the job. It was agreed that all the men present would meet next to the fields at 9.00 the next morning. When he arrived there by the stipulated time, there were no men in sight. He decided to work the fence alone, an undertaking which led him to cover a distance of 600m x 600m almost alone. One man came to his assistance when he was left with only about 400m left to do. Sthathu had both the competence and the confidence to do the job because of his experience on the farms.

The field which Sthathu was so active in fencing was not his own. He had borrowed it from a widower who had two fields. When he had finished the fence he had started ploughing the field, with borrowed oxen. Other men from the village joined him, and for a while, cultivation became a way of life at Gwabeni again. The enthusiasm, however, was short-lived. By 1978 only two men were ploughing in the whole village, and one of them was Sthathu. The field he used was so productive that in the first year he produced 25 bags of mealies on the cob.

During the night of the 24th of November 1978, cattle from three households were deliberately driven into Sthathu's mealie fields. The maize was ripening, ready to bear fruit. When he saw what had happened, he momentarily lost his consciousness, and walked up and down the field without being aware of it. The cattle had grazed the fields so thoroughly that only stalks were

left. Although the households which had done this were subsequently identified, and made to repay the damage, Sthathu lost all interest in field cultivation after that.

At a time when the climate still made field cultivation possible, but the lands were exhausted and eroded, and the men had ceased cooperative fence-construction because deforestation had made the raw materials difficult to procure in sufficient quantities, the outsider, Sthathu, with no land or stock, but plenty of enthusiasm and farm-derived know-how and technology (and perhaps sufficient cash to buy barbed wire after his years of employment with a reputable construction company), single-handedly attempted to revive field cultivation in Gwabeni. That he could do alone what local work parties had not managed to keep going together was an intolerable affront to the spirit of African communalism, known locally as *ubuntu*. Three households punished him for his effrontery, but were punished in their turn, presumably for their extremism rather than their sentiment. "How can this person plough", they were reported as saying, "whilst we are not ploughing?" The exact words are remembered because that *cause celebre* was probably the last time traditional agrarian communal values were defended, just as it was definitely the last time a field was cultivated in Gwabeni.

(iv) Cultivation and continuity

Beyond the physical damage to land, natural vegetation and stock that successive severe droughts have wreaked, there is a social and cultural dimension which bedevils agricultural recovery in the relatively wet seasons and periods. When a drought continues for a decade or more, such as occurred in the 1930s and the

1980s, by the time rains come all the old people who are the repositories of agricultural knowledge and skill, have either become too old to take up cultivation again, or have died. When Dumisani observed on one occasion that no one was taking advantage of the good rains of 1994 to plough, an old woman within earshot observed:

We will only be able to plough their fields again if the young men come back from Port Elizabeth to help us, and even then...

Back in the old days, when we still cultivated, the old men supervised the young men closely while they ploughed. Nowadays, it is so long since they ploughed that the youths know nothing about ploughing. They have no interest in it.

Confirming this view a man who was also present volunteered the following:

It is quite true what she says. Take me for an example: I am 32 years old and able-bodied, yet I have never in my life had the opportunity to plough.

The drought cycle has made it extremely difficult to sustain a culture of field cultivation in Gwabeni, and the recapturing of it since the breaking of the last drought without any agricultural extension was beyond the abilities of the present inhabitants of Gwabeni, with or without social pensions to fall back on.

(v) Field ownership and use

In the survey the sample of 37 households were asked if they still had fields and when they had last cultivated them (Table 5.1). Of the 16, 14 had at least one field; of the 21 FHHs, 12 retained fields: but only one household, a MHH, had returned to field cultivation since the drought. As all Gwabeni households have rights to fields under community tenure, the 13 who lacked fields were either outsiders who were not entitled to a field, like Sthathu, or they had long since given up their rights.

Table 6.1 Ownership of Fields Among the Sampled Households of Gwabeni

Last Year of Field Cultivation	M	HH	F	HH	Total Owners of at least one field
	1 Field	2 Fields	1 Field	2 Fields	
1960s	1	-	-	-	1
1970s	7	2	11	-	20
1980s	1	-	1	-	2
1994	1	-	-	-	1
Total	10	2	12	-	24

We also asked our informants in the sample what had stopped them from cultivating, what they felt about resuming cultivation and whether they wanted more land. No differentiation was made between field cultivation and garden cultivation when the questions were posed so this issue can only be addressed after gardening has been discussed.

The experience of Gcinisa

As with Gwabeni, the decline of field cultivation in Gcinisa predated the recent drought and had its roots in a relationship with white outsiders, in this case the architects of Betterment and relocation.

(i) The genesis of a betterment village

A very old man who lived in the area prior to 'betterment' recalled the conversion of two former white-owned farms into an agricultural community for blacks in accordance with Betterment Planning.

First the white men from the government, they came and surveyed the land. They wanted the fields that had always been used for cultivation to be reserved for cultivation. I had no problem with that. They then told people to take down the old fences used on the white farms, so the two could become one area, divided into arable, gardening and grazing zones.

The grazing zone was divided into four camps. Three of these were to be used alternately on a quarterly basis, and one for the whole year. One small camp with sweet grass along the banks of Riverbankfarm river, was to be used for dairy cattle, and two small camps were to be reserved for the grazing of calves. A strict system of pasture management was thereby inaugurated. Even chopping of wood was strictly controlled, with permission to chop wood to be sought from the local headman. It was not to last. The former white farmer's commercial dairy operation was taken over by the government for the first wave of black settlers

in Gcinisa to run. Pure and cross bred dairy cattle, particularly Frieslands and Jerseys, formed the greater part of the herd. Individual settlers were given one or two dairy cattle, with a total herd size of about 25, and the dairy was run on a co-operative basis.

To begin with, grazing rotation was strictly adhered to, and the government provided lucerne for supplementary feeding in winter. The maximum milk production per cow was said to be about five gallons, though an old man who was involved in the dairy operation remembers the typical daily amount of milk produced by a cow daily as being about one to two gallons. The curdling process was done in the village, by one trained by an agricultural officer, and cream was transported to a market in King William's Town by means of a railway bus which stopped at the village twice a week. The returns on the sales of cream varied between R5.00 and R6.00 a gallon can, which made it a valuable 'cash crop' for those times.

Dairy farming continued in this way for about 15 years, and when the people from the second wave of settlers arrived in the mid 1970s, they were also brought into the dairy operation, but by this time it was in sharp decline, and would soon fold. Some blamed the arrival of the 'new people', who were said to have stolen the cream, for the dairy's eventual termination; but the problems of the dairy went far beyond a little 'shrinkage' and had begun well before the arrival of the 'new people'. Government assistance with the dairy ceased as soon as it began to produce a reliable income, and with it supplementary feeding for the herd during the winter months. The local people were unable to find an alternative source of lucerne, and an attempt to secure additional grazing on a farm near Wesley was short-lived because it was too expensive. As a result, many of the cows died of

starvation or disease when the dry season was unusually long, or when the rains failed. Adding insult to injury, the bus changed its route and transporting the dwindling supplies of cream to King William's Town became problematical, and an outbreak of red water (*umanzi abomvu*) killed some of the surviving cattle.

In 1974 the farmers exchanged their remaining dairy cattle for beef cattle, and afterwards the mode of stock farming carried on in Gcinisa became more like that described above for Gwabeni. The next year, the relocatees who would swell the community to many times its initial size began to arrive. They founded the section of the village known as New Gcinisa (causing the original settlement to be known as Old Gcinisa from then on). Their sheer numbers would have been threatening enough to the households of Old Gcinisa. That they were accompanied by large herds of stock made their impact all the more so.

While the people of Old Gcinisa had their fields, and access to grazing and dipping, the new arrivals did not enjoy such rights, for no new land had been allocated them. Furthermore, some of the newcomers felt exploited because, before settling in Gcinisa, they had brought some of their cattle over in advance, and placed them with some of the local people until such time as they could move their households across to Gcinisa. But when they brought the rest of their livestock and belongings with them, the people in the old section of Gcinisa forbade them to use local pastures and dipping facilities, arguing that this would lead to overstocking. A pasture ranger was appointed to ensure that this was not overlooked.

Provoked by the lack of forewarning, men who had recently settled in the new section assaulted the ranger, and forcibly drove their cattle into the local camps by cutting the wire. Although a charge of assault was brought against the men, they were not

convicted. The illogicality of the earlier settlers denying access to their subsequent stock while no such prohibition obtained to the animals that had been brought in advance and that the Old Gcinisa people were looking after, impressed the judge and the case was dismissed. Unfortunately, this victory brought an end to the system of pasture management introduced through Betterment Planning and made any future attempts at stock control virtually impossible.

The pressure of numbers in the cattle camps meant the rotation of pastures could not be maintained. Livestock began to roam at will between camps, and the fences between them were cut to facilitate this. Besides fence-cutting as a deliberate response to overcrowding; as a form of crisis-management by the men of the new section; the women collecting wood were taking short cuts across the fields instead of going around them and cutting or loosening the wire to facilitate this. Now livestock were not only wandering between pastures but into cultivated fields as far as neighbouring villages such as Ndaba, and being impounded.

The division between the residents and the newcomers was exacerbated by the ambiguous juridical status of Gcinisa and the accompanying shifts of chiefly allegiance, in terms of which the headman associated with Old Gcinisa came to be superseded by a new headman who ruled the area for the new chief Njokweni from a base in New Gcinisa. Although the headman tried to control the situation, and in some cases obtained the cooperation of people from the both the new and old sections of Gcinisa, there were always recalcitrant members who would not comply with the rules. Rivalries between the two sections endured right up until the democratic elections, since when President Mandela's preaching about reconciliation, seems to have been taken to heart in Gcinisa.

Part of the problem in this put-together community has been the relative lack of outside intervention. The buck-passing and consequent muddle in the sphere of local government had its counterpart in the management of agriculture, beginning when the dairy operation was abandoned to its fate and continuing up to the present. Ulimocor is a parastatal corporation of the former Ciskei whose whole sole brief was to foster black agricultural advancement in the territory. Ulimocor only opened a branch in the vicinity of Gcinisa (Wesley) in 1994. From interviews with the staff at the Wesley offices it emerged that the corporation nowadays is largely a conduit for hiring out farms bought by the former Ciskei from the department of Development Aid to aspirant black commercial farmers. As far as the communities in the immediate vicinity, like Gcinisa, are concerned, Ulimocor is known more for literacy classes, than for agricultural assistance. Meanwhile, the decline of agriculture in the key areas of field cultivation and stock farming continue unabated.

(ii) The state of field cultivation

Like Gwabeni, Gcinisa had witnessed a marked decline in field cultivation, but it was not yet extinct as in Gwabeni. It endured longer, and was continuing in a restricted form. As noted in chapter 3, outside of periods of extreme dryness the land on which Gcinisa was founded had considerable agricultural potential, even for farming operations in which inputs of capital were limited. An elderly resident of Old Gcinisa recalled:

When I settled here more than 20 years ago they were still cultivating the fields to the east of the main road and new fields were being developed in the north and

west of the location; there were more households that wanted to cultivate than space for them all.

Table 6.2 documents the decline of field cultivation in Gcinisa through the experiences of the field-owners in the survey. As in Gwabeni, the FHHs experienced more difficulty in sustaining field cultivation than the MHHs and for the same reasons, problems of labour, capital, skills, direction and extension support.

Table 6.2 **Ownership of fields Among the Sampled Households of Gcinisa**

Last Cultivated	M	HH	F	HH	BOTH
	1 Field	2 Fields	1 Field	2 Fields	
1970s	-	-	1	-	1
1980s	3	1	1	-	5
1990-91	1	1	-	-	2
1994	4	-	-	-	4
Total	7	2	2	-	11 ²

The fields east of the main road and those in the north west are highly suitable for cultivation, granted reasonable rainfall, with their moderate slopes of up to 10 and contour banks to reduce erosion. But from the beginning of the 1980s until 1993 the rains failed, and these fields could not be used. The only fields which remained under cultivation were on the flat floodplain of the Nyultsi River. These fertile fields were well fenced, and did not

suffer from significant water erosion. They were the last to become unusable during the drought and the first to recover. One old man who no longer practises field cultivation told us that he used to get an annual harvest of about 200 sacks of maize from his field by the river. A man who cultivated in 1993 said that he obtained 40 bags of maize, most of which went to feed his family. Two men who have continued to cultivate say that they obtain good crops. The village shopkeeper, one of the richest men in Gcinisa, has planted crops nearly every year despite the drought. He said that the fields nearest to the river continued to be productive throughout the drought.

In this last redoubt of field cultivation in Gcinisa, where male labour is not as scarce as in Gwabeni, ploughing and planting remain male prerogatives while women tend to do the hoeing. As anyone who has grown maize (the principal crop) well knows, regular hoeing is crucial if weeds are not to compete with the crop and cause its stunting.

The only problem with the riverine fields is that they are vulnerable to trampling by livestock. Men cultivating fields near the river say they have tried to persuade people not to drive their stock across the road but to no avail. They have had to fence their fields at considerable expense in order to protect them from the incursions of cattle.

A man who was extending his field explained the numerous obstacles to cultivation in Gcinisa from his point of view:

Number one: the ground is difficult to clear, you have to cut down the thorn trees and dig out the stumps. Second: you need to pay for a tractor to do the ploughing. I can afford it because I have a good job; but not everyone can. Third: fencing takes time and a lot of

money and even the goats and sheep can sometimes get into your fields and do a lot of damage. They ate most of my mealie crop in 1993. Fourth: if the goats don't get it, it can still be stolen. I will always cultivate, though, and now that the drought has broken there are others who are planning to cultivate next season.

He did not mention (as others did) the high cost of fertilizer (though kraal manure is an acceptable substitute) and pesticides, nor the fact that fence-posts and fencing wire tend to rust in the salty sea air of Gcinisa. If these inputs are added to the inputs he did mention, such as the tractor and initial fencing, then the demise of field cultivation here as in Gwabeni is not only a response to periodic droughts but also an epiphenomenon of severe poverty, in which the investment of scarce capital on a crop which may or may not come in intact in a few months time is no longer something the average household can afford to do.

On the social and psychological reactions to the demise of cultivation, Dumisani observed:

Once I asked some of the local men who they thought the best farmer was -- who produced the biggest crop of maize? You could see in the reactions of those present who were considered the best a redeemed sense of esteem, nowadays lost in others through the long periods of agricultural inactivity. My question also prompted them to think about 'the good old days of plenty', and seem to want to shed tears as they reflected on the poverty that has engulfed them.

As in Gwabeni, field cultivation was entrenched in the culture of the various peasantries which came together to construct the

divided community of Gcinisa; they mourned its passing, not only out of sentiment for it, but also because it used to be an important piece in the jig-saw of their subsistence. Now only those with access to the riverine lands benefit from it.

The decline of stock farming

The experience of Gwabeni

Two centuries of restricted mobility and congestion in the former reserves and homelands have tended to diminish the role of cattle in the economies of the Mfengu and Xhosa while cultivation and the keeping of smaller stock have become emphasized. Thus, goats and sheep have long been added to cattle as the main kinds of livestock farmed in Gwabeni. Pigs and chickens were also kept, as well as donkeys and the occasional horse as sources of transport.

(i) Stock ownership

The numbers of stock owned by the sampled households during the period of research are given in Table 6.3. As before the figures are separated for MHHs and FHHs, but here the number of stock-owning households in each category is also distinguished. Chickens are not included in the table because most informants did not enumerate them. Four of the MHHs and three of the FHHs kept chickens. Altogether, nine (57%) of the male-headed and 13 (62%) of the female-headed households kept some sort of edible quadruped or fowl. It is interesting to note that the FHHs had slightly more cattle than the MHHs in absolute numbers as well as per household while the male-headed house-

holds were much more inclined to keep goats and sheep than the female. Whereas the MHHs had more pigs per household than the FHHs, three times as many FHHs as MHHs had at least one pig.

Cattle and goats were both of the hardy indigenous type; the sheep came originally from the white farmers in the area. All species were in good condition during the research period on account of the good rains. But there were pitifully few of them in the aftermath of the protracted drought compared with their numbers at the beginning of it. According to the records of the Ciskei Department of Agriculture in Peddie, there were 454 head of cattle in Gwabeni in 1975. The cattle-keepers of Gwabeni had thus sustained a reduction of their herds to about a twentieth of their former size.

Table 6.3 **Livestock held by Sampled Households in Gwabeni**

Stock Type	MHH		FHH		BOTH	
	Units	HHS	Units	HHS	No.	HHS
Cattle	12	4	15	3	27	7
Goats	69	5	55	7	124	12
Sheep	121	5	16	4	137	9
Pigs	11	4	23	12	34	16
Donkeys	-	-	1	-	1	1

(ii) The effects of the drought

Livestock were affected by the drought in different ways. As browsers, goats were the best suited of the three species to the

local ecology, and were least affected by the drought, which is why they are the most numerous of the three today. Sheep also withstood the drought years reasonably well, but the cattle succumbed in droves all over the region.

Deaths occurred through starvation and disease, and included virtually all oxen which had previously been used for ploughing. Some cattle died of thirst. This happened in the winter months, after the smaller dams had dried up. Others, seeking to slake their thirst from the river, died by drowning -- being weak from the drought, they either slipped on the banks or got stuck in the mud, fell over and drowned. Still others sought alternative sources of sustenance, after the grass and edible leaves had been all consumed, sometimes with disastrous consequences. A 76 year old man told Dumisani:

I used to have 7 cattle, but they all died in the drought. It wasn't thirst that caused them to die, but they didn't die of thirst. They took to eating prickly pear leaves because they were the only green, juicy leaves around during the drought. Their mouths became infected by the prickles on the leaves and swelled up! They were unable to eat, and so they eventually died of starvation!

According to Shtathu, no extension officers or veterinarians visited Gwabeni to help the stockowners deal with the sick animals or maintain what was left of their herds.

(iii) The importance of cattle

Cattle, for all their vulnerability to drought, remain the most valued of all varieties of stock in the rural communities of the former Ciskei. They continue to be a crucial moveable asset, but

the use to which they are put is changing. Whereas, formerly, the stock farmers of the Ciskei frequently resisted education because the boys were needed for herding, nowadays it is becoming quite usual for livestock to be regarded as a short-term investment to secure a long-term investment such as education. Such plans were obviously short-circuited by the heavy stock losses of the drought, which may have encouraged another trend. Stock farmers in the area were much more prepared to slaughter cattle outside of a ritual context, timing such commercial slaughtering to coincide with pension pay days, fast becoming the equivalent of country fairs in the region.

In addition to these new uses for cattle, they continue to have ritual significance, providing protein rich meals to the whole community on such occasions (which are quite frequent) and oxen would still be used as draught animals if any had survived the drought. The cows continue to be milked (though they are by no means prime dairy stock and yield little); their hides are used for making thongs and discarded cattle horns are used to make pipe ends. What little is not consumed by humans goes to the dogs.

The other smaller stock may not have the key role granted to cattle, but they also have many uses. Goats are valued for their milk and meat, and white goats particularly have an important role in rituals, which makes them more sought after than sheep. Besides being another source of meat, sheep provide one of the few 'cash crops' in the local economy, their wool. They do not make as much from the clip as they used to because they now have to hire their own transport to ferry their wool to King William's Town. Previously transport was paid for by government, but it is still worth the while of these cash-starved farmers.

The development of rural markets linked to pension day has not only stimulated the slaughtering of cattle, it has also provided a new role for the pig, which has no ritual or other significance besides direct consumption. It has become the most frequently slaughtered animal for such purposes, a cash crop in its own right. Chickens are another non-ritual animal which can be farmed for slaughter. But they are also important for eggs, and chicken feathers are used to make cushions, whilst egg shells may be used as medicine to ward off evil spirits.

Animal dung has more uses than garden fertilizer in this community. Cow dung is an essential building and home maintenance material. Goat and pig dung are used in medicine³, and pig fat is used to drive off evil spirits, while donkey and horse dung are used as narcotics. The stock losses sustained by Gwabeni thus had wide ramifications within the local economy and way of life. For one thing managing stock and using its products tend to be gendered activities. Almost everything to do with cattle used to be and to a large extent still is firmly in the male domain, right down to making pipe ends out of cow horns, though women have always been permitted to use the dung to resurface their floors. Small stock have always been associated with women, so it is they that make cushions from chicken-feathers. Making medicines from animal products or plants is more ambiguous and tends to be the task of whichever gender in the household has the expertise.

(iv) Livestock management

There is very little active management of livestock in Gwabeni. Legislation was introduced in the 1950s and '60s to control stocking rates in Ciskei but it was never properly implemented,

and the drought rendered it unnecessary. The movement of animals is not controlled and they graze or browse continuously. In this area of scarce grazing, livestock owners regard the trees in Valley Bushveld areas as providing vital fodder, particularly during periods of drought. Some of them claim that the leaves of such trees provide the best fodder for cattle and sheep. This view contradicts 'modern' agricultural thinking, but where good grass (generally accepted as being the favoured food of cattle) is scarce, it may well be that leaves provide a better source of nutrition.

The fondness of the local stock for leaves is unfortunate in view of the earlier discussion of the role of fencing in the rapid deforestation of the area. It means that man and beast were not only in competition for the crops which were formerly grown on the fields, but they were also antagonists in the case of the trees. The cattle and goats were attracted to the (renewable) leaves while their owners depended on the (non-renewable) saplings and branches for their fences.

While the cattle tended to roam (unless required for milking or dipping), some owners of goats and sheep kept them in kraals at the owner's homestead at night because of the threat of predation (especially by jackals). Kids and lambs were frequently kept in the kraals even during the day for this reason. The ecological consequence of this pattern was that cattle could use more distant foraging lands than the small stock. Fortuitously, in this area where the veld is inherently less suitable for cattle than for goats (see chapter 3), the less vulnerable cattle could range far and wide in their search for forage without having to compete with the local goats and sheep, which had more circumscribed existence.

In other communities of rural South Africa, including Gcinisa, stock theft is a far greater problem than predation. While there have been occasional incidences of stock theft in Gwabeni, it is hardly rife. Predation is of more concern because it tended to increase as a result of the drought and the policy of the adjacent Game Reserve towards dogs (for more on this topic see chapter 7).

(v) Gender issues in stock management

The care for livestock, particularly cattle, being traditionally the domain of men, women tend to involve themselves only with the smaller stock, or as a last resort where cattle are concerned. Where men of a household are absent through migration, other men either from the neighbourhood or from the agnatic group, are expected to act as caretakers. As depopulation ensues this ideal becomes difficult to implement, and there are more cases in which women have an active role in the management of livestock. A typical example is that of Elsie:

Elsie is a 65 year old widow. She has 10 goats. When they get sick, she uses herbs to treat them. She knows which herb to use, she claims, through dreams in which she is told by her ancestors which herb to get and where to get it. The morning after such a dream, she sends her daughter's sons to go and fetch the herb for her, and when they bring it she makes the necessary concoction herself, and also administers it herself. She might have continued with poultry instead, but her homestead is adjacent to the route to the Breakfast Vlei Hotel, and drunken men were for ever stealing her chickens, even when her husband was still alive.

Livestock management, including that of goats, is no longer a male preserve in Gwabeni, and women who have the necessary knowledge and authority, such as Elsie, are quite at liberty to manage their own stock. It helps, of course, if they are post-menopausal. The old prohibition against women managing stock was always rationalised in terms of the threat their fertility (particularly when it was manifesting itself during menstruation or after childbirth) posed to domestic animals (Liebenderg 1993).

Men were of no danger to any stock, of course, but there were some, such as poultry, that were considered beneath their dignity and were left to women. No longer --

Nala is a 72 year old man, who farms mainly in poultry and goats. He ordered the 18 chicken he has via agricultural officers from King Williamstown and he sought advice from the same quarter as to what medicine to use when his chickens get sick: they advised him to use terramycine. He constructed a chicken-run to protect them from wildcats. He is the sole manager of his chicken project, but when he wants chicken meat, he consults his wife, out of respect for her traditional authority over poultry. By the same token, she could not order the slaughtering of a goat without consulting him in the matter, or, if he is absent, whichever brother is looking after his affairs.

The lack of gender specific livestock management practises also manifests itself in the cooperation between men and women in filling dips with water prior to dipping. This is particularly the case with small stock dipping, where agricultural officers do not bring the water in government trucks. There is one small stock

dip in Gwabeni, which is situated at Nqwebeba. The Bhubho people have requested that their cattle dip be used for dipping small stock as well, because the dip at Nqwebeba is far from them. Of interest is that the dip in Bhubho is used by both Bhubho and Mankone, a neighbouring village, and the dip in Nqwebeba is used by both Nqwebeba and Nala sections. The use is sometimes preceded by cooperation on the part of the territorial groups using the dip. That is, young men and women from both Nqwebeba and Bhubho cooperate to pour water in the dip, by means of beakers, and the same with regard to the dip in Bhubho. Here is management of livestock traditionally considered to be the domain of men involving not only the cooperation of village sections and villages, but men and women at the same time.

Whichever the gender of the person responsible for the livestock in the fluid sexual division of labour in Gwabeni, considerable experience and expertise is necessary for a successful enterprise. It has been observed that livestock in Gwabeni tend to browse on the leaves of trees, particularly during the dry winter months. Herders encourage the process by selecting choice areas at not too great a distance to which they drive their cattle and goats. They naturally avoid areas where predators have been sighted recently. Thus, to be a good herder one needs to know both the constraints and the opportunities of the local environment, or else one's stock suffers. Growing up in this environment, and gaining an intimate knowledge of it confer considerable advantages to successful herding, and could be important in the restoration of the household herds in Gwabeni.

(vi) Problems facing the stock farmers of Gwabeni

Herding skills, alas, are no compensation for a dearth of effective agricultural extension. The stock farmers of Gwabeni had no assistance during their crisis in the drought; they will certainly need it if they are to make a successful recovery. For many years extension officers in the former Ciskei tended to concentrate on those villages where the Tribal Authority used to meet, and where they tended to be based. In the past, each extension officer used to be assigned an area and routine visits were made quite frequently around these circuits. There was supposed to be an agricultural extension officer for every two villages, and a huge budget provided for this. But for years the inhabitants of villages which lacked a resident extension officer rarely saw one. Dipping services have become so irregular that farmers organise themselves to dip their livestock, with dipping liquid which they buy. Quite apart from the high cost of dip and medicines for stock, there is the cost of travelling to town to buy it, which places a heavy burden on households whose sole reliable source of income is old age pensions. Local farmers were crying out for extension services and agricultural training, for they saw what happened when their more assertive neighbours, such as Nala actively sought advice from agricultural officers and applied it.

Granted the recent history of severe drought in the area, it is not surprising that most informants should still regard this as a problem after it had broken. That an even greater proportion of the FHHs should cite predators (in practice, mostly jackals) as a problem says something about their more limited capacity for herding and controlling predators than the MHHs (not that the latter trivialise the problem). FHHs were rather more concerned about tick-borne and other diseases, probably because of their

more smaller budgets for medicines. Interestingly, access to water for stock was only a problem for one household in each category, as was organizing dipping.

Table 6.4 **Problems Associated with Stock Management
Articulated by Sampled Householders in Gwabeni**

Problems	MHH	FHH	Total
% 'Drought'	37.5	38.1	37.8
% 'Predators'	25.0	42.9	35.1
% 'Ticks'	18.8	23.8	21.6
% 'Disease in general'	12.5	14.3	13.5
% 'Access to water'	6.3	4.8	5.4
% 'Dipping problems'	6.3	4.8	5.4

The experience of Gcinisa

(i) Overstocking

The former farm labourers who settled in new Gcinisa brought with them not only a considerable number of cattle, but also numerous goats, because the quota on the farms they came from was ten goats and six cattle that a labourer and his family were permitted to keep. The white farmers forbade the keeping of sheep by their labourers, so no sheep came with them, and only four households in new Gcinisa keep sheep to this day. Not that sheep farming is particularly popular anywhere in Gcinisa: only six households in old Gcinisa keep them.

The chaos which accompanied the arrival of all this stock, and which spelled the end of 'betterment' in all but name has already been described with reference to the cattle. When the far more numerous and agile goats were confronted with the scarce grass and few shrubs and trees in the area of Gcinisa, they headed for pastures new, invading the camps of neighbouring communities, such as Ndaba, River bank, and as far afield as Bodium and Hamburg. These wandering involved journeys of over 10 km and the crossing of the national road. The result was that those goats which were not involved in car accidents tended to get lost, if they were not rustled. A great deal of pressure was taken off the environment by these depredations, but the owners lost much of their capital in their first months in Gcinisa.

(ii) The effects of the drought

Overstocking placed the stock farmers of Gcinisa in a poor position to confront the drought in the early 1980s. According to the records of the Department of Agriculture in Peddie, even before the heavy influx of cattle that came with the new settlers, the households of old Gcinisa were well-endowed with cattle. In 1968 there were 363 heads and only 36 households, which means each had about 10 cattle, on average. By 1994, the 233 households in both old and new Gcinisa shared 452 cattle. It was twenty times the number that survived in Gwabeni, but it still only amounted to slightly less than two per household. As in Gwabeni, the cattle died in the drought, directly, of hunger and thirst, and indirectly of diseases they contracted in their weakened state. The valuable draught animals died along with the ordinary scrub cattle, so there was no draught power for anyone who felt inclined to plough and could not afford tractor fees (which helps to explain

why there has not been a resurgence of field cultivation in such communities since the drought broke).

The current stock holdings of the sampled households in Gcinisa are enumerated in Table 6.5.

Table 6.5 Livestock Held by the Sampled Households in Gcinisa

Stock Type	MHH		FHH		Total	
	No.	HH	No.	HH	No.	HH
Cattle	156	14	8	1	170	22
Goats	88	7	24	2	112	9
Sheep	231	7	20	2	251	9
Pigs	10	7	-	-	10	7
Donkeys	2	1	6	1	8	2
Horses	-	-	2	1	2	1

Even allowing for the fact that the MHHs are 2.7 times as numerous as the FHHs, the former have much greater stock holdings over a wider range of households than the latter. Half of the MHHs had cattle, whereas only one FHH owned cattle, and the MHHs averaged 11 head per cattle-owning household, while the cattle-owning FHH had only eight. There was near parity in the matter of goats, with the MHHs only slightly ahead on both criteria, but when it came to sheep the MHHs had three times the amount of the FHHs. Presumably, the differential was even greater before the drought struck, because the larger the herds or flocks per household, the more difficult it was to look after them.

Recovery in the aftermath of the drought was problematized by the entire breakdown of all the features, save for concentrated settlement, which were supposed to make 'betterment' communities more viable than the alternative. For twenty years there were no rules as to where livestock were supposed to graze. The animals either wandered freely or were driven to the nearest suitable area. As browsers, the goats had more scope than the cattle. They ate the leaves of thorn trees as well as grass and, despite the scarcity of these trees, were clearly highly efficient at seeking them out. By this means goats continued to receive a balanced diet. However, with the continued pressure on trees for firewood and the expected increase in the number of goats in the aftermath of the breaking of the drought, the land can only become progressively less suitable for goats.

In winter 1994, cattle and sheep were in good condition but had no excess fat cover. Goats were in fair condition but less so than those in Gwabeni, while the condition of their coats indicated a nutritional deficiency. Perhaps this is due to the growing scarcity of browse material.

(iii) Livestock management

As in Gwabeni, neither modern management of livestock nor the retention of traditional approaches (the selection of sexes, sale of weaners) were exhibited. Although cattle were dipped regularly (with government supervision and chemicals), vaccination and worming did not routinely occur. Nowadays, government only assists with medicines and vaccinations in the event of a particular outbreak. As a legacy of the many disputes which had occurred between the two sections of Gcinisa and between Gcinisa and the neighbouring settlements, cattle had eartags and

individuals were recorded at dipping time; most goats and sheep were also marked for identification.

Sheep, goats and cows in milk were generally brought in to the backyard kraal at night, more out of fear of theft than for protection from predators which are scarce in this open country. Cattle were generally left to roam by night as well as by day.

Ownership of cattle was dominated by a small minority of wealthier households in Gcinisa. A local shopkeeper owned about 40 which he kept on neighbouring farms to avoid the problems of theft and lack of fencing in Gcinisa. There were exceptions to this tendency, however. A pensioner sublet grazing for his livestock from another farmer who rented the farm but had grazing beyond the needs of his own livestock; he paid R800.00 a year for this right out of his social pension of R370 a month. The fact that stock-owners would go to the inconvenience and expense of placing stock on outside farms is a reflection of the strong desire in some to continue with stock-farming.

The only commercial produce obtained from livestock in Gcinisa since the failure of the dairy cooperative was wool from the sheep; and sheep farming was a minority occupation. Although sheep-owners combined to transport the wool to the buyer in order to save costs, the income from the local clip was hardly worth the effort. One sheep-owner said that last year he received only R20 for the wool from 20 sheep! This in spite of the fact that the wool in this area is of good quality, and yields are reasonable.

The perceptions of stock-owners regarding stock management in Gcinisa are summarised in Table 6.6.

Table 6.6 Problems Associated with Livestock Management Among Sampled Households in Gcinisa

Problems	MHH	FHH	Total
'Drought'	11 (40%)	5 (50%)	16 (43%)
'Thieves'	8 (29%)	3 (30%)	11 (30%)
'Disease'	7 (26%)	1 (10%)	8 (21%)
'Poisonous plants'	4 (15%)	1 (10%)	5 (13%)
'Limited grazing'	1 (4%)	1 (10%)	2 (8%)

Both household types were preoccupied mainly with the after-effects of the long drought and the problem of stock-theft which was rife in this divided community. The MHHs were more concerned about disease and accidental poisoning than the FHHS, probably because their herds or flocks were larger and these problems therefore loomed larger. Note how different the problems concerning stock are in Gcinisa than in Gwabeni. Here poisonous plants take the place of ticks as hazards, and the predators have two legs instead of four.

Regarding small stock, pigs were popular as a source of protein, but they were more of a nuisance in this closer-settlement than they in Gwabeni. They were meant to be kept within people's yards but they tended to escape and get into neighbours' gardens becoming another source of conflict in an already divided community. Nearly every household had chickens, and there were some geese.

The decline of the two most important pillars of the local agrarian economy, field cultivation and animal husbandry, had forced able-bodied men and, to a lesser-extent, women, to seek

work outside Gcinisa. As a consequence, women had begun to play a role in livestock management. Some of them had taken instruction from agricultural officers on how to dose their stock, while others assisted with the labour-intensive task of driving cattle to the dip.

As might be expected, there were plenty of older men in Gcinisa who felt that the place of women was in the kitchen and that of men in the kraal. Other men, however, were increasingly acknowledging the role women could play in the management of livestock, including 'livestock of the kraal' (i.e., cattle). This was another manifestation of the general trend towards flexibility in gender roles in Gwabeni and Gcinisa. The essence of this trend is that it was practical and situational rather than ideological. In the case of women's increased involvement with the larger stock it was more out of necessity than any manifestation of a vernacular feminism. Most of the women of Gcinisa had no strong desire to take on extra work (i.e., formerly masculine roles in the traditional division of labour) in addition to their other tasks. But they were prepared to do so if the alternative was the neglect of an important element in the household patrimony.

The continued viability of garden cultivation

The experience of Gwabeni

Field cultivation may have become a thing of the past in Gwabeni, taking a large part of customary communal cooperation with it, but gardening, the oldest form of cultivation practised by the Mfengu and Xhosa had persisted. In spite of the erratic rainfall pattern, the difficulties of access to surface water, the depopula-

tion and the demographic distortion of the community, gardens continued to be cultivated whenever conditions permitted.

Table 6.7 **Gardening Among the Sampled Households of Gwabeni**

Variables	MHH	FHH	Total
Gardens owned	11 (69%)	10 (48%)	21 (57%)
Gardens cultivated	10 (63%)	7 (33%)	17 (46%)
Crops grown by at least 2 households ⁴ :			
Maize	3	8	11
Beans	4	6	10
Peas	5	5	10
Potatoes	4	6	10
Pumpkins	4	6	10
Spinach	7	2	9
Cabbage	6	2	8
Melons	4	2	6
Onions	5	1	6
Carrots	3	-	3
Beetroot	1	2	3
Tomatoes	3	-	3
Sweet-potatoes	1	1	2

As noted above, the preparation and cultivation of fields involved community cooperation which was difficult to organise, as the sad case of Sthathu underlined. Gardening, however, requires only household cooperation, and this was much more consonant with the altered social relations of Gwabeni. Gardening is not particularly gendered, and it is within the capabilities of almost the entire age-range present. The preparation of gardens for cultivation may involve several household members but the more

routine work might only involve one individual with occasional assistance from others. Should the principal gardener be absent for any reason, other household members can readily substitute for him or her. Another reason why gardening is better suited to the altered socioeconomic conditions of Gwabeni than field cultivation is the low cost of inputs (besides the initial outlay for fencing). Most households use hand-tools such as spades and hoes and organic fertilizer from their own or at least local animals.

More than half of the surveyed the households in Gwabeni had gardens. Three of them had given up gardening during the drought and had not resumed gardening since the drought broke. But the remainder (46% of the sample) claimed to be actively engaged in gardening (see Table 6.7). This finding seems to contradict the responses to the division of labour question analysed in chapter 5, in which gardening did not seem to occupy many household members. The apparent contradiction is resolved once it is appreciated that gardening is not a particularly labour-intensive activity, except for the watering aspect, and readily became identified with one or two enthusiasts with occasional assistance from other household members when needed.

Gardening tends to be a seasonal occupation in Gwabeni, only viable in the wet season, and then only if the rains come. Only Sthathu kept a garden going in winter, though his crop of potatoes and the fruit on his citrus trees were stunted due to lack of water. A shortage of water was consistently given as the main reason for not cultivating gardens. Beyond the damage a shortage of water can do to the plants, it also makes soil improvement difficult. Several people said they knew about the benefits of compost (which can be used to improve soil structure, texture

and fertility), but they could only make good compost if there was sufficient water, so it was rarely used.

Sthathu, who turned to gardening after he swore off field cultivation, had the following varieties in his garden: pine-apples, beans, tomatoes, sweet potatoes, peach trees (6), apple trees (2), orange trees (2), cabbages, beetroot, onions, pumpkins, potatoes, maize and, avocado pear. When Sthathu was visited, he had just harvested beans, but was replanting beans in the same place from which he had taken them. He explained that he was doing so because he did not have the space to do otherwise (incredibly, his bountiful garden measures only 60 by 100 m). Crop rotation was out of the question in his small garden, and so the soil quality may deteriorate in spite of his use of manure as a fertilizer.

Land suitable for gardening was in demand in Gwabeni, as Table 6.7 reveals. With so many fields lying fallow, it cannot be said there is lack of arable land in Gwabeni, but the kind that is scarce is land with some guarantees of security, which in Gwabeni means small fenced plots near the homesteads, preferably close to a water source. All gardens currently in use are fenced with wire. Garden cultivation would be impossible without effective fencing because of the free-ranging herbivores. Garden cultivation is thus limited to those households with the financial means to buy wire for fencing and access to labour to install it. The fact that a high proportion of these generally cash-and labour-starved households have prioritized their gardens is indicative of the value attached to gardening in Gwabeni.

Commercial fertilizers and insecticides are available in the district, but few locals had the means to buy them (in addition to the cost of travel to Peddie or King William's Town) . One

Table 6.8 Aspirations, Attitudes and Problems Associated with Cultivation Among the Sampled Households of Gwabeni

	MHH	FHH	BOTH
Would you like to have more land to cultivate?			
No. & % positive:	10 (63%)	7 (33%)	17 (46%)
How do you feel about cultivation?			
Very positive	5 (31%)	7 (33%)	12 (32%)
Positive	8 (50%)	8 (38%)	16 (43%)
Indifferent	-	1 (5%)	1 (3%)
Negative	-	2 (10%)	2 (5%)
Very negative	-	-	-
D.K.	6 (38%)	3 (14%)	9 (24%)
What are the problems with cultivation in this area? [shared by at least two households]			
Drought	8 (50%)	11 (52%)	19 (51%)
No fences	6 (38%)	7 (33%)	13 (35%)
No water	4 (25%)	5 (23%)	9 (24%)
Insects	4 (25%)	2 (10%)	6 (16%)
No draught power	2 (13%)	3 (14%)	5 (14%)
No capital	1 (6%)	2 (10%)	3 (8%)
No land	1 (6%)	1 (5%)	2 (5%)
No labour	-	2 (10%)	2 (5%)

man used a special fertilizer to prevent stunting in maize, an insecticide against cutworms and terramycine for his chickens, but such inputs are very much the exception in Gwabeni.

Gardens such as Sthathu's were extraordinarily versatile. They combined the functions of vegetable gardens, orchards and plantations. It is as if households were compensating in their gardens for the deforestation which has occurred beyond them. Trees were being grown for fruit and for shade and in some cases

the trees had been transplanted from the wild for their medicinal value.⁵ Gum trees were grown as windbreaks, for shade, and fencing poles. They were a particularly poor choice for a garden tree where water and garden land are scarce because nothing grows under gums and, being heavy consumers of water, they tend to desiccate the surrounding land.

Enthusiasm for gardening was considerable in the households of Gwabeni (see Table 6.8) in spite of the difficulties mentioned above and a demographic profile which favours women, the elderly and minors. This did not necessarily mean that respondents wanted more land for gardening, as the relatively few seeking more land confirms. The difference between the MHHs and FHHs in the table reflects the fact that women are responsible for more household tasks than men, and generally have fewer men in the households they head, so finding time and labour for their gardens is more difficult than in the case of the male-headed households.

Why household members felt so positive about cultivation in spite of the demise of the many obstacles to successful cultivation that they acknowledged had a lot to do with upbringing, in the case of older members, and their economic plight. Most respondents regarded some sort of cultivation as part of their way of life, an intrinsic good and part of their identity. But they were much too practical to view it in purely symbolic terms. Cultivating, even in small gardens, was a hedge against poverty and malnutrition. Every vegetable they managed to grow was one less that had to be bought and the nearest source of fresh vegetables was Peddie, an expensive taxi ride away.

A 78 year old widow with five grand children, who subsists mainly on her social pension of R370 a month, spends R300.00 a month on food, R260.00 a year on school uniforms, and R2.00

a month on medicine. Food, thus, constitutes 89% of this woman's annual expenditure. It would be an even greater proportion if she did not have her garden. Where gardening contributes so meaningfully to subsistence and fits in well with household organisation, and is so strongly valued by between two-thirds and three-quarters of the sampled households of Gwabeni, it would appear to be a most sustainable area for development in the community provided that solutions can be found for the key problems of irrigation and affordable fencing.

The experience of Gcinisa

Nearly every household in Gcinisa had a garden, where both males and females, old and young, worked together to produce much needed subsistence crops. It was in a way a compensation for the demise of field cultivation, a form of privatization in the place of the communal effort that was no longer sustainable.

The gardens varied in size, but most were large enough to permit ploughing by tractor, if the owners could afford the R40 for a typical plot size of about 400m². All but one of the 10 FHHs was engaged in gardening during the fieldwork period, whereas only 16 out of the 27 MHHs had gardens. The range of crops they grew, which differed somewhat in frequency if not in type from those grown in Gwabeni, are detailed in Table 6.9.

As in Gwabeni, the main problem households in Gcinisa encountered with gardening was that of water supply. There were no furrows or pipes and all water for gardening had to be brought from the dams. Here, too, the lack of irrigation made gardening a mainly summer activity. The only substantial vegetable garden seen in the winter of 1994 belonged to a family with two donkeys, which they used to fetch water from Wesley. The sale of vegeta-

bles provided a significant contribution to their income, so they have the incentive as well as the means to water all year round. Knowledge concerning organic gardening techniques was more widespread in Gcinisa than in Gwabeni. This may have been because children are taught about gardening at the local high school. (Gwabeni only had a primary school.) Several gardeners made limited use of mulch and compost, and manure was used more often than in Gwabeni. Crops were not staggered to produce an ongoing supply, however, probably because of a lack of storage facilities.

Table 6.9 **Gardening Among Sampled Households of Gcinisa**

Variables	MHH	FHH	BOTH
Gardens owned	16 (59%)	9 (90%)	25 (68%)
Gardens in use	15 (56%)	9 (90%)	24 (65%)
Crops grown by at least two households:			
Maize	12	6	18
Pumpkin	12	5	17
Spinach/ <i>imifino</i>	9	7	16
Potatoes	13	2	15
Beans	7	6	13
Melons	8	5	13
Sweet-potatoes	7	2	9
Carrots	5	2	7
Peas	5	2	7
Beetroot	2	2	4
Cabbage	2	1	3
Onion	2	1	3
Number and percent of HHs selling produce	7 (26%)	3 (33%)	10 (27%)

Gardening in Gcinisa was not in theory a gendered occupation, but in practice it fell mainly to the women, (see Part four). This correlated with the fact that field cultivation and animal husbandry continued to occupy the men and boys. The principal and usually only contribution of the men to gardening was their responsibility for the construction and repair of the all-important, stock-proof garden fences.

Table 6.10 Aspirations, Attitudes and Problems Associated with Cultivation Among Sampled Households in Gcinisa

	MHH	FHH	BOTH
Would you like to have more land to cultivate?			
No. & percent positive:	16 (70%)	5 (50%)	17 (64%)
How do you feel about cultivation?			
Very positive	15 (55%)	2(20%)	17(46%)
Positive	6 (22%)	5 (50%)	11 (29%)
Indifferent	-	1 (10%)	1 (3%)
Negative	1 (4%)	2 (20%)	3 (8%)
Very negative	-	-	-
D.K.	5 (18%)	-	5 (13%)
What are the problems with cultivation in this area? [shared by at least two households]			
'No land'	8 (29%)	1 (10%)	9 (24%)
'Drought'	4 (15%)	3 (30%)	7 (19%)
'Insects'	2 (7%)	5 (50%)	7 (19%)
'Roaming stock'	3 (11%)	4 (40%)	7 (19%)
'No draught power'	4 (14%)	1 (10%)	5 (13%)
'No labour'	2 (7%)	1 (10%)	- 3 (8%)
'No organization'	3 (11%)	2 (20%)	3 (8%)
'No water'	1 (3%)	-	3 (8%)
'No capital'	2 (7%)		2 (5%)

The method of fencing differed between the old and new sections of the village, with hedges used to fence both yards and gardens in most of the households of New Gcinisa while wire fences enclosed both yards and gardens in Old Gcinisa. The gardens of the new section were more versatile, with a variety of vegetables crops and fruit. In the old section, the gardens were mainly planted with maize. It was as if the suspension of field cultivation, at least on the lands distant from the river, had led to a compensatory development in the gardens of Old Gcinisa, where field crops took over from the vegetables for which gardens were used when field cultivation was still practised. The households of New Gcinisa, never having been allocated fields, were unaffected by the decline of cultivation and simply continued to maximise variety in their gardens.

Only a quarter of the MHHs and one third of the FHHS in Gcinisa sold their produce. The minority that managed to produce a surplus over and above household needs sold it either to their neighbours or to one of the local stores. While cash incomes were larger in Gcinisa than Gwabeni, they were not so large that there was no incentive to supplement them with home-grown produce, and gardening on Gcinisa's flat, fertile soil under better climatic conditions and with dams nearby made market gardening more of a proposition than in dry, barren Gwabeni.

Under these ecological and socioeconomic conditions it is unsurprising that the surveyed households of Gcinisa demonstrated considerable enthusiasm for cultivation and those of New Gcinisa, in particular, wanted more land on which to practice it (see Table 6.10). As in Gwabeni, the MHHs were more interested in expanding their holdings than the FHHs. Poorer and with less available labour in the active adult years, let alone male labour,

the FHHs in both communities were more interested in defending what land they had from the ravages of drought, insects, roaming stock and pilferers than adding to their problems.

Conclusion

The great irony of the situation of agriculture in Gcinisa up to and during the fieldwork period was that in the areas in which the agricultural potential of the area was strongest, crop production and animal husbandry, in particular dairy and beef farming, production had declined the most. Of course, the unusually long and severe drought had had very deleterious effects on those two forms of agricultural activity. It was a major factor in the reduction of cattle herds and it had accelerated the decline of field cultivation, limiting it to the fields on the flood plain of the river. But the drought was not the only factor in the failure to realise Gcinisa's agricultural potential. This was also the case in Gwabeni, with its minimal agricultural potential, where the demise of field cultivation began long before the 1980s.

There were many socio-economic and political factors involved in the demise of agriculture in Gwabeni and Gcinisa, some of them far from obvious. In the case of Gwabeni, the tradition of opposition which kept the Betterment Planners at bay had its correlate in the neglect of the community by extension officers, to the detriment of the local agriculture, well into the 'independence period'. But the most crushing blow to agriculture in a community whose ecology was marginal for most kinds of agricultural activity was the annexation of the best land, first by the white farmers and next by the Game Reserve.

Gcinisa also suffered from administrative neglect, largely because of its long period of jurisdictional ambiguity. But it was

the rapid expansion of Gcinisa without any provision for the newcomers and their stock that fomented the local inequity and division between Old and New Gcinisa which have their correlate in the complete breakdown of the organisation of agrarian production which was the justification for Betterment Planning. Chaos and thieving have driven the few large stock-farmers to place their herds beyond the community, and encouraged gardening at the expense of field cultivation.

Migration and pensions, the important extraneous factors noted in chapter 4, have impacted particularly heavily on agriculture. Migration, both oscillating and permanent, has profoundly affected the composition of the local labour force and, indeed, the entire demography, skewing it in favour of the very old, the very young and the female, a pattern which was particularly marked in the smaller community of Gwabeni. Small wonder that field cultivation, which depended on the cooperation and labour of adult males, declined even before the drought of the 1980s finished it off in Gwabeni and accelerated its decline in Gcinisa; that gardening, a small-scale, low-technology, close-to-home activity that both genders and all ages can participate in, came to the fore; and that smaller stock types superceded cattle in importance. While these tendencies were apparent in all households in both communities over time, the MHHs were in a better position to offset them than the FHHS, in whom the transition from larger-scale agriculture to gardening and in many cases to an entirely non-agrarian existence was almost complete.

Pensions have provided an alternative to both agriculture and migrant remittances as a means of support for entire households in Gwabeni and Gcinisa. Not only were pensions a reliable form of income, but they also tended to increase faster than wages. A household with one pensioner could match the income of another

without a pensioner but two members in low-paid or impermanent employment; household with two or even three pensioners were among the most prosperous in the two communities. Under these conditions, there was little incentive for the more arduous or risky forms of agriculture after 1967, especially among those households which lacked the necessary leadership, expertise, labour and capital: the FHHs. For the first time in history, provided they had a member eligible for a pension, the rural dwellers of the former Ciskei had a choice. They could continue as before, retire from agriculture entirely, or focus all their productive energies on gardening.

Continuing as before was problematized by two further factors, one internal and the other external. The communalist ethic in Gwabeni made it very difficult for an individual or a minority to go its own way, as the case of Sthathu underlined. If the majority had given up ploughing, then everyone should follow suit, of risk having his fields grazed. Then, when the drought had set in, it became obvious to all (save for those with fields near the river in Gcinisa) that the era of field cultivation was over. That left stock farming with whatever animals had survived the drought or were best suited to the altered conditions and gardening, unless the intention was to give up farming and live entirely on one's own or one's relative's pension. It would appear from the survey that there was a heavy cultural and psycho-social investment in mixed farming in both communities, and hardly any households felt negatively about the old way of life. It was just that not all of them could marshal the energy, labour or capital to manage even a garden and a few small stock under the prevailing conditions. This was particularly the case in the less favoured circumstances of Gwabeni.

For those who had the resources as well as the inclination, gardening had many advantages. Gardening does not require cooperation beyond the household, being an extension of household activities more than a sector in its own right. This means that should innovations in the division of labour occur in the running of the homestead as a result of local demographic or global cultural change, these are readily extended to the garden. None of the gendered cultural baggage which attaches to the fields or the cattle kraal, obtains in the garden. It is therefore the ideal site on which to focus what remains of the productive energies of post-peasant communities such as Gwabeni and Gcinisa; communities so transformed through migration, pensions and a host of other factors that they are not so much communities as clusters of semi-autonomous households.

From the environmental point of view, the involution of agriculture in the two villages may be regarded as a positive development. While the fields lie fallow and the stock have not yet recovered from the drought, the natural environment in the vicinities of Gwabeni and Gcinisa and countless communities in a similar situation in the Eastern Province has a chance to recover and extend into the formerly arable areas for the first time in almost two centuries. If migration and urbanization continue to reduce the rural labour force and pensions keep pace with inflation, there will be little local capacity or inclination to resume field cultivation and stock farming on a large scale even if climatic conditions favour these activities. Cultivation and stock farming, however, are not the only activities through which the villagers of the former Ciskei interact with the natural environment: like countryfolk everywhere they also depend on the sections of their hinterland which are not under cultivation

for their sustenance. It is to that relationship which we now turn.

Endnotes

1. It should be noted that these types of crops all require a high and consistent supply of water in order to obtain good yields.
2. The total reflects the number of field owners (whether of one or two fields) rather than the number of fields owned. That only 11 of the 37 households in the sample had fields is not so much evidence of a decline in field ownership as a reflection of the exclusion of the New Gcinisa majority from field ownership.
3. Goat dung is used to treat children with measles and pig dung to treat people with *umgqwaliso*, a condition which makes the sufferer unlikeable when looked at.
4. The crops in Table 6.7 are listed in order of overall frequency, which does not correspond to their frequencies as between the MHHs and the FHHs. The difference suggests that the FHHs went for crops that produce high bulk, preferably over a long season (maize, potatoes, pumpkins), while the MHHs were more interested in variety and flavour, reflecting the socioeconomic distinction between the two.
5. The leaves of the *Mhlawuvuthwa* tree may be used to treat cythe (*ithumba*); those of the *Umthunzi we Chanti* tree are good for treating wounds, while its roots are given to people with blocked urinary tracks. Even the avocado pear, primarily valued for its fruit, has leaves with healing properties which are also used for treating wounds as well.

7. THE UNCULTIVATED SECTOR

Introduction

The most 'natural' section of the environment, that which lies beyond the settlement and the cultivated lands, was a source of much that was potentially useful to the households of Gwabeni and Gcinisa. Its utility depended on the season and the amount of rainfall, but there was always something to be had. The poorer the household, the more it was attracted to this source of 'free' bounty. Paraffin or bottled gas were obviously more convenient as fuel for cooking, heating and lighting, but if you could not afford these expensive commodities, then the only other option was fuel-wood. Hunting and gathering foodstuffs, like gardening, offset the cost of bought food and brought freshness and variety to a restricted diet. Collecting herbs for self-medication, similarly saved money which might otherwise be spent on traditional or Western medicines which were available commercially.

Poverty was not the only motivation for hunting and gathering and not necessarily the principal one. Cultural values related to the uncultivated environment, notably in the relationship between hunting and masculinity and beliefs in the ritual properties of certain kinds of wood and the healing properties of medicinal plants found there, drew people to *ihlathi* (the forest) as much as the hope of finding subsistence materials from beyond the market economy for which no payment was necessary. In practice, the two motivators reinforced each other. Provided the hunters and gathers were up to the rigours of the journey, going to the forest

was usually a pleasure, part of a way of life and a source of identity and an opportunity to exercise environmental knowledge accumulated over many generations.

In this chapter we compare the experiences of the men and women, boys and girls of the households of Gwabeni and Gcinisa in terms of their access to, dependence on and knowledge of the natural environment in each case. As before, we alternate between the two villages to bring out the similarities and contrasts.

Considerations of access and use

It will be recalled from chapter 3 that the people of Gwabeni and Gcinisa inhabited somewhat different ecologies in spite of being in the same district, and that the impact of humans and domestic animals had been much heavier in Gcinisa, where the former white farmers had cleared the natural bush for cultivation and grazing over generations. For their part, the people of Gwabeni were tantalized by the knowledge that there was thousands of hectares of bush on their doorstep in the form of the Double Drift Nature Reserve from which they were excluded.

The situation in Gwabeni

The main section of Gwabeni's uncultivated environment is the area to the North-West of the village which was formerly controlled by white farmers and subsequently became a Nature Reserve. The other boundaries of the village are shared with neighbouring locations and a farm. Understandably, Gwabeni, the longest-established community closest to the Nature Reserve claimed the area as its own even though four generations or more of its inhabitants have had very limited access to the Reserve's

vast potential for grazing, browsing, (wild vegetables), prickly-pear fruit, traditional medicinal herbs, fuel-wood and building materials.¹

During the time of the white farmers as well as following the declaration of the Reserve, people from Gwabeni were not welcome in the area without permission. Resource extraction was controlled by the farmers, and it came to be even more strictly controlled by the game rangers. Between the two hegemonies, though, there was a tantalizing interregnum of nine years' duration. Between 1981 and 1990, the Reserve relied on the former farm fences to keep their game in and the people of Gwabeni out. This meant in practice that there was virtually free access to the Reserves' resources.

Local people were prepared to gloss over the fact that they had never been consulted about the plan to establish a nature reserve on their doorstep and had never been informed of the purpose of making such a vast tract of land and all its natural resources over to the exclusive use of wild animals -- so long as they had access. But after the tall game fence was constructed in 1990 the old indignation about the loss of land that the inhabitants of Gwabeni considered their's was reignited. "It's our land. We want the land back again" was the oft-repeated response to the question *How do you feel about the Game Reserve?* in our survey (see Table 7.1 for the quantified responses).

The advent of the game fence has not entirely disbarred the people of Gwabeni from that major section of the uncultivated environment, but it has made access much more difficult. The management of the Nature Reserve predictably opposes unauthorised hunting or trapping in the reserve, and tries to discourage gathering because, they maintain, the gatherers would be

Table 7.1 Attitudes to the Nature Reserve among the Sampled Households of Gwabeni

HH Type	Very Negative	Negative	Indifferent	Positive
MHH	2 (13 %)	7 (44 %)	4 (25 %)	-
FHH	5 (24 %)	12 (57 %)	3 (14 %)	1 (5 %)
BOTH	7 (19 %)	19 (51 %)	7 (19 %)	1 (3 %)

vulnerable to dangerous animals, and they would prevent the natural regeneration of the bush.

In order to regulate the gatherers, a system was introduced whereby villagers were required to visit the Reserve manager's office, some 20 kilometres away (roundtrip), to get a signed letter of authorisation that allowed them to collect prickly-pear, wood or medicinal plants in designated areas. This mechanism effectively curtailed gathering activities without specifically forbidding them. The people of Gwabeni, particularly the women who were most involved in gathering, were incensed by this underhand measure. When told about the dissatisfaction of the Gwabeni people concerning the need for permission to enter the Game Reserve, the Reserve Manager expressed surprise and said that it was no longer necessary for people to come to his office, that the permits were available at the main gate to the Reserve, only one kilometre from the village. He attributed the fact that residents seemed unaware of this arrangement, to the lack of leadership in the community of Gwabeni.

Whatever the cause of the problem, the effect has been a tendency on the part of the people of Gwabeni either to avoid the Reserve or to enter it clandestinely. These, anyway, are the inferences of our survey. The very slight dependence on the

Game Reserve indicated in Table 7.2 and the low frequency of expeditions into the Reserve (Table 7.3) reflect the prevailing conditions in which hunting became poaching, and gathering without a permit was an act of trespass. Few would admit to us that they engaged in such illegal activities for fear of being reported.

Table 7.2 **Dependence on the Nature Reserve of the Sampled Households of Gwabeni**

HH Type	Hunting	Wood	Prickly Pears	Wild Veg.	Herbs
MHH	(1)	(1)	4 (25%)	2 (13%)	-
FHH	-	2 (10%)	(1)	4 (19%)	(1)
BOTH	(1)	3 (8%)	5 (14%)	5 (14%)	(1)

The Nature Reserve may be the largest area of unspoilt natural bush in the vicinity of Gwabeni but it is not the only section of the immediate natural environment that can be classified uncultivated. There are diminishing areas of forest and bush in the steep valleys around Gwabeni. Furthermore, game animals and predators venture into the cultivated/domesticated domain and, especially after the rains, wild vegetables (*imifino*) and herbs are to be found in these areas. The people of Gwabeni do not ignore the natural resources 'on their doorstep', but they recognise that these are scarce and have been diminishing over the years; they look to their ancestral hinterland, first annexed by the white farmers for grazing (which use the black stock-farmers of Gwabeni could at least understand) and then by 'their' Government for a Game Reserve (a use they cannot understand), as their hunting and gathering domain.

Table 7.3 Frequency of visits to the Nature Reserve for Subsistence Purposes by Members of the Sampled Households of Gwabeni

HH Type	Once a day	Twice a week	Once a week	Twice a month	Once a month	Now and then
MHH	(1)	-	(1)	(1)	-	3 (19%)
FHH	-	(1)	(1)	(1)	(1)	(1)
BOTH	(1)	(1)	2 (5%)	2 (5%)	(1)	4 (11%)

The situation in Gcinisa

Gcinisa had no equivalent of the Game Reserve in its vicinity and, as a Betterment community, comprised of settlers from another district and landless farm labourers from the same general area, it had no collective claim to ancestral land. Without a strong identification with any particular tribal authority, the people of Gcinisa could not identify with the land claims of a chief, in the way that the people of Gwabeni participate in those of Chief Thyefu. Gcinisa's uncultivated hinterland consists of the following areas:

- the commonage, principally a grazing area;
- the neighbouring farms, some of which are vacant and overgrown;
- the coast, consisting of grassland, dunes and deserted beach immediately to the south of Gcinisa.

Although the deserted farms were not commonage, they were treated as such for the purposes of extracting natural resources

and so in the following tabulations from the household survey, they have not been differentiated. The coast was treated as a separate category because it was such a different environment. As it turned out, the coast was only slightly utilized for its natural resources (Table 7.4).

Table 7.4 **Dependence on the Coast of the Sampled Households of Gcinisa**

HH Type	Grazing	Imifino	Herbs
MHH	3 (11%)	2 (7%)	(1)
FHH	10 (100%)	3 (30%)	(1)
BOTH	13 (35%)	5 (14%)	2

There was, however, an exception: the FHHs, being at a disadvantage *vis a vis* the MHHs in the competition for the grazing on the nearby commonage, used the coastal area for emergency grazing. Evidently the winter months of 1994, following the copious autumn rains, did not represent an emergency situation, judging from the frequency with which the coastal area was visited by members of the FHHs (Table 7.5).

Table 7.5 **Frequency of visits to Coast for Subsistence Purposes by Members of Sampled Households of Gcinisa**

HH Type	Once a day	Twice a week	Occasionally
MHH	3 (11%)	(1)	4 (15%)
FHH	-	-	(1)
BOTH	3 (8%)	(1)	5 (14%)

If the coast was little used for grazing and gathering purposes and was of little use for hunting, what about fishing and the collection of oysters, mussels, etc.? Although these resources abound along the coastline of the Eastern Province, the post-peasants of Gcinisa did not appear to have much use for them. It was said that a group of migrants would go fishing during their December holidays, for mainly recreational purposes, but that was all.

The commonage and the vacant farms were the main focus of attention, as well as being areas of grazing and browsing (see Table 7.6).

The MHHs were chiefly interested in the area as a source of grazing and fuel-wood, though more than a quarter of the households gathered *imifino* and herbs there too. The FHHs used the area for the same purposes, but with correspondingly less emphasis on grazing and more on *imifino*. Only one individual (from a MHH) admitted to hunting, and we did not see any hunters or dogs while resident there.

Table 7.6 Dependence on the Commonage of the Sampled Households of Gcinisa

HH Type	Grazing	Imifino	Herbs	Wood	Hunt
MHH	13 (48%)	8 (30%)	7 (26%)	17 (63%)	(1)
FHH	3 (30%)	5 (50%)	2 (20%)	5 (50%)	-
BOTH	16 (43%)	13 (35%)	9 (24%)	22 (59%)	(1)

The commonage and the farms were visited frequently for these purposes (see Table 7.7)

Table 7.7 Frequency of visits to Commonage for Subsistence Purposes by Members of the Sampled Households of Gcinisa

HH Type	1-2 Times a day	1-2 Times a week	Once a month	Occasionally
MHH	21 (78%)	4 (19%)	6 (29%)	7 (33%)
FHH	4 (40%)	3 (30%)	-	2 (20%)
BOTH	17 (68%)	7 (19%)	6 (16%)	9 (24%)

The MHHs were particularly involved with the commonage, largely because of the needs of their stock. But even if herding was the main purpose of the visit, any *imifino* or dry timber found along the way would not be ignored. Fewer of the FHHs being tied to herding stock on the commonage, proportionately more members would make a weekly or twice-weekly trip to the commonage or farms in search of wood, *imifino* and herbs.

Discussion

Gcinisa had a very different uncultivated environment to that of Gwabeni. From the point of view of the community, it was in some ways less restricted, on others more restricted, in terms of access and resources, than that of Gwabeni. Whereas Gwabeni was adjacent to a vast area of forest and bush full of game, fuel-wood, prickly-pears, *imifino* and herbs which the people regarded as theirs, they were restricted from entering it since it had become a Nature Reserve. While the people of Gcinisa had, in practice, unrestricted access to a commonage, vacant farms and a vast coastline, the wooded or bushy areas were scarce,

fuel-wood was hard to find, and the roaming animals usually found the *imifino* first. Furthermore, the marine resources of the coast were of no interest to the formerly landlocked folk of Gcinisa.

In the following the two communities are compared more closely, where possible, in a topic by topic survey of the meaning of their relationship with the uncultivated environment in their lives, particularly from the point of view of gender relations at the household level.

Hunting and masculine identity

Hunting is the only activity which did not have a strong correlate in both communities. The 'tamer' area in which Gcinisa was established, long cleared of natural bush and hunted out by the previous white farmers, had scant potential for hunting, and what little it had would have been exhausted during the early years of the settlement. It was thus not so much disinterest as lack of game which had led to the demise of hunting in Gcinisa. Curiously, its marine counterpart, fishing, which is so popularly among other coastal communities in this region, was not widely regarded as a substitute pastime by the men. Nor was the feminine counterpart, the gathering of shellfish, which is an important source of protein for coastal communities in the former Transkei.

In Gwabeni, by contrast, hunting, however, is an important though in many ways frustrating activity. The lack of a comparison in Gcinisa should not prevent us from examining it.

It has been established that most of the adult men in Gwabeni during the research period, were either retired and are receiving a social pension or are unemployed with no prospect of full-time local employment in the foreseeable future. Given the decline

almost to extinction of the local agrarian economy and the relatively minor role adult men had in household tasks (cf Chapter 5) these pensioners and unemployed had a great deal of time on their hands.

A few of the older men were enthusiastic gardeners, as noted in the previous chapter. Some of the middle-aged men, neither formally employed nor eligible for pensions hired their labour out to people who need building repairs or alterations done to their houses. They were also employed by those who needed their cattle kraals repaired or wood collected for the purposes of performing a ritual. Occasionally, wealthier men from other villages employed them to build a house or dig new pit-latrines. But there were still long periods when they are without work.

The younger men were less inclined than any of the other age-categories to engage in physical work and appeared to be disinterested in the local economy such as it was. They were sometimes called upon to help with the collection of wood for a ritual, because one of them owned a light delivery vehicle. But their main 'work' during the research period was in the context of village and sub-regional politics and involved representing Gwabeni at meetings in Peddie town and organising weekly meetings in the village. These meetings (which at that time were concerned with voter education in the run up to South Africa's first democratic elections) took up a great deal of everyone's time, including the young men's, but they were a temporary phenomenon: the rest of the time the young men were as unoccupied as the others.

Many of the men of all ages pass the time socialising and drinking (if they are in funds or in credit to someone who has money) on the verandah of the Breakfast Vlei Hotel. This behaviour was resented by the women of the village, who

regarded it as a squandering of much-needed household resources. "The men are drinking our money at Jimmy's [hotel]", was the comment of one bitter woman. Yet convivial irresponsibility was not the sole motive for convening at the hotel on the part of the men. Take the case of Matthew (74):

I live alone now that my wife is dead and all six of my children have left Gwabeni, some for work others to be with their husbands. There is only my helper, Faniswa, at home. I understand that they had to leave: there is no work here. At least they come back during holidays, but I miss them and feel very lonely. That is why I go to Breakfast Vlei three times a week -- just to talk to other men.

In a community of few dignified roles for resident men, hunting with the help of dogs around the perimeter of the village was a popular pastime which did not have to involve the Game Reserve, but occasionally did. Their main quarry was the jackals which took their lambs and kid-goats, but they also hunted small buck such as duiker and steenbok, as well as warthog and hares. Occasionally, they brought down a kudu or other large buck. In addition to active hunting with their dogs, they also set snares. Formally, hunting is illegal without licences but the local hunters regard it as a traditional pastime which should not require licensing.²

In earlier times, wildlife was plentiful in this area. Only the kudu avoided the village, preferring to stay on the farms (where they were duly hunted by Gwabeni men). Now it has become scarce. But ever since the Reserve Rangers began shooting the local dogs on sight, there has been a drastic increase in the number of jackal in the forest areas around the village, so much

so that jackal can be heard howling at night. One man said that he had seen a jackal chasing some sheep on the slope below his homestead in broad daylight, something that was unheard of before.

The following cases provide an insight into the conflict between the hunters and the rangers:

Mlungisi was caught hunting in the reserve at night. His dogs were shot and he was arrested. He was held in custody for three days after which the case was dropped because of insufficient evidence. Apparently he could not be conclusively linked to any particular crime. In spite of his presumed innocence, he lost trained hunting dogs which would be hard to replace.

Three young boys from Gwabeni were caught by the Reserve Manager on the reserve, who suspected that they had been hunting. They were taken to the police station in Peddie and given a light caning after which the matter was dropped. As two of the boys were Manonas, one of the senior members of this agnatic cluster had to go down to the police station and fetch them. He assured the authorities that there would be no repetition of this behaviour in the future, but there was much resentment in Gwabeni about the caning meted out to the boys without a case being brought.

Behind the community's evident disgust with what they saw as high-handedness on the part of the Nature Reserve staff was the problem of the dubious legitimacy of the Reserve's tenure, in the eyes of the villagers: they continued to believe that the land was theirs by right. Fortunately, the poaching which occurred in the

Double Drift Reserve was not regarded as a serious problem by the management of Countour, the company that manages the reserve. It is regarded almost as normal. Reserve staff prosecute poachers only if they are caught 'red-handed', otherwise they try to educate the neighbouring villagers by means of field discussions involving community leaders. By these means they hope to reduce an annual security budget of R247 000,00 per annum (Peckham 1994).

The older men of the village were still much involved in hunting, though the young men have little to do with it. Nala (40) was considered exceptional, a 'younger' man who was exceptionally knowledgeable about wild animals and how to hunt them. These men could recognise each other's dogs and much of their conversation when together at the hotel concerned the pedigree and prowess of particular dogs.³ Andrew Ainslie collected the following example:

The best dog I ever had was French. My father mated a bitch from Committee's Drift [about 18 kilometres away] with Jwarha's dog from Bhubho [a village section of Gwabeni]. The result was French. He was a big dog; he once caught and killed a lynx near my place. He also killed many small buck, but never hares, for some reason. When he started a hare he would just stand and stare at it. The trouble with French was that if you didn't take him hunting regularly he would go after sheep and goats. When my father had had enough of this, he ordered me to beat the dog to death. I found it very difficult to obey this order, but eventually I realized I had no choice. One day, I led French off into the bush and beat him; it took him a few days to die. When my brother who had been working in Port Elizabeth re-

turned home and heard that I had killed French he was very upset. He had liked French very much and had always brought food home for him.

The anecdote reflects not only the attachment to the hunting dogs, but also the interest in breeding, and the tragic consequences of 'not getting it right', of not achieving the fine balance between a good hunting instincts on the one side, and trustworthiness among the stock, on the other.

A breeder in Peddie was particularly esteemed as a source of fine hunting dogs. They were said to be 'English', specially bred for hunting purposes. Several of the dogs of Gwabeni, including Nala's came from Peddie. Ainslie was in a position to witness them in action when he accompanied Nala on a hunt:

Nala and his cousin, Thabo, brought along eight dogs between them. They had collected the other dogs from relatives' houses around the village early that morning. The dogs were very active and on several occasions, went crashing through the dense bush chasing some wild animal. When this happened, we would stop and listen to the dogs running down distant valleys in pursuit. Only once all the dogs had returned, particularly the more experienced dogs, did we proceed. At one stage, they cornered a leguaan [monitor lizard], which was more than able to defend itself. Nala had his hands full trying to get the dogs away from the leguaan. At the end of the hunt, one dog was not to be found and both Nala and Thabo expressed concern. They debated going back to look for the dog, but since it was not the young dog which was on its first hunt that was missing, they decided that the dog would find its way home.

The role of dogs in the village, particularly in the way dogs are used for hunting, an exclusively male activity, reveals an interesting side to the nature of the status of men in relation to women in the village. Xhosa-speaking society has traditionally elevated the status of men above that of women in many ways. But the years of apartheid, discrimination, migrancy, unemployment and poverty have radically reduced the ability of men to adequately provide for their families and indeed to maintain the cohesion of their family units. This has had a profound effect on their self-esteem and status as men, as husbands, as fathers. The men of Gwabeni who tend to be either past their prime or retired, conscious that their generation no longer enjoys the full respect accorded the aged in previous generations, or are young to middle-aged but have failed to secure employment in the towns or cities, find themselves marginalised from the cash-earning mainstream of the men of their village who are working or living elsewhere.

In the years when ploughing with draught oxen was still practised, men enjoyed a higher status than now. They could contribute to the food intake of their families and in a good year, make some money from the sale of surplus crops and the wool-clip. They were not reliant on state pensions for survival as now. Since women were forbidden to work with the draught animals, the cultivation and harvest of crops was the domain of men and involved a co-operative effort by them. A good yield would obviously enhance their status in their households and in the village.

With the decline of agriculture through erosion, drought, disputes over land and migrancy, the status of men declined, and with it their self-esteem. The only way of restoring it was to gain employment elsewhere and return to the village annually with

gifts and material goods for their households and thereby win respect and admiration in the village. Those men who remained in the village had no such possibilities, and incurred a low social status as a consequence. Their only avenue to status and improved self-esteem is through buying drinks at the hotel for the other men after pension days or when in receipt of the occasional windfall and through success in such a traditionally (and universally) masculine activity as hunting.

As a pastime which excludes women, hunting can contribute to the enhancing of the status of men. All the talk about good hunting dogs, who has killed what animal where, recently and in the past, and the hunt itself, which often entails more than one man and several dogs, gives the men of Gwabeni an opportunity to engage in activities which are psychologically and socially rewarding even if the hunt does not yield much in the way of meat. Where it involves the inedible jackal it is at least securing mutton and goat for human consumption.

Early in the last century the missionary, John Brownlee, described the Xhosa as 'passionately fond' of hunting 'as an active and animating amusement' (Wilson and Thompson 1969, 110). But for people who did not slaughter their cattle outside of rituals, it was also an important source of protein. Now they, in common with most Africans have fallen victim to what John McKenzie (1991) regards as a long-standing and enduring conspiracy on the part of European hunters and nature conservationists to reclassify African hunters as poachers and work towards their extinction.

We have noted in the case of Gwabeni what an important diversion and source of social solidarity hunting and associated activities such as dog breeding are for the men, and the way hunting and masculine identity reinforce each other in a commu-

nity which has very little else to offer its male residents by way of employment or pastime. We have also noted that almost no hunting takes place in Gcinisa. Does that mean that the superannuated or unemployed men of Gcinisa have unresolved problems of low status and low self-esteem? Or do they have other outlets? Although it may seem far-fetched, it is just possible that the almost epidemic rate of venereal disease in Gcinisa, the high male mortality rate and the frequent cases of assault which are brought to the clinic reflect hunting-like pastimes which have become directed towards fellow humans because they cannot be directed against non-existent game.

Gathering and environmental knowledge

The fact that hunting is an entirely masculine activity should not be taken to imply, in the contexts of Gwabeni and Gcinisa, that gathering is a feminine monopoly. To be sure, the collection of fuel-wood, thatching materials, wild vegetables, herbs and fruit are tasks that are traditionally associated with women in the former Ciskei, but contemporary society is more flexible: apart from forces of modernisation, the demographic distortions of communities like Gwabeni and Gcinisa have made people concentrate more on who is willing and able rather than considerations of gender dogmatism.

The selective removal of woody species which are good for fuel and fencing is common throughout the area (cf. Palmer and Avis 1994). Unfortunately, these species are often the same ones which provide valuable forage for livestock. There is thus a conflict between the human need for fencing and fuel and the availability of vegetation for browsers, such as goats. The result, as noted in chapter 2 has been rapid deforestation of every part

of the former Ciskei. The relative immunity of the Nature Reserve from this process even when it was a white farm is obviously a powerful motivator of the residents' claim on the territory.

As mentioned above, the deforestation of the land around Gcinisa occurred long before the community was established, and while plenty of arable and grazing land was made available as a result, wood for fuel and other purposes is extremely scarce.

(i) The situation in Gwabeni

Table 7.8 shows some of the species of wood most commonly collected by the people of Gwabeni and their main uses. Women in Gwabeni are not only able to correctly distinguish the different species (even, in one case, when a certain species occurred in two distinct morphs), but have a detailed knowledge of their properties as fuel. This means, for example, that in constructing a fire they know how to mix those species which burn quickly and hotly with those that burn more slowly and at lower temperature to produce fire of an appropriate temperature.

Fuelwood is collected almost exclusively in the closest suitable location and transported mainly on the heads of women and girls. Collecting wood is considered a difficult task, not because of the scarcity of this resource, but rather because it is heavy to carry and one has to walk a considerable distance to the forests. Although the collection of fuel-wood is regarded as 'women's work', widowed men who are mostly elderly also collect firewood, so long as they have wheelbarrows to collect it with: they would not carry it on their heads after the manner of women.

Table 7.8 Types of Wood Commonly Used in Gwabeni

Species	Xhosa Name	Main Use
<i>Acacia karroo</i>	Umnqa	fuel (in high demand due to slow burning producing hot coals) used in rituals heating
<i>Ptaeroxylon obliquum</i>	umthathi	fuel, poles, fencing
<i>Scutia myrtina</i>	isiphingo	fuel
<i>Ozoroa mucronata</i>	umphembe	fuel
<i>Euclea unulata</i>		fuel
<i>Pappea capensis</i>	ilitye	leaves fed to lambs kraal fences
<i>Euphorbia tetragona</i>	umhlonto	occasionally used for fast, hot fire
<i>Pteronia incanaa</i> <i>Chrysocama ciliata</i>	bhosisi	used as kindling when dry
Not available	umgquzuguquzu	poles ,fencing, samp grinding
Not available	intsinde	kraal fences
Not available	umchani	kraal fences, house frame
<i>Pinus sp. (bought)</i>	None	house frame

Most of the Valley Bushveld trees are seen as suitable for firewood as long as they are dry. People generally have to go to different places to get *umnqa* as compared with the other trees. *Umnqa* occurs mostly on savanna lands which tend to occur only in and near to the upper part of the settlement, while the other trees occur in Valley Bushveld vegetation in the valleys (fig. 3.6). Kindling wood is usually collected separately from larger pieces of wood because it can be found closer to the homestead.

In general, only dry wood seems to be collected for fuel - partly because this is known to be most suitable for burning, and partly because it is understood that the supply of growing wood needs to be protected. Wood is normally picked up by hand, although some women carry an axe which allows them to cut larger pieces of wood from fallen trees or branches. In this area there was no obvious sign of the progressive removal of trees that Palmer and Avis (1994) described for the area as a whole. Judging by the abundance of dead wood on the ground in the wood collecting areas in the Valley Bushveld which Karen Higginbottom visited, the present rate of fuelwood collection in those areas is more or less sustainable; however, depletion of trees at a non-sustainable rate may be occurring in some localised areas.

When people first moved to Gwabeni the area occupied by Valley Bushveld vegetation was much more extensive than at present (Palmer 1994, confirmed by elderly residents). Extensive clearing for cultivation combined with use of branches for fencing and fuel led to the almost complete removal of trees from the residential areas. One elderly man who claimed that the removal of trees has been the major cause of erosion blamed 'stupid energetic women' for chopping down too many trees on the ridges in earlier days. *Umnga* was common on the slopes of the ridges until quite recently, but it has now disappeared from all areas close to the settlement. Less desirable species of fuelwood have had to be used in its place.

Even if the present use of fuelwood is sustainable, the situation is far from satisfactory as far as the women who collect it are concerned. A journey to collect one headload of wood takes between one and two hours, and is strenuous work - particularly since the return trip carrying the wood generally involves walking

up steep slopes and over rough terrain. The women involved in these activities see this work as a tiresome chore, particularly when they compare it to the prospect of having electricity. There is an alternative, firewood is available commercially at the rate of R40 a bakkie⁴-load; mostly *umnga*, which is collected from the Outspan or the Nature Reserve but it is beyond the means of most of those who use fuel-wood on a daily basis.

As Table 7.8 indicates, and as we already know from the discussion of the problems of fencing the fields in the previous chapter, wood was used for purposes other than fuel. Fencing (now restricted to kraals) required wood with plenty of small twigs to produce an impenetrable barrier. Such branches were subject to rapid deterioration, so fences needed to be replenished with a new layer every six months or so. In the case of wire fences, poles were needed for posts. Longer poles formed the basis of 'wattle-and-daub' structures for dwelling huts and storage structures. But this mode of construction was tending to be replaced by mud bricks and cement blocks, so it was no longer a major drain on the environment.

(ii) The situation in Gcinisa

Similar species of tree are used for fuelwood in Gcinisa as in Gwabeni, and women seem to have an equally detailed knowledge of the properties of different species (see Table 7.8). There being such a scarcity of wood resources near Gcinisa, those households which could not afford to buy wood which is brought in from further afield faced long walks to the limits of the commonage and into the vacant farms in search of fuel. At current rates of usage the supply of fuel-wood in the area will be

depleted in the near future. There is, therefore, an urgent need for an alternative source of affordable fuel in Gcinisa.

To the extent that gatherers from Gcinisa have a choice, the preferred source of fuelwood was thorn trees, as in Gwabeni. Although large old trees are preferred, very few of these still existed so generally people had to chop down young live trees. Other trees commonly used for fuel included *Scutia myrtina* and *Maytenus heterophylla* (see Table 7.8). People sometimes resorted to using tree species which were known to provide poor quality fuel, such as a species known locally as *inwele*, out of desperation.

Common sites where firewood was collected were the dense woody patch in the north east, scattered patches throughout the northern areas and along the river. Most of the trees along the river are seen as unsuitable for firewood, however, and so this vegetation has been preserved as a consequence.

Kraals were constructed from either thorn trees (*umnga*) or *intsinde*, though the shortage of wood has meant that many were constructed of barbed wire. As in Gwabeni, *intsinde* was valued because it lasts a long time and has many twigs which inhibit access by livestock.

The only tree planting that has occurred in Gcinisa is of gum trees (*Eucalyptus sp.*) in the settlement area. These were planted in the 1980s, mostly for the purpose of shade. Gums are notoriously 'thirsty' but there are probably too few of them to have much impact on the water table. Fuel-species in wood lots would be far more relevant to the needs of the poorer households of Gcinisa.

(iii) Extraction and consumption

The household survey yielded some interesting insights into the amount of effort put into the extraction of fuel-wood in the two communities on the part of men and women, though the claims made for the amount fuel-wood extracted are almost certainly exaggerated.

Table 7.9 Active Involvement in Fuel-Wood Extraction, by Sampled Households and Gender

Village	HH Type	No. HHS Involved	Males	Females	Both
Gwabeni	MHH	10 (63%)	6	9	15
	FHH	16 (76%)	11	22	33
	Both	26 (70%)	17	31	48
Gcinisa	MHH	6 (22%)	2	8	10
	FHH	5 (50%)	3	5	8
	Both	11 (30%)	5	13	18

Table 7.10 Quantity of Fuel-Wood Extracted per Week, in Headloads⁵, by Gender and Surveyed Households

Village	HH Type	Extracted by Males	Extracted by Females	Extracted by Both
Gwabeni	MHH	8	59	67
	FHH	39	94	133
	Both	47	153	200
Gcinisa	MHH	4	19	23
	FHH	3	22	25
	Both	7	41	48

Tables 7.9 and 7.10 do not describe the entire role of males in the supply of wood. In addition to the wood which was collected in the vicinity and transported by human-power to the homesteads, mainly by women, older men, girls and boys, there was wood collection on a less-individualised, more mechanised basis involving wheeled transport and adult men. In Gwabeni it consisted of the men of two households employing donkey-carts to collect a month's supply of wood. But in Gcinisa, it was a larger-scale, commercial operation on which most of the households in this wood-scarce community relied. Table 7.7 conveys the scale of this activity in Gcinisa.

Table 7.11 **Dependence of Surveyed Households on Commercial Sources of Fuel-Wood**

Village	HH Type	Monthly Donkeycart load	Monthly Carload	Annual Truckload
Gwabeni	MHH	2	-	-
	FHH	-	-	-
	Both	2	-	-
Gcinisa	MHH	3	3	4
	FHH	2	-	2
	Both	5	3	6

It takes a fair amount of capital to buy an annual truckload of wood, and access to a motor vehicle or at least a donkey-cart for the other mechanised methods. Considering the socioeconomic status of most households in the two communities it is not surprising that relatively few obtain their fuel-wood in this way. It is only the scarcity of local fuel-wood combined with a larger

affluent segment which makes this method so much more prevalent in Gcinisa than in Gwabeni.

Table 7.12 Fuel Use in the Sampled Households I: Gathered wood

Village	HH Type	Cooking	Heating	Lighting
Gwabeni	MHH	8 (50%)	5 (31%)	(1)
	FHH	18 (86%)	16 (76%)	(1)
	Both	26 (70%)	21 (57%)	2 (5%)
Gcinisa	MHH	12 (44%)	9 (33%)	(1)
	FHH	5 (50%)	4 (40%)	-
	Both	17 (46%)	13 (35%)	(1)

As before, when considering access and use in more general terms, it is necessary and instructive to attempt to quantify the use of wood for fuel and other purposes in Gwabeni and Gcinisa. The following tables compare the use of both gathered and bought wood and its great substitute in such villages, paraffin between the two communities.

Only two households in Gwabeni and one in Gcinisa were so poor that they could not even afford paraffin or a lamp for lighting and had to make do with fire-light. But between a third and a half of the MHHs in Gwabeni depended on gathered wood for cooking and keeping warm in winter, and more than three quarters of the FHHs relied on it for such purposes. Even in Gcinisa, where gathered wood was so much scarcer, roughly the same proportion of MHHs as in Gwabeni but a significantly lesser proportion of FHHs made use of it for cooking and heating.

The scarcity of firewood in Gcinisa relative to Gwabeni's more advantageous position is best demonstrated in Table 7.13. In Gwabeni only one household bought wood for cooking and heating. In Gcinisa almost half of the MHHs bought wood for heating, and more than a quarter for heating; while the FHHs were even heavier consumers from this source. No one in either community bought wood for lighting!

**Table 7.13 Fuel use in the Sampled Households II:
Bought wood**

Village	HH Type	Cooking	Heating
Gwabeni	MHH	-	-
	FHH	(1)	(1)
	Both	(1)	(1)
Gcinisa	MHH	13 (48%)	7 (26%)
	FHH	8 (80%)	4 (40%)
	Both	21 (57%)	12 (33%)

If a household could afford to buy wood at R40 a bakkie-load, then it could also afford paraffin at R2.50 a 750cc bottle. The uses could be split: paraffin for indoor cooking and lighting, and wood for outdoor cooking and heating. Whichever way they used it, paraffin was consumed quite heavily in both communities (Table 7.14).

Paraffin for heating appears to have been regarded as a reckless extravagance by most of the MHHs and all but one of the FHHs in Gwabeni. The households took a similar view in Gcinisa, though with less disparity between the MHHs and the FHHs. Almost every homestead in Gcinisa used paraffin for lighting,

compared with only 57% in Gwabeni. In the matter of cooking there was less disparity, partly because fewer of the households of Gcinisa used paraffin for cooking than lighting, partly because such a large proportion of FHHs in Gwabeni cooked with paraffin. Considering that the FHHs of Gwabeni have emerged as by far the poorest category in either village, there had to be good reasons for such apparent extravagance. What the table does not reveal is how much paraffin they used. The FHHs were observed to use it very sparingly. That they used it at all had a lot to do with the missing generation in these households, which placed limits on the capacity of the members to gather wood in great quantities.

Table 7.14 Fuel Use in the Sampled Households III: Paraffin

Village	HH Type	Cooking	Heating	Lighting
Gwabeni	MHH	8 (50%)	5 (31%)	6 (38%)
	FHH	16 (76%)	(1)	15 (71%)
	Both	24 (65%)	6 (16%)	21 (57%)
Gcinisa	MHH	19 (70%)	7 (26%)	26 (96%)
	FHH	10 (100%)	2 (20%)	10 (100%)
	Both	29 (78%)	9 (24%)	36 (97%)

(iv) Perceptions of scarcity

The issue of scarcity was addressed in the survey by means of a simple question (*Is wood becoming scarce around here?*) and a follow-up (*If yes, what is your household doing about it?*). The results were unsatisfactory and are not worth tabulating. While

the response rate to the simple question was reasonable -- eight households in Gwabeni thought wood was becoming scarce, 15 thought it was not, 14 did not know -- only a handful were prepared to say what they were doing about it (they were divided between collecting further afield or buying paraffin). In Gcinisa there was more interest with 31 households answering in the affirmative, none against, and only six who were not prepared to commit themselves. Again, relatively few addressed the follow-on question, and they were divided between searching further afield, using paraffin or gas, or buying wood. Three MHHs did, however, take a conservationist line: they had planted trees and recommended that others did as well. Unless the Reconstruction and Development Programme dramatically improves the income levels in Gcinisa such that paraffin and gas become universally affordable, wood-lots of particularly fast-growing fuel-woods would appear to provide the only solution to the local scarcity of firewood.

(v) Discussion

Gwabeni and Gcinisa were situated very differently in respect of fuel-wood. The FHH's of Gwabeni were particularly dependent on fuel from this source. Fortunately it was still fairly abundant in the environs, though easier access to the timber in the Nature Reserve would benefit this group. The main restraint was household labour, the wood-collectors tending to tire easily, being recruited from the elderly and the juveniles (except for those adult males who collected with the help of donkey-carts).

In Gcinisa the scarcity of fuel-wood, forcing the poorer households to buy more wood and paraffin than they could afford, was a problem which could not be offset by the greater

number of older children and adults in the households. Indeed, it had led some of the poorer households to collect cow dung for use as fuel as a last resort.⁶ The obvious solution to Gcinisa's problems is woodlot, but it is not one that occurred to many of the local people, and like any other joint venture in Gcinisa, it would be bedeviled by the absence of a spirit of cooperation and community sanctions.

Saplings, reeds and grasses

The environment provides, besides wood for fuel and mature trees whose branches are used in the construction of fences and kraals, a variety of slender and pliable materials that are used variously in house construction and handicrafts. Construction in Gwabeni made very limited use of vegetation from the environment. Formerly, pliable saplings were the basis of 'wattle and daub' construction (the other being mud) and roofs were made of thatching grass. Today, other materials are used, but corrugated zinc roofs may be lined with thatching grass to provide some insulation against extremes of heat and cold. Grass for this purpose was collected from the savanna areas on the plateau; various species of tall, thick-stemmed grasses were used. This application did not place the environment at risk because relatively small quantities were used at any one time and the roof-lining only had to be replaced occasionally. This was the only use of reeds or grass that we heard about in Gwabeni.

Various plants, particularly those found along the river, were used in handicrafts. These products were for domestic consumption and were not sold beyond the community. The palm *Phoenix reclinata* (*isundu*) was used for making brooms, while certain reeds -- *Cyperus textilis* (*umzi*) were used to make mats. The

woman who provided this information maintained that there had been no decrease in the availability of these plants over time. The common local grass, *Hyparrhenia hirta*, has been used for thatching of a small proportion of dwellings (plate 14). This is supplemented by the bulrush, *Typha capensis* (*ingcongolo*). Together these provide a waterproof roof, as long as it is occasionally repaired.

The modernisation of construction and the prestige conferred by manufactured items have led to a decline in the dependence on the natural environment for these formerly invaluable natural resources. Table 7.14 compares the use made of some of these materials between Gwabeni and Gcinisa.

Table 7.15 Use of Saplings and Grasses in the Sampled Households

Village	HH Type	Saplings	Grasses/Reeds
Gwabeni	MHH	(1)	2 (13%)
	FHH	2 (10%)	6 (29%)
	Both	3 (8%)	8 (22%)
Gcinisa	MHH	2 (7%)	4 (15%)
	FHH	(1)	2 (10%)
	Both	3 (8%)	6 (16%)

It is evident that the households of Gwabeni and Gcinisa make only slight use of these materials, though the insulation properties of the reeds seem to appeal quite strongly to the FHHs of Gwabeni. In terms of gender, the use of these materials was traditionally the preserve of women and largely remains so. It is

too marginal and sporadic an activity to be sure but, as such, it is also of little importance.

Wild vegetables and herbs

Imifino are wild vegetables which are gathered or may be transplanted into gardens. These plants are frequently highly nutritious, and are an important and free supplement to the daily diet (Mbangata *et al.* 1982). The national Food Research Institute in Pretoria has demonstrated that *imifino* plants contain carbohydrates, proteins, vitamins and minerals which are essential to the health of the consumer. The enthusiasm for *imifino* in both Gwabeni and Gcinisa may be a factor in the general health of both populations in spite of the poverty and basic living conditions.

If the role of *imifino* in health is mainly preventative, the role of the many varieties of herbs to be found in the uncultivated environment is more curative. In the following the use and understanding of both kinds of wild vegetation is compared between the two communities. The majority of the households of Gwabeni contain members who are knowledgeable about the uses of a wide variety of plants which grow wild in the area. Some examples of *imifino* plants are given in Table 7.16.

Besides *imifino*, herbs which were used solely for medicinal purposes were also gathered. Although the community supported the sub-clinic, attending even for minor ailments such as stomach aches, fever, cough, etc., members also used herbal remedies for these and other ailments -- a form of double-indemnity.

Table 7.17 lists herbs which were commonly used for medicinal purposes in Gwabeni. The list was obtained from Griffiths, one of the two practising herbalists in Gwabeni. (The other, Tholsile, refused to be interviewed). Gleaned from a single source the list is unlikely to be exhaustive, but it can be said that the natural environment of Gwabeni yields at least 13 varieties of valuable medicinal herbs. Where only one of the plants, the Skorpaati, is a protected plant, and all the rest are common, herb-collecting would appear to be a perfectly sustainable activity around Gwabeni.

Table 7.16 **Examples of *Imifino* Plants Commonly Used in Gwabeni**

Species	Xhosa name	Use
<i>Solanum nigrum</i> (Black Nightshade)	Umsobo	Emergency food plant; high in carbohydrate and calcium
<i>Marrubium vulgare</i> (Hoarhound)	Imbuya	Bitter-tasting salad plant; also used to treat colds, coughs and sore throats
<i>Arcototi arctotioides</i>	Isiqwamba	Salad plant with properties similar to spinach

The same *imifino* plants as are consumed in Gwabeni are also sought in Gcinisa, but with rather less success. By compensation, one of the dams of Gcinisa has an edible plant that Gwabeni lacks: *intyatyambo*, a form of water lily (fam. *Amaryllidaceae*) which makes a delicious addition to stews.

Table 7.17 Medicinal Herbs Commonly Used in Gwabeni

Species	Xhosa Name	Use
<i>Zanthoxylum capense</i>	Umlungumabele	The bark is ground to a powder as the basis of a mouth-wash to relieve tooth-ache
<i>Protasparages africana</i>	Mathunga	The root is diced and bottled; taken orally to heal fractures
<i>Acacia karoo hayne</i>	Umga	The bark is chewed; for stomach aches and blood stools
<i>Dioscorea sylvical</i>	Skorpaati	See Mathunga
<i>Azima telracantha</i>	Igcebaya	The root is ground and bottled; stimulates birth contractions in livestock
<i>Lasiospermum bipinnatuim</i>	Ubushwa	The leaves are ground into a paste with water; rubbed into incisions in the skin or given as infusion; for ulcers, vomiting, ear-ache
<i>Thunbergia capensis</i>	Ubuhlanu bezikhali	Leaves ground to paste; for cuts
<i>Brachylaena elliptica</i>	Isagqepa	Leaves chewed; for asthma and coughs
<i>Bulbine alooides</i>	Maweni/Rooiwater	Stem is bottled; taken orally for bladder complaints
<i>Bulbine asphdeloides</i>	Yakayakana	As enema for weaning infants
<i>Rumex acetosella</i>	Umhlanyane	Leaves boiled in water; for asthma, coughing
<i>Becuim burchellianum</i>	Ibhubhusi	For fevers and coughs
<i>Ledebouria</i>	Isithathithibala	Bulb ground and boiled then used as an enema; for back-ache

Medicinal plants and herbs are not usually gathered by the general populace of Gcinisa, as occurs in Gwabeni; this task is left to the specialists. A large amount of medicinal plant material is collected by the local *amagqira* and *amaxhwele*, who are so much more numerous in Gcinisa than Gwabeni. They range far and wide in search of such plants because of the poor quality of the natural environment around the village; a favourite spot is Mqwalana on the coast, near Bira. The vacant farms are another good source because their original indigenous vegetation has grown back. One *igqira* revealed that they collect as much as 50 kilograms of plant material on each outing.

A local herbalist, Mrs Potswana, recognised most of the medicinal plants obtained from Griffiths in Gwabeni (Table 7.16), but she differed on their use in some instances. She did not like to use *mathunga* because she regarded it as too strong; she had found that *umga*, besides being good for stomach-aches and bloody stools, also helped broken bones to heal; and *yakayakana* had wound-healing as well as emetic properties. Some of the plants that grow wild around Gwabeni had to be bought in Port Elizabeth by Mrs Potswana because they could not be found anywhere near Gcinisa.

In both villages there appears to be plenty of interest in wild vegetables and herbs. This is reflected in Table 7.17 as well as in the foregoing.

The figures for Gwabeni are probably understated, as this data was collected quite early on in the fieldwork, when respondents were shy of admitting to traditional lifeways. Later, when they felt more comfortable with the team, some of the people admitted that they had understated their use of traditional medicines.

The difference between the two communities in the matter of wild vegetables and herbs may be summarised as follows. In

Gwabeni, where both *imifino* and medicinal plants exist in many varieties and are readily collected, there is little specialisation: every adult is his or her own dietitian or physician. The herbalists or the sister at the clinic are only consulted when traditional 'primary health care' cannot address the problem.

In Gcinisa, by contrast, where both kinds of vegetation are extremely scarce and *amagqira* and *amaxhwele* abound, the search for and administration of medicinal plants is left to the professionals.

Table 7.18 Use of *Imifino* and Medicinal Plants in Sampled Households

Village	HH Type	Imifino	Medicinal Plants
Gwabeni	MHH	4 (25%)	4 (25%)
	FHH	13 (62%)	10 (48%)
	Both	17 (46%)	14 (38%)
Gcinisa	MHH	12 (44%)	9 (33%)
	FHH	9 (90%)	2 (20%)
	Both	21 (57%)	11 (30%)

Fruit and extracts

Of all the wild food resources in the environs of Gwabeni, the most desirable is probably the prickly pear. Known locally as *itolofiya*, prickly pear is distributed throughout the area, but at a very low density. It abounds in the Game Reserve. Any restriction of access to those groves has a direct bearing on both the diet of humans and domestic animals in Gwabeni. One

informant commented with disgust, "We can't even get prickly-pear, they (the authorities) say it's for their baboons."

The fruit of the prickly pear is a source of sweetness, nourishment and refreshing liquid for the people of this dry area, and the leaves can be used as an emergency fodder for cattle, so long as the thorns are burned off. The fruit is also sold by some of the women by the roadside to the occupants of passing vehicles.

The collection of the prickly pear fruit is mainly an occupation of the women, but some of the older men are also involved. The prickly-pear gatherers can be seen leaving the village with plastic bags and a long pole which has a sharpened metal loop at one end. The loop is placed over the fruit, which is often high up on the plant, and then pulled downwards to cut the fruit off the stem. The fruit is handled in such a way that the many, tiny thorns on the stem and the fruit itself do not get into one's hands.

The bitter aloe, *Aloe ferox* (*ikhala*) is abundant on some of the valley slopes in the Gwabeni area, as it is throughout the Eastern Province. This species tends to increase in abundance in response to moderate overgrazing of Valley Bushveld (Palmer and Avis 1994); hence its high density in the settled area. The medicinal and cosmetic value of the aloe once led to an attempt to harvest it commercially in Gwabeni, but the sap-tappers developed such violent allergies (mainly manifested as asthma) that the initiative, which had the potential to provide considerable much-needed employment and income for the community, had to be abandoned.

Prickly pear fruit is as sought after by the households of Gcinisa as it is in Gwabeni. It can be found along the banks of the river, if it is to be found at all. Prickly pear is rare in the vicinity of Gcinisa, probably because the previous white farmers had seen it as a hazard to their cattle and attempted to eradicate

it. Aloes, which are at least a potential natural resource, are also scarce in the coastal environment, partly for ecological reasons, and partly because the indigenous environment was mostly cleared for farming in this area.

To the conservationist, the prickly pear is an exotic weed and to the commercial cattle farmer it is a threat to the stock. Both parties have attempted to destroy the plant over the years, but it is amazingly resilient. While the people of Gwabeni were aware of its hazards (see chapter 6), they also appreciated the prickly pear as their sole source of fruit and a potential cash-crop when sold to passing motorists. Those of Gcinisa might have been similarly disposed had they had the same access to the resource.

Table 7.19 compares the use of the prickly pear and the aloe in the two communities. Quite a large proportion of especially the FHHs were involved in the abortive aloe project in Gwabeni, it appears. Something similar must have involved members of those seven MHHs in Gcinisa, but no details are to hand. None of the surveyed households in Gcinisa used prickly pear, but it was very important for the relatively poor FHHs in Gwabeni.

Table 7.19 Use of Prickly Pears and Aloes by Sampled Households

Village	HH Type	Aloes	Prickly-Pear
Gwabeni	MHH	2 (13%)	3 (19%)
	FHH	10 (48%)	13 (62%)
	Both	12 (32%)	16 (43%)
Gcinisa	MHH	7 (26%)	-
	FHH	-	-
	Both	7 (19%)	-

Soil

Gathering is conventionally associated with vegetable matter, but soil is also a product of the natural environment which is universally available and may be used as the source of mud plaster and mud bricks for building. The extraction of soil for these purposes is only restricted to the uncultivated environment in the literal sense that people would hardly remove top-soil from areas currently under cultivation. Where the only current cultivation is in small gardens near the homesteads, this stricture gives them plenty of scope in the formerly cultivated and grazing areas without the need to look further afield for what is, after all, a weighty material.

As the population has declined and other building materials have been introduced (such as cement blocks), the extraction of soil for building purposes has ceased, but should the new sites on the Outspan become fully-occupied and traditional building methods be revived, there could be a renewed demand for local soil. This would only constitute an environmental problem if topsoil which is needed for garden cultivation in the new area comes to be used in the building operations.

It is unlikely that any future development involving the local people will be damaging to the environment because they have already demonstrated their interest in soil conservation. There is, indeed, a vast store of indigenous technical knowledge in this area, the value of which has tended to be ignored in the past. Consider the views of Sibongile (63):

The only way to stop erosion is to leave the plants where they are. Where *umhlontlo* (the euphorbia plant) is still growing there is hardly any erosion. My new home-

stead is on a slope and I have tried very hard to ensure that there will be no erosion. I have planted seringa trees to bind the soil, but also for wind-breaks and also because goats eat the leaves. I am planning to terrace my garden so that erosion cannot take place. I have transplanted two tree ferns and one eucalyptus tree from the forest into my garden for decoration, but also to bind the soil...

Brickmaking using the soils of the area occurred on a small scale in Gcinisa. Soil pits have been dug next to 'the dirty dam'. Extraction of soil in this area is not causing any significant environmental damage, but another area from which soil has been removed east of the main road has been subsequently subjected to major sheet erosion which may be connected to this activity.

In both Gwabeni and Gcinisa there were already signs of increased building activity during the research period, and construction is likely to increase exponentially as the Reconstruction and Development Programme, with its emphasis on housing and services, reaches the two villages. To the extent that local soil is used in construction it will be necessary to select sites for extraction with due concern for the environment.

Conclusion

From the evidence presented in this chapter it is apparent that the uncultivated environment plays an important part in the lives of the inhabitants of Gwabeni and Gcinisa. It supplies commodities such as meat, fuel, vegetables and medicines in return for nothing more than the effort of extracting them, permitting the beneficiary households to save their scarce cash for other sub-

sistence purposes. Yet the relationship with the natural environment is not reducible to a purely utilitarian significance in the lives of the people. Hunting provides the demoralized men of Gwabeni with far more than the occasional meal of venison or hare; the special woods which are gathered for ritual feasts, the herbs and barks for medicinal purposes, gain much of their potency from their association with the vital position of *ihlathi*, the forest, in their cosmology. The same might be said for the *amagqira* and *amaxhwele* of Gcinisa as they search far and wide for scarce medicinal plants in their deforested environment. Even if the households of Gwabeni and Gcinisa were electrified by the RDP and could afford to buy all the vegetables and medicines they needed in the local shops and they only went to *ihlathi* once a year, the uncultivated environment would still have its traditional meaning for them. The people of Gwabeni would continue to feel that the Nature Reserve is rightfully theirs.

When issues of land rights, restitution and redistribution come to the fore, as in the new democratic South Africa, it tends to be assumed that 'land' is coterminous with residential, arable and grazing land, but to the poor post-peasants of the former Ciskei, who have long given up ploughing and whose herds have been decimated by the drought, the uncultivated environment, with its many valued resources and powerful ritual associations may be the most valued category of land after the settlement itself. This is partly why the people of Gwabeni challenge the moral right of the Nature Reserve to its hinterland; why the poor people of Gcinisa quest far and wide for what few resources their long-since deforested environment might offer.

Unfortunately, what remains of the indigenous bush and forest in the former Ciskei is contested ground. It is also claimed by forestry and conservationist interests working very closely with

government to extract profits from these areas while simultaneously trying to conserve them. Up till very recently there has been no room for the adjacent communities in this equation. Government, commercial interests and the communities are only now beginning to find ways in which they can share the uncultivated environment.

Endnotes

1. The 23 000ha of the Nature Reserve contains the greatest variety and abundance of natural resources in the immediate hinterland of Gwabeni, but there are other, rapidly diminishing sources of game and collectibles around the settled area.
2. The issuing of hunting licences is a function of the sub-department of Nature Conservation within the Department of Agriculture. These licences are available from the Conservation Section officers in Bisho, as well as from regional magistrates.
3. The role of dogs for hunting, herding and guarding purposes in Black rural society, and the ancient lineage of distinct indigenous breeds of dog is only now being recognised by archaeologists and anthropologists (*Sunday Times* 5/2/95,7).
4. Local term for a light delivery vehicle.
5. Respondents were requested to express their replies in terms of headloads, whether they brought wood out on their heads or not (men preferred to use wheelbarrows). Headloads of 40 to 50 kilograms are not unusual in this area, but in Gwabeni, particularly, the loads can only have been 10 to 20 kgs to make these figures realistic. Remember that the collectors were usually elderly women and children.

6. Although cow-dung is used as a fuel in many parts of Sub-Saharan Africa, and there is still plenty lying around Gcinisa, it is not generally used because the residents do not like the smell. This may be for the best, in spite of the local scarcity of 'free' fuel, because the removal of nutrients from the system also leads to a decrease in fertility of the soil.
7. There is the occasional peach tree in each village, but the fruit is rarely found in the village shops and it is very expensive, beyond all but the wealthiest households.

8. THE AQUATIC SECTOR

Introduction

The cultivated/domesticated sector and the uncultivated sector of the environment have been dealt with; now it is the turn of the ambiguous area inbetween, where water is located in its natural state and is now supplemented with purpose-built dams. In its new manifestations as boreholes, tanks, drums and, in some fortunate areas, reticulation systems, the aquatic sector is beginning to invade the domestic sector. But as far as the inhabitants of Gwabeni and Gcinisa are concerned, fetching water still entails interaction with water in its natural or near-natural state, where the supernatural *abantu bomlambo* ('water people') are in ultimate control.

According to David Hammond-Tooke, whose formulation of Cape Nguni cosmology provided the idiom for this part of the report:

There is a close association...between the River People and humans, an association which has both its positive and negative sides, for the River People's influence can be both baleful and benevolent (1975, 21).

The vernacular personification of the water-sources as Janus-faced was entirely appropriate to the nature of this resource. Whether flowing naturally in rivers or contained in purpose-built dams. water gives life, not only to people, but also to every living

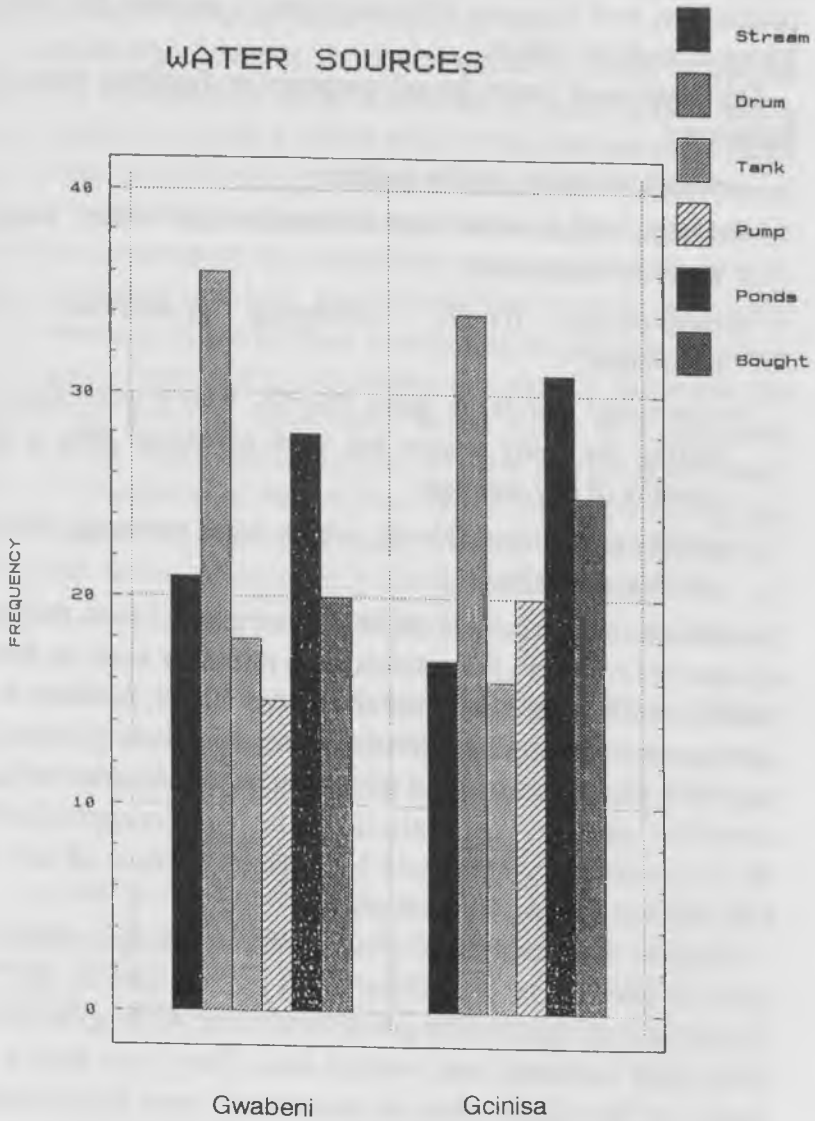
thing. It is the ultimate blessing. But it also takes away life when the rains fail year after year, when weakened cattle are drowned trying to gain access to rivers or dams or when water-borne diseases afflict the populace. In common with rural communities in the drier parts of Africa and the Third World generally most rural households of the former Ciskei lack an adequate water supply (Briscoe and De Ferranti 1989; Cleaver and Elson 1995). Gwabeni and Gcinisa are among the lesser privileged, with Gwabeni among the worst-supplied communities in the entire region.

A foretaste of the problems water poses to the people of Gwabeni and Gcinisa was provided: in the general discussion of the natural environment in chapter 3; in chapter 5 where household tasks and the division of labour were discussed; and in chapter 6 where drought was cited as a principal factor in the collapse of agriculture. Clearly, meeting the need for sufficient good quality water for household and irrigation purposes has been the greatest challenge that the local people face, particularly in Gwabeni. How they attempted to meet that challenge, with how much efficacy and at what price is the subject of this chapter.

Water for household consumption in Gwabeni

It will be recalled that Gwabeni consists of five village-sections: Bhobho, Nala, New Brighton, Nqwebebeni and Egunyeni. The five sections, radiating to the north and the south of the road from the junction with the main road to Nala, the principal settlement, are arranged along ridges and divided from each other by steep valleys (see fig. 3.3).

Figure 8.1 Water Sources for Human Consumption



Given the fact that water always finds its own level, it is a daunting topography for a community in a dry climate. Water sources are hard to obtain or maintain on the high ground where people live, and it is very difficult to haul it up from the valleys where it tends to collect.

The sources of water for all purposes in Gwabeni were the following:

- rainwater tanks, fed by gutters;
- drums, which were used to contain dam water, bought water or rainwater;
- hand-pumps (N=2), conveying groundwater via bore-holes;
- communal ponds or dams (N=9), which was filled up during the rainy season but were exhausted after a few months of dry weather;
- government dams (N=3), which were perennial but not readily accessible.

In spatial terms the most accessible water sources from the point of view of Gwabeni's households were rainwater tanks or drums which could be sited next to the homestead. Tanks, however, were an expensive commodity. With the necessary guttering and pipes, they were expensive to install initially and they had to be replaced every few years. (A cost analysis may be found in appendix VI). By no means every household had a tank system at all and few had efficient systems in good repair.

The next most accessible sources were the pumps, communal dams or ponds. The pumps and dams are indicated in fig. 3.5. The natural springs and the government dams were quite distant, along both horizontal and vertical axes. They were sited at the bottom of the valleys while the homesteads were sited on top of

the ridges, but they were still walkable. Farthest away was the Keiskamma River, which was only reachable by bakkie or cart at Ripplemead for purposes of drawing water.

Accessibility, however, is not measurable solely in spatial terms. If a household could not afford to install gutters and a tank, replace or repair a rusted tank, or buy and purchase water for a drum, then the most proximal resource became a communal dam or pump for the months that these were functional, and a spring or government dam when they were not. The springs were soon exhausted, and so it was necessary to go there very early in the morning, ahead of other households, to secure water from this source. Anyone who was unable to make the journey in the dark would lose out. Those who lacked a tank or a drum and were too old, weak, disabled or sick to make it to the government dams (a round-trip of two to three hours' duration) during the season when the communal dams dried up had to rely on the grace and favour of helpers, grandchildren or neighbours, or purchase small quantities of water from severely limited incomes.

Accessibility was thus also a function of age and fitness. If you were not fit and fully mobile, accessing water for household purposes was extremely problematical. Nojamani (74) explained:

I cannot carry as much water as before. Every year it is less. It means I have to go to the springs or the dam more frequently than before. During the dry season it takes me two hours to collect 12 litres of water.

This reality was at the heart of the fear women frequently expressed to the team, the fear of aging. The fear was most often expressed in households where women lived on their own or with husbands who were old and sick. It was born of the knowledge that the 'social insurance' of belonging to a multi-generational household in a community full of kinsmen of all ages no longer applied in Gwabeni; that out-migration had brought an end to that source of security. Unnerved also by the longest drought of the century, they were not to be consoled by the good rains which preceded (and accompanied) the fieldwork period. "This rain can go away for years", one elderly woman reminded us. The reality they faced if without tanks or the means to buy water was growing helplessness in a situation in which, according to the same informant:

People will not help; they are too busy to help. It is a difficult job getting water in addition to everything else. It is possible to go without water for days if you are too tired and weak to fetch water.

Another old woman demurred:

Last winter [the dry season] there was a time when I was too tired to get water, too tired to eat; I just slept. My neighbour gave me water; she is kind. She was happy to give it, but she would not be happy to carry large amounts for me from the springs.

The cause of the fatigue and fear was not only the distance to the dams, but also the arduous and dangerous nature of the journey. The pathways to the government dams and natural springs were

steep, narrow, rocky and eroded, claiming many casualties, especially among the unfit. Nombuyiselo recalled:

One day at the spring I had a bucket on my head with water in it and the tree caught my skirt and the 20 L bucket fell from my head. I twisted my ankle and had a very painful hand. Even though I had a sore foot I still had to carry on with daily life. There is no one to help me as the children are away at school.

The old women of Gwabeni complained of sore knees, high blood pressure, arthritis, headaches and exhaustion, either resulting from or exacerbated by over-exertion from water-carrying. But the essential needs of drinking and cooking at least had to be met regardless of the woman's age, condition (pregnancy, small children) or state of health. Nombuyiselo, an unmarried mother, told us: "It is very difficult to dig the springs and carry water home with a child on your back, but nobody helps".

Poverty and seasonality were crucial variables in the suffering of the women and children of Gwabeni. Both variables determined how far the water-carriers would have to travel to fill their buckets. Slipping out of the homestead to fill a bucket from the tank, or wheeling a wheel-barrow to the communal dam or pump, was a very different proposition from the two-to-three hour hike (you could hardly call it a walk) to the nearest government dam. But if you could not afford to buy, repair or replace a rainwater tank and the gutters and pipes to feed it, you had to rely on the communal dams until they gave out and the pumps if they were working; otherwise the only option was the hike to the springs and the government dams. Every winter and during drought years there was that point at which water-carrying made the transition from a chore to an ordeal which only child-labour could mitigate

for those many elderly women who were beyond such heavy work.

It is no coincidence that all these testimonies have come from women. Next to the exclusively masculine pursuit of hunting, water-carrying was the most gendered task of all. It was the most senior woman's responsibility to ensure that there was water available for the household. To fulfill this function she could either delegate the task or fetch it herself. Her best chance of successful delegation was to other women or children (of both sexes); her least likely prospect the few younger adult men who were prepared to perform this 'woman's task' (see Table 8.1).

Table 8.1 Proportions of Males and Females from Sampled Households Engaged in Fetching Water in Gwabeni

Age-Groups	Male	Female
Juvenile	27%	20%
Young adult	4%	4%
Mature adult	7%	18%
Elderly adult	9%	11%

The arduous task of water-carrying therefore fell largely to the women, the old and the young (had there been more young wives present in Gwabeni the figure for that category would have been a good deal more than 4%. Depending on children as water-carriers was, however, problematical. The available children were mostly pre-pubescent (because Gwabeni only had a primary school) and could only carry 5 to 10 litres of water at a time. This deficiency could not be made up for by making more trips

to fetch water because attending school took up too much of their day for that to be an option.

The children tended to fetch water from the government dams in groups or gangs. Fetching water from the distant dams was potentially dangerous to young children because of the difficult terrain, the deep water itself, wild animals such as jackals, rapists and the River People. The gangs maximised safety and sociability, but not efficiency, however. Much time was wasted in assembling them and there was a much greater incentive to dawdle and play on the way and the old women who depended on them might have to wait all day for a few litres of water.

Primary school children may not be the most efficient of water-carriers, and the amount of it they can do in addition to other chores while attending school and doing home work may not be very great, but to their grandparents they represent a life-line, particularly when winter brings dependence on the government dams. For this reason and because their parents are unimpressed with the social conditions for children in the townships where they live, there is a steady flow of children coming to Gwabeni to attend primary school and leaving the village to rejoin their parents for secondary education. Nicky Motteux recorded the following encounter:

Lukhanyo aged 14 and his brother aged 11 were seen walking down the steep eroded pathway to Chibilamadoda dam with their 13L and 5L buckets. Lukhanyo told me that they had been sent by their parents in Port Elizabeth to look after their grandmother. "The location is too crowded. Also, our grandmother, she needs us: without us she would have no help. We also like to be here with our cousins and friends."

From the point of view of the grandmothers of Gwabeni "the grandchild shuttle" may not have been the most efficient means of accessing a daily water supply, but in the absence of viable alternatives, it was better than nothing.

Age and fitness were thus important in accessing the water supply, but number and gender also played a part. While the gender of the children was not an issue, that of the adults definitely was. Where the adult men usually played no part in fetching water (though they consumed as much as the women) the quantity that could be supplied was a function of the proportion of able-bodied women in the household. Gwabeni was not as advantaged in this respect as Gcinisa (see chapter 3).

It goes without saying that the suffering of grandmothers and the shuttling of children between city and countryside would not have been necessary if the government of the former Ciskei and its predecessors had done more to improve access to water in the village. The hike to the government dams may be arduous and dangerous, but the communal ponds and pumps are reasonably accessible, even to the elderly. Being reachable by wheelbarrow, it is possible to manage more water per trip, and some of the men were prepared to fetch water with a wheelbarrow. The trouble was the short span of time when the communal dams were usable, and the unreliability of the pumps. When the handpumps broke, it could take years before they were fixed. The hand pump in the Nala area was installed in 1948. Two years later the pump broke. It was not repaired until 1994!

At this remove it is impossible to judge whether the 44 year delay was the fault of the government (for procrastinating) or the community (for failing to notify the authorities or reminding them). It is possible that the community was insufficiently assertive, because of another factor which retards access to water

in Gwabeni. The supply of water to the household may be the responsibility of women, but the administration of water on behalf of the village is regarded as the responsibility of the men. Their interest in water tends to be confined to the needs of the stock, they had had nothing to do with the household supply since they were boys. Thande, who was in charge of water-related issues in the village, could state without shame that he never walked to the springs or the government dams: "It's too far and the erosion is bad; I ask the little boys to get water".

The fact that few measures have been taken to either conserve or manage water supplies in Gwabeni may be connected to the fact that the most interested parties (the women) are not the decision makers as far as the community water is concerned. This may help to explain why very little dam maintenance occurs, so that siltation has occurred and reduced the capacity of the dams, and why there are no fences around any of the dams causing the supply to be contaminated by livestock.

Sathu (who was introduced in chapter 5) worked alone during the rains in July 1994 to excavate a channel to help divert runoff into one of the dams. But it was too big a job for one person to finish. When asked why others were not helping him, he replied: "I cannot wait for the other men. They are too busy drinking at the hotel".

In Gwabeni the livestock had easy access to all surface water because no fences had been constructed. The continuous use of the dam had had a noticeable effect on the water quality. In the early mornings and evenings goats, sheep, and pigs were concentrated around the communal ponds. While women were concerned that household water was being exposed to animal contamination, there was little they could do about it. Stock was too firmly in the masculine domain, even if the provision of clean

water for the household was a woman's responsibility. The women's lack of authority constrained them from insisting on better livestock management. Nomfila observed "pigs and goats use the water, there is no control". But when asked why she did not do something about it she acknowledged she had no authority to tell the men how to herd their stock.

In the first few days of fieldwork, Nicky attended a meeting the men called to discuss the water crisis of Gwabeni:

The men were discussing an application to be made to the Independent Development Trust for piped water to Gwabeni. The application form included a request that villagers stipulate how much they expected to be paid. Thande said that "the workers must be paid, people want cash; they won't work for nothing for free". The men seemed to be more interested in the short-run benefit of the paid work digging ditches than the long-run benefits of piped water. Throughout all this, the women waited anxiously, while the men controlled their future.

It was indeed paradoxical that the women, who were by custom responsible for the supply of water at the household level and whose roles in the division of labour such as cooking, washing babies, children and clothing, watering the garden and the small stock depended entirely on a steady supply of water, had no authority over that for which they took total responsibility. It was equally paradoxical that the men, who by custom administered water supply on behalf of the entire community, had no responsibility for or involvement in its supply at the household level. That the village elders in their turn reported to a succession of administrators with scant direct knowledge of or interest in the

problems of water supply in the rural areas, explains how Gwabeni's water problems have continued for so long. That combination also makes a speedy resolution to the access problem doubtful, certainly on the basis of past performance.

In the household survey informants were asked for their primary source of water, a difficult question when, as we have seen, water sources vary from season to season. Informants could not cite a 'principal source' for all seasons and purposes, so they gave their main sources (see table 8.2 and fig. 8.1). The overall mean was 2.7 sources per household.

Table 8.2 Principal Sources of Water Identified by the Sampled Households of Gwabeni

Sources	MHHS	FHHS	Both
Tanks	7	10	17
Bore-holes	5	8	13
Springs	7	13	20
Dams	12	16	28
Buy water	11	9	20
Total	42	56	98

There was no significant variation between the MHHs (N = 16) and the FHHs (N = 21) in the mean number of sources accessed, but there was one interesting discrepancy between the two: a greater proportion of MHHs than FHHs relied on bought water. Bought water ranks second in the sources favoured by the MHHs; whereas it is fourth (second to last) in the FHHs selection. The FHHs are also disproportionately reliant on the springs. This is consistent with everything else that has been reported on the

differences between the two kinds of household in this report so far, though one might have expected the FHHs, being poorer, to have less access to tanks than the MHHs.

Having obtained their water from their preferred sources (or rather, those which were available to them), the women used it for a wide variety of purposes inside and outside of the homestead: drinking; making tea, coffee, beer; cooking; cleaning; washing dishes; washing clothes; painting walls; dunging floors; and watering the garden. Water for cleaning, washing dishes and clothes was collected in containers from the communal dams during the summer rains and from the government dams in the drier months. When water had to be collected from the government dams, the household was particularly careful with it. Water was endlessly recycled and eventually ended up on the garden.

The amount of water required by a household obviously depended chiefly on the number of consumers present, and according to use. Thandeka told us: "When you are making Xhosa beer you need a lot of sweet water. You can only do it when the ponds are full". It does not end there. The ritual for which the beer is brewed may be a heavy consumer of water in other ways. Food must be cooked; tea, coffee, and cool drink must be served; the intestines of the slaughtered animal must be washed; dishes must be washed up afterwards. For this reason the ritual cycle was restricted to the summer months. The good rains of Feb 1994 resulted in numerous feasts and rituals during the fieldwork period, at which water use could be observed.

Among the day to day tasks, laundry was a heavy consumer of water. The women estimated that clothes washing required 50L of water. When this water had to be drawn from the government dams, most households found it easier to take their laundry there than to bring the water home.

Where water was so precious and hard-won a resource the women (and some of the men) took steps to maximise its quality. They sited their latrines well away from any surface water source. This was just as well, for the standard of hygiene of the household latrines was relatively low. Each household dug a pit and erected a corrugated iron shack over it. Once the pit was full a new one was dug. A few households had no latrines. These were mainly homesteads that had been newly built or are occupied by single elderly women or men. They used either their neighbours' latrines or the veld. The local crèche was similarly disadvantaged. At 'potty time' the up to 35 young children would go to the edge of the ridge. Fortunately, all this informal defecation took place a long way from the water sources.

All the householders were in fact very sensitive about the risk of contaminating the communal dams; so much so that they tended to avoid taking water for consumption from a certain dam which was very conveniently sited. Nicky Motteux tells the story:

Wilson, who is a keen gardener and active man, requested the government bulldozers in 1991 to come and dig a dam. From his experience gained in gardening he gauged that the red soil below the grave yard would make a good dam wall. It was a convenient site for a dam, with plenty of homesteads nearby, but the dam has only been used for livestock since then because the people believe, as Wilson expressed it: "that the water is full of people's fat and gravy" and they are scared of skeletons".

In spite of the fact that the graveyard was above the dam, there was no way the remains could physically filter through hundreds of tons of soil into the water below. But when entities as

ambiguous in Cape Nguni cosmology as water and a graveyard are brought into conjunction, one clearly cannot be too careful.

For all their sensitivity about the real or imagined potential for human contamination of the dams the people of Gwabeni had been unable thus far to deal with pollution from domestic animals. The surface water was usually muddy and visibly polluted with the faeces of cattle because none of it was fenced. Moreover, drainage systems to reroute the runoff were scarce and poorly maintained. (The steep slopes exposed the surface water points to extreme runoff.) Surface pollution was washed by heavy rain into the villagers water supply, introducing further livestock faeces and litter.

The surface water in Gwabeni was continuously exposed to human and animal activities. In the drought and the winter months, the dams became a focal point of activity. Clothes were washed, livestock watered and water collected. The unnatural concentration of activity at the watering points exerted a considerable pressure on the surrounding ground and vegetation, and, hence, the water quality. The effects of the compaction and deformations by trampling around the water points were considerable. The continuous trampling of the surface inhibited root development and reduced in plant growth; it reduced the infiltration capacity of the soil and caused considerable soil erosion in the vicinity of the dams. This in turn gave rise to the muddy appearance of the dams as a result of siltation.

All the women interviewed in the household survey expressed a deep interest in water quality. They practised a form of ethno-hydrology, having their own good reasons for rejecting or preferring particular water sources.

The water quality was judged according to three main criteria:

- 'sweet' -- water they reserved for drinking, that was also good for making beer;
- 'sour' -- groundwater from the pumps which, being brackish, tasted salty, was not appreciated for cooking and did not lather when used for washing;
- 'dirty' -- which included muddiness, faecal contamination and algae.

The criteria for these assessments of water quality were thus appearance, colour, mineral taste and use. In a poor community beset with difficulties of water supply it would seem, to an outsider, that the only necessary discrimination should be between clean and dirty, but the sweet/sour distinction had a practical/economic as well as a sensual significance. If sour water was used for bathing, washing up, laundry or any other purpose which combined water with soap or detergent, those expensive commodities would be partly wasted because soap does not lather in brackish water.

Western experts confirm that "an excess of minerals generally - hard water - increases the cost of washing by making more soap necessary" (White, Bradley and White 1972, 176). Indeed, the concept of 'hard' water "initially came from the water supply practice field and was measured by soap requirements needed for adequate lather formation" (Chester 1989, 13). Our own tests confirmed that the pump water had a high conductivity, that is, a "high concentration of total dissolved solids and major ions" (Chapman 1992, 61). There were undeniable advantages associated with the pumps (when both were working), however. They provided the village with a source of water free of all human and livestock contamination; there was no loss of water through

evaporation; the capital and maintenance cost was low; and the pumps were conveniently sited.

Here are some views about the local water supply collected in the course of the household survey:

The ponds (communal dams) give the sweetest, the best water. We like to drink the sweet water. We don't boil sweet water -- we like the taste. We never get sick from drinking the sweet water from the ponds.¹

The pump water is healthy. The water comes from the ground. No germs. But the pump eats a lot of soap. I like the taste of sweet water; I do not like the taste of sour.

It does not clean clothes very well -- it is too salty to wash with.

Sour water does not cook well; it does not cook peas or samp or mealies well.

Thus the pump water in Gwabeni was considered to be an unsuitable water supply for household purposes due to the high salinity in the underlying rock, but it was not the only source that was sour. The natural springs in the valley had the same water-source as the pumps. The people recognised that the water was the same and our conductivity tests verified that there was a high ion content in the spring water. Unlike the pump water, however, the spring water was unprotected and exposed to human and animal contamination. Thus it could be 'dirty' as well as 'sour'.

In spite of the disinclination to use anything but sweet water, during the dry season or in the drought years no water-source is spurned, and the women worked hard to keep the spring water

free from contamination by digging and cleaning the springs. Observing that the sour water from the ground rose only in the mornings and in the evenings, the women only came at those times, but the concentration of women collecting only at those times depleted the spring of water. This was because "the main difference between groundwater and surface flow is that movement of groundwater is slower" (Chester 1989, xvi). The perceived rising and falling of the spring water was the time needed for groundwater to move in response to gravity, pressure and friction to fill the aquifer.

The springs ultimately supply the government dams, the lowest lying water source. Thandeka, a keen observer of her environment, made the same connection:

The government dams are close to the springs and the streams have salt coming into them. That is why the government dam water is sour but it is also dirty from the cattle and goats. That water we must boil or put Jik² in.

While the building of government dams in 1980s and 1990s was seen by the local people as a very positive step to offset the seasonal drying up of the communal ponds and water tanks, everyone acknowledged that the water was dirty, especially in the drought. The respondents were aware that water must be boiled or chemically disinfected to avoid health risks.

The main threat to the purity of the communal and government dam water is the free roaming livestock. Without fences there can be no meaningful separation between dams for human and those for animal consumption. It is a common sight to see pigs wallowing in the communal dams. The nurse at the local sub-

clinic erroneously attributed the beak-outs of scabies³ in the summer months to pigs wallowing in the communal ponds.

Although local preference for sweet water, when water was scarce the women firmly only insisted that it be clean, as even that was in short supply. "Good clean water is short here", Clara told us. "Clean water is only for cooking and drinking". Everyday a bucket of such water from a tank, drum, communal dam or pump (depending on the season) was placed in the kitchen for cooking and drinking. The drinking water was protected from the flies and other contamination by a dish towel.

The value attached to clean water was indicated by the lengths to which people would go to obtain it during the dry season or during droughts. At these times, the only clean water available to some of the households was obtainable, for purchase, from a Mr Kulati in the next village. Clients from Gwabeni had to walk approximately 15 km round-trip if they did not have access to a vehicle; yet some were prepared to invest their energies and scarce cash in this source of sweet, clean water rather than drink the scarce, sour groundwater or risk the dirty dam water at these times.

In the household survey respondents were asked if they had any problems connected with water supply. Those who did were asked to share it. They were further asked how they thought the problems they cited might be solved. The two questions were entirely open-ended, but the answers were not, as might be expected, highly variable. The results are provided in Tables 8.3 and 8.4.

Predictably, the majority cited the general scarcity of water of any quality in this drought-stricken area. Next came the distance factor, which looms so large especially in the dry season. Then

Table 8.3 Problems of Water Supply Cited by Sampled Households in Gwabeni

Problems	MHH	FHH	BOTH
Water Scarce	5 (31 %)	9 (43 %)	14 (38%)
Distant Dams	3 (19 %)	5 (24 %)	8 (22 %)
Dirty Water	3 (19 %)	(1)	4 (11 %)
Sour Water	(1)	-	(1)
Expensive	3 (19 %)	3 (14 %)	6 (16 %)
Laborious	-	2 (10 %)	2 (5 %)
Dangerous	-	2 (10 %)	2 (5 %)

the acknowledgement that more would buy at least drinking water if it was not so expensive; followed by wish that it was cleaner. An interesting difference between the MHHs and FHHs was the recognition of a minority of the latter that water collection was too laborious and dangerous. The FHHs, depending more on old women and children would certainly take more strain, and the old women were exposed to the danger of falling, while the young girls out fetching water were exposed to the danger of rape.

Table 8.4 Solutions for Problems of Water Supply Cited by Sampled Households in Gwabeni

Solutions	MHHS	FHHS	BOTH
New sites	(1)	4 (19 %)	5 (14 %)
State taps	6 (38 %)	11 (52 %)	20 (54 %)
Help with tanks	(1)	4 (20 %)	5 (14 %)
Action on dams	2 (13 %)	2 (10 %)	4 (11 %)
Unspecified	4 (25 %)	-	3 (8 %)

Few respondents believed that there would be some kind of causal nexus between moving to the new sites opposite the hotel and receiving piped water, though clearly some did, and it was a possibility that was often discussed in the community. Most felt that it was the government's responsibility to provide piped water, not necessarily right into their houses whether they moved to the new sites or not. A minority with more modest aspirations simply wanted financial assistance with rainwater tanks, or assistance to clean up and fence off the communal dams. It is interesting to note the differences in the responses as between the MHHs and the FHHs to this question. Unlike 25% of the MHHs, who wanted solutions but could not specify them, the FHHs knew what they wanted. They wanted taps. More of them than the MHHs suspected that there might be a trade-off between abandoning the scattered settlement (i.e. moving to the new sites) and receiving reticulated water.

The water situation in Gwabeni has been characterised in the way that the people themselves experienced it. The apparent indifference of the successive administrations in the region and, indeed, of the local men who were empowered by tradition to make decisions about water supply, left the local women and children to do what they could to supply the water needs of households. Exercising considerable environmental knowledge, they separated clean from dirty water, eked out the 'sweetest' and ensured that none was wasted. But they still had to carry more water farther than was good for them, and at considerable risk of strain and injury.

Water for household purposes in Gcinisa

Gcinisa had an entirely different topography from Gwabeni, as well as a much more concentrated settlement (compare figs. 3.1 and 3.2). The land undulated gently; there were no steep slopes. Wheelbarrows and donkey-carts could negotiate the same tracks as human water-carriers, offering a less laborious means of transport than a 25L bucket balanced on a woman's head.

During the fieldwork period, Gcinisa's water sources consisted of:

- Rainwater tanks and drums adjacent to the homesteads;
- Pumps (N=2), one operated by a windmill with a concrete holding tank;
- Communal dams (N=12), of which two are fit for human use (the others are reserved for animals and brickmaking);
- The Nyulutsi River, which flows past the settlement;
- Various water-courses, which flow only during the rainy season;
- Taps (N=2), at Wesley, the next settlement, 2.5 km distant.

The rainwater-fed tanks, 64L drums and the two drinking dams were the only sources of fresh, sweet water in the village itself, until they gave out. But households with access to some mode of transport or the means to buy water from those who made its supply their business could obtain seemingly unlimited supplies of clean water from Wesley. Otherwise, households had recourse to the Nyulutsi River, which rarely dried up completely; a few watercourses which flowed only after heavy rains; or the two

bore-holes, one of which had never worked and the other which had broken down after years of good service a few months before the fieldwork period (and remained unrepaired for the duration of it).

During the winter months, or in extreme drought conditions, after tanks and drums have been voided of rainwater and the river and dams are too low to provide safe water, this community of 233 households becomes totally dependent on the two taps at Wesley. Fortunately for them, there is no charge for water at this source, but transport costs must be met.

'The lower dam' (*edamie elisezantsi*) (6) and 'the upper dam' (*edamie eliphezulu*) (12) were the two utilized by people as opposed to stock. Men, women and children could be seen in the late afternoons and early mornings moving out from the settled area to these dams. The pathways to the dams showed that people converged on them from all directions. These dams were also significant focal points of the community.

Fetching water in Gcinisa was not the endurance test it could be in Gwabeni. It was more of a pleasure, an opportunity to socialize. Eunice put it this way:

When I fetch water it is time off from house duties. I can be with Thabisa and talk with her.

Nothumeka, who moved to Gcinisa in 1993 with her new born child (her husband remained in Port Alfred to retain his job as a gardener) knew nobody initially, only her husband's sisters. But:

I soon made friends at the dam. There were others of my age who also had young children and husbands away working. I asked them home for tea; they had me back; and I am no longer lonely.

The flatness of the terrain made it possible to carry water in various ways on the head, by hand, in wheelbarrows or carts. The buckets ranged from 5L to 25L and the carts could accommodate 64L drums. Age, gender, health and access to wheelbarrow or cart determined the size of container and method of transport. Children and the elderly could not manage the 25L buckets hefted by young and middle-aged adults. Households which did not have access to a wheelbarrow or lacked members with the strength to negotiate it along the rough tracks fully-laden were also disadvantaged. Nicky Motteux observed the following:

A ten year old girl accompanied by her little sister was seen to be having great difficulty pushing a 20 litre drum in a wheelbarrow. The tufts of grass hampered their movement. Both girls rolled the wheelbarrow backwards and forwards to get over the tufts of grass in the pathway. At intervals the two girls would stop for a break and then continue up the slope.

Wheelbarrows enabled older children and able-bodied women to transport loads that they would not be able to manage any other way; the method saves time and energy because it cuts the number of journeys to and from the dams. Most households had a wheelbarrow or had access one. Links between kin and former neighbours on the farms or in the original Gcinisa facilitate the borrowing of wheelbarrows. Nobanke and her sister Nokwakha, both born on Shushu farm and both having moved with their husbands to Gcinisa, share Nokwakha's wheelbarrow. Nokwakha declared herself: "happy that my sister is here -- I am happy to help with my wheelbarrow so her four children can go and collect water".

Nothumeka was responsible for collecting all the water for her household. Her sisters, Zukiswa and Nosis, worked at the Fish River Sun Hotel all week and could only help with water-carrying over weekends. In order to secure the volume her household needed without spending too much time walking between her home and the dam, she used the wheelbarrow and two twenty five litre buckets. She also had to manage her one year old baby, strapped to her back. Other water-carriers, less robust or under less pressure than Nothumeka reported that they could not manage a wheelbarrow as they did not have the strength; they preferred to carry the buckets on their heads.

Children as young as five helped their brothers or sisters or mothers to carry water. They generally used 2L plastic milk careen. From the age of 8 to 10 they would graduate to 10 litres or help push a wheelbarrow and from 15 to 16 upwards they would be carrying 20 or 25 litres on their heads or in the wheel barrows. The head-carriers hated August, not only because the tanks were dry and all "sweet" local water had to come from the dam or the river, but also because the August winds made it difficult to carry water. Eunice explained:

It is difficult to use a bucket in the wind. The wind shakes the bucket. We have to put a lid or the water comes out.

At the dams buckets were lowered into the water if it could be done without disturbing the muddy bottom of the dam, or buckets and drums were filled using cups, deep dishes, jugs or small 5L or 10L buckets. People did not necessarily use their own containers for scooping water, but borrowed from a friend. The sociability at the dams extended even to that level of reciprocity.

In principle the division of labour in the fetching of water was the same as in Gwabeni. Ambulatory water-carrying was regarded as a task of women assisted by children, though older men living alone might fetch water for themselves. Yet there were a few older boys and adult men involved in fetching water in Gcinisa (see Table 8.5).

Table 8.5 Proportions of Males and Females in Sampled Households Engaged in Fetching Water in Gcinisa

Age-Groups	Males	Female
Juvenile	19%	34%
Young adult	5%	14%
Mature adult	5%	12%
Elderly adult	3%	8%

Their value far exceeded their proportion in the water-carrying labour-force because they tended to move water in bulk. The flatter terrain of Gcinisa made wheelbarrows and carts viable methods of collecting water in most parts of the settlement and its immediate hinterland, and carts and bakkies were the most practical means of fetching water from Wesley. The association of water-carrying with some sort of motive transport and the greater scope for the commercialization of water-carrying in Gcinisa compared with Gwabeni made the activity attractive to some of the men. The flatter terrain and the existence of the taps at Wesley were key factors in this development, but the larger size of Gcinisa and hence larger class of those who could afford to buy water certainly helped to stimulate the trade.

Yet the male-sector bulk water-carrying tended to complement rather than compete with the far larger sector of the women and children going to the river and the dams (Table 7). Where half the households subsisted on less than R1 000 a month there was plenty of motivation to exploit the "free" water and only pay for it as a last resort. Besides, there was plenty of able-bodied household labour in Gcinisa, a consequence of the high schools in the area, and fetching and carrying water was relatively safe and easy here compared with Gwabeni.

The mechanization of water-carrying was the only possible explanation of some interesting discrepancies between the MHHs and FHHs in the water sources they depended on (see Table 8.6 and fig. 8.7)

Table 8.6 **Principal Sources of Water Identified by Sampled Households in Gcinisa**

Sources	MHHS	FHHS	Both
Tanks	12	3	15
Bore-holes	10	8	18
River	6	7	13
Dams	17	10	27
Buy water	8	9	17
Total	53	37	90

The mean number of water sources used by the MHHs is just under two, while the FHHs had recourse to almost twice as many (3.7).

The MHHs depended on the bore-holes, the river and the dams considerably less than the FHHs, yet they also bought much less

water than the FHHs. It is not as if so many more MHHs depended on their tanks than FHHs, so the MHHs must have had access to a free source of good water to which the FHHs were denied. That source was the taps at Wesley, via their own or their relatives' or friends' private transport, whether it was a cart or a motor vehicle. Households with a male head appear to have had an advantage in this matter which the female-headed households lacked.

The households of Gcinisa distinguished three 'seasons' in relation to water supply -- 'summer', 'winter' and 'drought' (Table 8.7).

Table 8.7 'Seasons' and Water Supply in Gcinisa

'Season'	Duration	Markers
'Summer' (rainy season)	November - February	The 84% of households with rainwater tanks relied exclusively on these; those without supplemented bought water in drums with surface water.
'Winter' (little or no rainfall)	March - May	Tanks and drums were used only for drinking and cooking; increasingly supplemented with 'sweet' surface water
'Drought (little or no rainfall)	June -October	The tanks being empty, the households relied either on increasingly polluted dam and river water or had to fetch it or buy it from Wesley

In this vernacular schema, the key values of proximity, 'sweetness', cleanliness and cost with regard to water are traded off against each other with the march of the seasons. Indeed, the vernacular seasons are marked by major shifts from closer, sweeter, cleaner and gratis sources, to more distant, sour, dirty or costly sources. The seasonal variation in water sources employed, with particular emphasis on the dry season, is expressed diagrammatically in fig. 8.2.

This schema is, of course, over-generalized. Those who had large, efficient tanks or more than one could enjoy convenient, sweet water until later into the season than those with more modest infrastructure, and then there were the 16% of the households which could not afford tanks and only had recourse to the other sources. By the same token, households which could afford their own wheeled transport could collect free tap water from Wesley all year round and those without transport who had funds could buy it from people who made a business of transporting water from Wesley. In short, some people enjoyed 'summer' all year round, while others endured their own poverty-induced year-round 'drought'.

The women of Gcinisa are as sensitive to the difference between 'sweet' and 'sour' water as those of Gwabeni, but in this village sweet water is not as scarce as in the other, and so it is less of an issue. There is no time of year when people are compelled, for at least part of their supply, to use sour water. As a consequence, the chief concern of those responsible for the supply of household water is with cleanliness.

When is water dirty? The answer to this vital question is to be found, as far as the women of Gcinisa are concerned, in the signs of dirty water that they have been brought up to look out for.

One sign of impending dubious water quality was the lowering of the level of the dam. Filling water containers in the summer months was "quick and easy", said Eunice: "We just put the bucket straight into the water". But as one moves through the 'winter' and 'drought' seasons, the little rain, high evaporation and wind progressively dry up the dams and water-courses. The dams become shallow and people are forced to wade in deeper to fill their containers. The wading and trampling of the water-carriers and the livestock (which take more interest in the 'upper' and 'lower' dams as the livestock dams dry up) result in the disturbance of the dam floor resulting in the pollution of the water with all the dead and alive matter of the floor. Dark brown opaque water is the sign that this has occurred and that the water is no longer fit for human consumption or for washing clothes.

Another sign was 'the blanket of the frog' (*ingumbo yesele*). Nicky Motteux records how she became aware of this vernacular category:

At the lower dam, Eunice, the daughter of Nomutsis, said: "the blanket of the frog is coming back" -- and pointed. Green algae was growing on the far edge of the dam. She explained: "People believe that the blanket of the frog is a house to many creatures. Frogs lay their eggs under that blanket. The blanket of the frog is a sign for us that we must look in other places for our drinking water".

Alternative sources of drinking water were being sought in Gcinisa as early as June in 1994. Women and children could be seen walking with buckets on their heads towards the Nyulutsi river. The water carriers had to follow the pathway that leads through the camps. The women did not like to collect water from

the river. They were fearful of real and metaphysical dangers, such as snakes and *Isikebeze* a kind of 'bogey-man'. With the arrival of the blanket of the frog, unless they could obtain all the water they needed from Wesley, they had little choice.

The river, however, may also be subject to the blanket of the frog condition after a long spell of dryness, when it also becomes very shallow. Several residents believed that minor gastric infections contracted at these times came from the river water. Our own inspection during the relatively wet winter of 1994 revealed that the river was only 20cm deep in the middle, flowed only weakly and contained a lot of sediment.

The appearance of the blanket of the frog was the sign that 'drought' had arrived. A stranger, observing the level of the water in the dams might deny this, but the households' water carriers had their own understanding of drought. It encompassed quality, as well as the quantity of available drinking water. Other concepts of drought tend to be concerned only with the quantity of water available. The vernacular concept of 'drought' and its sign, 'the blanket of the frog' are thus an instance of the way rural people 'read' the environment but not necessarily in the way an environmentalist might, because they are doing so for their own, usually practical, purposes.

Dam water during the drought season may be considered to be too dirty to use for drinking or cooking or even washing, but that does not mean that the remaining water is neglected. The human and the livestock dams in any season may be used for watering gardens and for building.

At the edge of 'the dirty dam' (*edamie elimdaka*) it was evident that some households preferred to build their bricks at the damside rather than the brick-making site. Brick building requires a lot of water. The brick layer reported: 'I use two drums

of water for every 100 bricks I make'. Each drum held 64 litres of water.

The two school dams are fenced, but that means that 10 others, including the two dams for human use are not. Human vigilance is thus the only way of preserving the drinking dams from animal contamination. Nicky Motteux observed someone to do just that:

One evening I watched an elderly man bringing his goats back to the homestead before night fall. He looked tired. As he passed the drinking dam, one of the goats broke away from the flock to drink from the dam. The old man left his flock to chase the goat away from the human water supply.

Community awareness and concern to keep drinking water clean was of quite a high order in Gcinisa, which was just as well as it was the only protection that existed. Further evidence of this came from Nicky's interviews with Maximal and Wilson, known as 'the donkey men', because each had a team of donkeys and a cart to sell water to the community:

'The donkey men' served as key informants of any possible occurrence of human contamination taking place at the dam sites, as they fetched water on average 2 to 4 times a day at the dams. They also had a good knowledge of human behaviour at various dams because their clients were allowed to choose which dam Maximal and Wilson were to collect water from.

Maximal: I think they should test the water. I have never seen anybody going to the toilet near the edge of the water

supply. But I remember another man from the other village, he washed his car there at the dam. I shouted at him and he stopped.

Wilson: I have often seen empty soap packets at the dams. I shout at people doing this: it's wrong. Until there is piped water to the homesteads this dam water must not be messed up by the people. I, too, have never seen adults defecating near the dams but I have seen children going to the toilet over the banks of the water supply.

Everyone I observed or spoke to seemed to agree with Wilson and Maximal. Once, three teen age girls arrived at the water place singing and chanting. After filling their water bucket they left the full buckets on the edge of the dam and went to the toilet behind the dam banks. Later the girls returned singing and laughing to carry their buckets home. Eunice, who is responsible for collecting water for her mother's household said: 'there are too many people; people must go behind (the bank) for the toilet'.

People were not as respectful of the stock dams, however, 'the dam below the windmill' (*edamie elisezantsi kwephiko* (8) was contaminated by human faeces because people used the inlet area as a toilet.

The interest in clean water in the households of Gcinisa should not end with the selection of the cleanest water source or efforts to maintain the source, however. People knew that they should, ideally, treat dam water to neutralize any bacteria present by boiling or using jik. Mrs Msutu, the shopkeeper's wife, a former trained nurse, claimed:

Not all people boil their water. It takes a long time; it uses a lot of fuel. Even those who can afford the fuel do not always remember to boil the night before.

Given the cost and effort of disinfecting water, the most popular precaution against contamination remained that of reading the environmental signs carefully and selecting the appropriate source. Pump water may have been considered sour, but it was known to be clean for drinking, washing whites and rinsing clothes. If boiling was out of the question, and the blanket of the frog was on the drinking dams, one always had recourse to the pump, which was kept in good repair by one of the local men.

Respect for the water-sources of Gcinisa went beyond the simple recognition of all responsible community members that they depended on clean water and must therefore read the signs and keep the dams and river clean. As noted at the outset of this chapter, water sources are regarded as sacred by most Cape Nguni, including those that adhere to Christian denominations. A trainee Sangoma put it this way:

The river and the dams are the home of the ancestors. There the ancestors of bone and water work together. They are very strong and dangerous. You cannot see them because the Umkumzi reed (*Typha capensis*) prevents the people of the river or dam from being exposed.

The presence of the Umkumzi reed was taken as a sign that the water source is inhabited by ancestors. They were held to be very sensitive about the way their domain is treated. If the ancestors are offended, they will take retribution. Nothing, except drinking water must be taken from the area of the water source without

asking permission of the ancestors. But this option was seldom exercised (mud for building was extracted from dams without the Umkumzi reed marker). Denizens of the river and dams, such as frogs and crabs, were feared and respected as messengers from the ancestors and are not removed or harmed in any way.

The belief that the larger water-sources are home to the ancestors modifies behaviour in various ways. Women and children preferred to collect water in pairs or groups for protection, and never went near water in the dark when the ancestors are thought to be active. They donned blue beads as amulets; should a woman have to collect water after dark, she would unthread a blue bead and leave it at the edge of the water as a propitiation. Formerly, no one with a sore or open wound would go near a water-source for fear that it would spread; some believed that scabies is a punishment from the ancestors for some transgression of water-related observances.

No one, even in groups, stayed very long at the dams. Besides the presence of the water people, there was always the possibility that the *isikebeza* might make an appearance. The Xhosa counterpart of the 'bogey man', this anthropomorphic inhabitant of lonely places is prone to rape and rob. It is not considered very safe to dilly-dally near water unless one is in company in broad daylight.

As in the case of Gwabeni, informants were asked for their perceptions of the chief problems of water supply in Gcinisa and their suggested solutions. There was less interest in the exercise in Gcinisa than in Gwabeni, with the FHHs returning a particularly low poll.

Table 8.8 Problems of Water Supply Cited by Sampled Households in Gcinisa

Problems	MHH	FHH	Both
Scarcity	6 (22%)	4 (40%)	10 (27%)
Distance	8 (30%)	(1)	9 (24%)
Laborious	2 (7%)	(1)	3 (8%)
Sour	-	(1)	(1)
Expensive	2 (7%)	-	2 (5%)
No help	2 (7%)	2 (20%)	4 (11%)
Total	20 (74%)	9 (90%)	29 (78%)

Scarcity, distance and the lack of official assistance were the issues that came up the most frequently, but the two kinds of household differed considerably. Only one of the FHHs cited distance, but almost half of those who responded among the MHHs thought that was the worst problem. Scarcity was the problem which exercised the FHHs the most. One might have thought that more households would have cited the expense of buying water, but perhaps that is what makes water scarce for many households.

The elicitation of solutions attracted an even lower poll in Gcinisa than the request to identify problems.

Table 8.9 Solutions for Problems of Water Supply Cited by Sampled Households in Gcinisa

Solutions	MHH	FHH	Both
Water project	8 (30%)	5 (50%)	13 (35%)
Tank grants	2 (7%)	(1)	3 (8%)
Clean dams	-	(1)	4 (11%)
Total	10 (37%)	7 (70%)	17 (46%)

Only slightly more than one third of the MHHs but more than two-thirds of the FHHs identified solutions. While two MHHs believed that grants to upgrade rainwater tanks would suffice, and two FHHs were divided between that solution and a clean up of the dams, there was general support for the community water project which, during the fieldwork period, had just begun to be implemented on the ground.

Compared to the situation in Gwabeni the households of Gcinisa seem privileged in their wide choice of sources and methods of transport. Yet they too regard scarcity as a problem, at least during the drought season, and those without rainwater tanks or after their tanks have been emptied deplore the distance from which they have to fetch water. In Gcinisa more than Gwabeni the men were involved with the provision of water because the terrain permitted transport options other than head-portage and the size of the population present made it possible to commercialize water carrying. Perhaps for this reason a man was given responsibility for the maintenance of the pumps, and they were always in good working order. Although the ultimate safeguard of boiling all water for consumption was beyond the means of the poorest households, everyone seemed to respect the water-sources and draw water selectively, according to the natural signs.

A microbiological assessment

Judging from the views expressed and the precautions taken in both villages, frequently at considerable inconvenience and expense to householders who have little energy or cash to spare, it would seem that most adults in Gwabeni and Gcinisa are aware

of the health risks of polluted water and determined to avoid disease which might result from ingesting impure water.

But what is the microbiological assessment of the condition of the water in the villages? Strenuous attempts were made to find out and we share the results by way of a conclusion to this chapter.

Table 8.10 Water Supply in Gwabeni Village

Water source	Seasonality	Reliability	Quality	Uses
Rainwater tanks	Fill in wet season; reserved as source of high quality water	Depends on rainfall; less useful in drought; costly to repair or replace	High quality	Drinking water; preparation of food only
Drums	Temporary storage			
Communal dams	Fill in wet season; reduced supply and poor quality in dry season	Depends on rainfall	Sweet water; seasonal; communal controls pollution	Drinking; food; laundry; personal hygiene; washing dishes
Boreholes	All year round	Variable	High conductivity; free from contamination	Not for drinking, cooking' laundry; general cleaning
Springs	Stronger during wet season	Quite good	High conductivity; open to contamination	As for bore holes
Government dams	All year round	Good	Moderate conductivity (from springs); requires boiling or jiking	Laundry; washing dishes; drinking if no other option
Keiskamma River	All year round	Good	Low conductivity; high silt content	Laundry; drinking

Table 8.11 Water supply in Gcinisa village

Water source	Seasonality	Reliability	Quality	Uses
Stock dams	Fill in wet season; larger ones available all year round	Depends on rainfall	Low conductivity but high bacteria	Stock, water & clay for bricks; watering gardens
Drinking dams	Most of the year round	Good	Sweet water' muddy when low	Drinking; food; personal; laundry
Boreholes	All year round	Good	High conductivity; clean	Not for drinking, cooking, laundry
Tap at Wesley	All year round	Good	Sweet; clean	Drinking; cooking
Nyulutsi river	All year round	Good	Low conductivity	Drinking; cooking; hygiene; laundry

Tables 8.10 and 8.11 provide a summary of the conditions of the water supply in Gwabeni and Gcinisa for referral during the presentation of the analysis of tests made at various points in the water supply of both villages.

People in both villages recognised, and our tests confirmed, that the groundwater delivered by borehole was the only water source which was free of all bacteria. More people would have

used the clean groundwater if the pumps were always serviceable and the water was less 'sour'; and everyone would have large tanks and gutter systems, the second purest 'free' source, if they could afford the outlay. But as things stood, most people in both villages found themselves using water for drinking and cooking from unfenced, open dams for at least part of the year.

How much risk do they run? All drinking-water sources in Gwabeni and Gcinisa were tested for enteric bacteria, level of conductivity and Ph. The API test which permits the rapid identification of bacteria was employed.⁴ Pathogenic bacteria may be spread through the urine and faeces of human beings and animals. When infected water is ingested, the bacteria become established in the intestine. Some pathogens cause meningitis, typhoid and paratyphoid fevers, dysentery or cholera (Stanier 1958,644).

Neither village had pathogens of this order in their water supplies, but pathogens that could cause dysentery were present. The water quality was found to be far below conventional drinking water standards, and was highly vulnerable to further contamination in which case serious or chronic water-borne diseases are a distinct probability.

The only uncontaminated water in Gwabeni was the high-saline pump water which the people found unpalatable and practically unusable for washing with conventional soaps. The other water sources were contaminated by *Serratia liquefaciens* and *Serratia marsescens*, which have been associated elsewhere with epidemics of pneumonia, septicemia, urinary tract and wound infections; *Enterobacter agglomerans*, which has been linked with an epidemic of infected intravenous fluids in the United States; *Enterobacter aerogenes* which can be transmitted through wounds, sputum and blood and has been implicated in urinary

tract infections; and *Citrobacteria freundii*, associated with urinary tract and respiratory infections (Zolnerzak 1962,729).

Enterobacter agglomerans was present at a high level (87%) in Edamie Elimdaka, which the people of Gwabeni regard as dirty and unfit for drinking. The other dams and ponds which people regarded as safe to use contained *Enterobacter aerogenes* at fairly high levels. *Enterobacter* and *Citrobacter* were also found in Gcinisa, along with a high incidence of various species of the genus *Pseudomonas*, described as: 'important opportunistic pathogens that infect individuals with impaired host defences' (*ibid.*, 761). One of these, *P. aeruginosa*: "...can infect almost any tissue or body site. Localized lesions occur at the site of burns or wounds, in corneal tissue, the urinary tract or the lungs" (Zolnerzak 1962,764).

P. Aeruginosa was found in 'the upper dam' (6), one of the two drinking dams, as well as Amos's rainwater tank. But it is only infectious in large uncontrolled quantities. When it combines with other enterotoxins, however, severe diarrhoea can result, and a closely related strain (*P. pseudomallei*) has caused a fatal infection of both humans and animals in Asia (Stanier 1958, 422).

The indications are that the drinking water situation in Gwabeni and Gcinisa is overdue for serious governmental attention, for it represents a bacteriological time-bomb. The fact that there have been no major epidemics of water-borne diseases in either community is a testimony to the precautions the local people take and to a remarkable natural resistance accumulated over generations of exposure to the same bacteria. Biologically, as well as metaphysically-speaking, their ancestors have been protecting them. There can be no room for complacency, however. Every succeeding generation is exposed to slightly more in the way of

Western-style hygiene and medical technology and natural resistance is weakened as a result. Whatever the householders of these two villages have been doing to provide their households with the cleanest water available usually excludes boiling it because most of them are too poor to supply the necessary fuel. The limited measures they take may be insufficient to keep them healthy in the future.

Conclusion

Of the three sectors of the changing natural environment identified in this part of the report, the cultivated/domesticated; the uncultivated; and water (the aquatic environment), the last is the only one which is truly inescapable. Through a gradual process of dispossession, impoverishment, out-migration, relocation, superannuation and community disarticulation, dependency on agriculture, hunting and gathering have reduced sharply over the last few decades in Gwabeni and Gcinisa. Dependence on the market economy for alternatives to local food and fuel resources has been made possible by members of the rural-based network (including the rurally based) who are in paid employment, but especially those with access to social pensions. While water, too, could be purchased, the volumes households used for all purposes even when trying to be frugal placed this source for all purposes beyond the means of most households. The convenience and relative safety of water from rainwater tanks was denied many households for the same reason (see Appendix VI for details of costs of tanks). Being concerned about cleanliness, they might have made more use of the bacteria-free pump water, but these, as we have seen, were frequently out of order, the water was

unpalatable and useless for washing. The only other option, in both communities, was the contaminated open dams.

Apart from the risk of polluted water, using the dams also exposed the weakest members of the two communities to the hardest work, as we have seen. Carrying water on the head, by hand or even in a wheelbarrow is difficult enough for a fit young adult over flat terrain: for children, pregnant women and the elderly confronting rocky paths on sloping ground it is a daily ordeal. The only thing that kept them going was the awareness that there was, as yet, no alternative and, in the case of Gwabeni, no sign of one.

Endnotes

1. Michelle Cocks found that the health records verified that the village inhabitants rarely suffered from diarrhoea or any other waterborne related diseases. White, Bradley and White (1972) suggested that it is possible that people exposed to polluted water continuously build up a resistance to water borne diseases.
2. The brand name of a potent South African bleach and disinfectant.
3. Scabies is caused by the human itch mite or mange mite (*Sarcoptes Scabici*). These mites tunnel into the epidermis of the skin, irritation being caused by the mite's sections. The female lays eggs in these tunnels and the life cycle is completed and continuous on the same host. Thus the infection can be endless. The mite is transmitted to another host by the contact with infected areas of the skin (Barnes 1987,545).

4. The API 20E system is a standardized, miniaturized version of the conventional procedure for identifying *Enterobacteriaceae* and other Gram-Negative bacteria. It is a ready-to-use microtube system for the performance of 23 standard biochemical tests.

9. CONCLUSIONS AND RECOMMENDATIONS

Summary

Before fieldwork in Peddie District commenced it was hypothesized that the arbitrary concentration of population which was one of the features of Betterment Planning would have negative implications for women's roles, household organisation and the natural environment in affected communities such as Gcinisa. The corollary was that villages retaining the traditional settlement pattern, such as Gwabeni, would not share these negative consequences of concentration.

The formerly universal scattered settlement-pattern of the Xhosa (and Mfengu) ensured that the most important locally obtained natural resources, arable and grazing land, water and fuelwood -- were differentially accessed as households tended to use the resources most conveniently located for them. Given the spread-out nature of the settlement, the most convenient (i.e., the closest) location differed for people living in different parts of the village. The environmental benefit of this arrangement was that the resources which were convenient for a given group of people were more abundantly available than would be the case if everyone competed for them. Therefore, less intensive harvesting of the resources occurred, and as such less likely to be depleted. In sum, the scattered settlement pattern made sense in practical and environmental terms where natural resources were widely distributed but in limited supply.

In Gcinisa's case, resources other than water and grazing were even more widely distributed and in very short supply. While those households which drove their livestock east of the main road tended to be those living in New Gcinisa, the section closest to that grazing area, the areas where most households sought natural resources were not defined by where they lived. Distance from the settlement as a whole tended to be the determining factor, and every household competed with every other for the most proximal resources. Concentration, however, was not the main reason why natural resources were scarce in Gcinisa: the main cause was to be found in the area's prior existence as cleared white farm land. The scarcity of trees and wild plants was simply aggravated by the subsequent depredations by the relocatees.

Had Gwabeni and Gcinisa been found to be entirely or even mainly dependent on the natural environment (whether cultivated or uncultivated) for their subsistence, it might have been easier to make connections between environmental changes, household organisation and gender relations but it had been a long time since the environment had sustained the rural communities of Peddie District. As documented in the body of the report, field cultivation had been in steep decline in both communities for decades, stock farming was severely reduced by the severe drought of the 1980s and hunting and collecting had never had more than a supplementary role in either village economy.

Two hundred years of conquest, colonialism and congestion in the Ciskei as well as the recent wholesale urbanization of the younger and better-educated country folk of both sexes were shown to have contributed to the present situation in which the households of Gcinisa and Gwabeni were almost entirely dependent for their subsistence on external sources. Their dependency has deepened in recent years. The lifting of apartheid's former

restrictions on mobility has permitted the legal urbanization of women and children after 40 years of Influx Control has coincided with the exacerbation of the normal hardships of rural life by the most severe drought of the century and the descent into administrative chaos of the former Ciskei. Today, households look to their resident and non-resident salary- and wage-earners and their members eligible for social pension for their principal and frequently sole means of support. Gardening, hunting and collecting, casual labour, traditional and personal services and informal sector activities undertaken locally can help to supplement externally-derived income, but except in the case of Gwabeni's hotelier and the shopkeepers of Gcinisa, local sources were found to be insufficient to support a household.

The rolling revolution in the composition and support of the rural population in the former Ciskei has had its correlate in the way households are structured and the division of labour has altered. The notion of the household and by extension, the community as a non-territorial entity, a rural-based network, was very strong in both Gwabeni and Gcinisa. Co-residence, let alone commensality, were no longer essential criteria for belonging to a household. Absent members could even be forgiven for failing to remit regularly, if at all, now that they were no longer single men but frequently had partners and children with them in town. It was sufficient that they visited when they could. The steady increase in the value of pensions and the proportion of the local population eligible for them made it easier for the locals to release the migrants from their obligations and, in many cases, help to support their children.

The 'grandchild shuttle', by which the children of urban-based members of the non-territorial households were returned to the villages (notably Gwabeni) for their primary school years, is not

reducible, however, to the desire of struggling urban parents to have their children brought up by their pensioned grandparents. The lack of services and the nature of the terrain (particularly in Gwabeni) made it difficult, dangerous and in many cases impossible for their elderly or infirm to supply their daily needs in respect of wood and especially water without assistance. Pre-pubescent children attending school are not ideal for these chores. They are neither sufficiently strong or responsible, but in the absence of any other source of assistance besides the limited help neighbours might provide, grandchildren performed a crucial role in household viability.

Until boys have reached the age of initiation there was found to be no discernible gender bias in the tasks the grandchildren undertook. The same applied at the other end of the life-cycle, with retired men tending to undertake 'women's work' more frequently and voluntarily than the scarce younger men, many of whom had found a new and all-consuming role in organised politics. Traditionally, newly-married women bore the brunt of the regular household tasks, but migration has made resident brides scarce (especially in Gwabeni) and so the work has had to be redistributed, any tasks which could not be delegated to grandchildren were discharged mainly by mature or elderly women.

The tendency towards gender flexibility in the division of household labour went beyond housework and securing water and fuel. It was evinced in what remained of the agrarian way of life too. Released from the cultivation of fields and herding, some men have become more involved in gardening and managing the small stock, traditionally women's tasks. While hunting and the associated pursuit of dog-handling remain strictly male sector activities, men were becoming more involved in the gathering of

wild plants and fruits, an activity formerly more associated with women. Where ever there was scope for commercialization and/or mechanisation, as in the supply of water and fuel-wood in Gcinisa, men became centrally involved, to the exclusion of women. These tendencies, among others, advantaged the male-headed households (MHHs) over the female-headed ones (FHHs).

The MHHs in both Gwabeni and Gcinisa tended to control more productive resources, in terms of land, (mature male) labour and animal capital than the FHHs. Correspondingly, the FHHs were more heavily involved in gleaning what they could from the environment to offset their meagre incomes. The economic distinction between the two kinds of household was not acute, however, and it is likely to disappear as the old agrarian economy continues to decline and dependency on 'gender-blind' pensions deepens with the aging of the population.

Male-domination or gender-inequality may be a waning feature of the division of labour within rural households, but it continued to be prominent in public life. The placement and performance of people in traditional rituals and public political meetings attended during the study period reflected the strong themes of sex-segregation and subordination by gender and age in the traditional culture. Besides the few women who were deferred to by virtue of their high status as teachers and nurses, there were no roles of public power occupied by women in Gwabeni and Gcinisa.

Marginal as it might have been as a principal source of contemporary subsistence, the relationship of the households of either village with the natural environment and their response to environmental changes was a prominent feature of this project because it was the major part of the brief. Both the cultivated

and uncultivated sectors of the two communities and their hinterlands were described in detail and the nature and extent of household involvement with them treated in diachronic perspective. The all-important role of water in this drought-plagued region was given particular prominence. So long as the households of Gwabeni and Gcinisa are constrained by a lack of affordable alternative sources to collect water from distant dams, there can be little hope for committed local involvement in sustainable development.

The general effect of the shift from a dependence on the cultivated and uncultivated natural environment to dependence on the earnings of commuters or migrants and pensions has been to homogenize the two communities, softening the hypothesized distinction between 'bettered' and 'non-bettered'. Under the altered conditions, proximity to services and transport are tending to take priority over access to land and stock. The 'bettered' village of Gcinisa is already nucleated and close to a main road, so the shift in emphasis has not had any physical correlates. In 'non-bettered' Gwabeni the more far-flung households have recently negotiated for sites closer to the road and will ultimately create for themselves a voluntary closer-settlement on surveyed sites on the outspan, opposite the hotel. The traditional/'bettered' dichotomy is more realistically viewed as a continuum which is rapidly closing as the middle ground disappears and the peri-urban settlement type becomes universal in the former Ciskei.

The extent to which any change in the settlement pattern of these post-peasant communities can have negative implications for the natural environment depends not so much on the concentration as on the rate of growth of the population and its degree of future dependence on the local resource base. In the face of population aging and continuing urbanisation in communities

like Gwabeni, the threat to the environment has to be a constantly diminishing one.

Under the radically altered material conditions which have transformed Gwabeni and Gcinisa, each in its own way, from mainly agrarian communities to mainly dependent peri-urban communities what kinds of sustainable development might be realistically essayed granted the demographic and socioeconomic realities of these communities today and projected into the future?

Field cultivation

The resumption of field cultivation in Gwabeni and Gcinisa is highly doubtful even if years of good rains follow the drought in the region as a whole. In order to be viable field cultivation would have to be heavily supported and subsidized, and such intervention would not resolve the contradiction of a gendered (men's) activity with too few experienced and motivated younger men to meet its labour needs. As noted in chapter 6, agriculture is regarded as a communal activity, and if there were not a general consensus that cultivation was worth reviving, the efforts of any individuals to resume ploughing would in all likelihood be sabotaged.

According to both a land capability assessment (Scotney *et al.* 1991) and conventional agricultural criteria (e.g. De Lange *et al.* 1994), field cultivation is not viable in Gwabeni. The principal physical obstacle is the lack of water. Water conservation practices could in theory ameliorate the situation, but these would be prohibitively expensive (*ibid.*). Large scale irrigation is out of the question on these upland fields so far from any river. In principle, in seasons of reasonable rainfall such as during the

fieldwork period, the revival of cultivation to meet subsistence needs would be possible, but the financial and social obstacles which caused people to stop cultivating would still obtain and the deficiency of appropriate skills and labour is worse now than it was when cultivating ceased in the 1970s.

Were there to be any attempt to revive field cultivation it should be restricted to the plateau areas (Bhobho Ridge and the Outspan) if further soil degradation (which would further reduce the land's capacity to produce crops in the future) were to be avoided. A switch to more drought-tolerant crops such as sorghum would boost production, but it is unlikely that the entrenched local food preference for maize would be supplanted by sorghum, whatever its advantages over maize. Fencing would need to be constructed and maintained around all cultivated fields, as before, but there is neither the sufficient 'free' fencing in the form of branches nor the labour and spirit of cooperation to fence in the old way. Using wire is beyond the means of most contemporary households. Moreover, rivalries over access to land for fields would need to be resolved, since there are some people now living in Gwabeni who others believe do not have historical rights to land for cultivation. The problems of finance, labour and organisation of production, even more than the environmental obstacles, make the revival of field cultivation highly unlikely in this community.

Field cultivation is not recommended in Gcinisa, although cultivating near the Nyulutsi River in years when good rainfall is expected may be worthwhile. Households which set out to cultivate fields under present conditions would probably recognise the risks involved and thus make minimal capital inputs, resulting in the agrarian equivalent of the self-fulfilled prophecy. Given the high local unemployment, however, households may be willing to supply the large labour inputs required provided

that an external agent puts up the capital. Even then, the relaunch of field cultivation would probably refuel the resentment felt by the fieldless majority of New Gcinisa towards the field-owners of Old Gcinisa leading to deliberate grazing and other negative practices. A complete revision of the landholding situation in Gcinisa to the entire satisfaction of all interested parties would have to proceed any attempt at reviving field cultivation in this hitherto divided community.

Stock farming

The acclimatized stock of the Eastern Cape are hardy and tend to recover quite quickly from periods of drought, but it is by no means certain that the good rains of 1994 represent an end to the drought. What is certain is that the environment of the former Ciskei is highly vulnerable to overstocking. The lack of younger male labour cited above is not necessarily a restraint on overstocking, because if the conditions improve those who have the means to invest in livestock will do so even if they have to employ herders from beyond their own households.

Livestock production has more potential than field cultivation in Gwabeni, but it is severely hampered by a veld type which is inherently unsuited to domestic stock and has become severely degraded (cf Palmer and Avis 1994). The recommended stocking rate for cattle on the Outspan and parts of Bhubho Ridge dominated by grasses rather than karroid shrubs is about 11 ha/LSU. On the ridgetops one LSU requires about 17 ha. The best grazing in Gwabeni can thus support comfortably only 13 LSUs. The rest of the area, which has a carrying capacity of between 20 and 35 ha/LSU, brings the figure for the whole of Gwabeni location to about 110 LSUs. The browsing capacity of

the Sweet Thornveld of the Breakfast Vlei Outspan is estimated to be of the order of 1ha/SSU (cf. Beckerling *et al.* 1993). Thus the whole Outspan could support about 80 goats without reducing its future browse potential. There is a caveat, however, these estimates assume that optimal management conditions apply, the numbers would have to be lower than this under the present management regime to prevent further deterioration of the land.

Thanks to the drought, the numbers of cattle was well within manageable levels, but the hardier goats and sheep were well in excess of these limits (Table 6.7). If an appropriate stocking density can be achieved through limiting the increase of cattle when or if drought conditions subside and marketing surplus sheep and goats, the best way to increase the productivity of the grassland and savanna component of the veld for cattle and sheep is considered by mainstream pasture scientists to involve the application of high pressure rotational grazing, with resting of one third of the grazing area each year (see Beckerling *et al.* 1993 for further details). The problem with this strategy in a communal grazing set-up is that it would necessitate the construction of fencing, and an institutional structure with popular support for managing the system. As this may not be feasible, an alternative would be to drive stock to suitable areas at different times of the year (Palmer and Avis 1994). This would still require a level of community co-operation which does not currently exist, and for the problems of theft between neighbouring villages to be overcome. Before either of these longer term strategies can be implemented, the karroid and bare areas of Gwabeni should be rehabilitated in order to both improve the carrying capacity of the land and halt further erosion. This objective would require total exclusion of stock for a long period of time (by fencing) and burning of the karroid bushes followed by resting for about 18

months (cf Beckerling *et al.* 1993). In a community such as Gwabeni in which adult men with the requisite experience and skills are scarce and unmotivated and becoming scarcer in each generation, none of these conditions are likely to be met in the future.

The move to the sites on the Outspan would make good grazing land more accessible, but the shift might place even more pressure on the grazing resources of the plateau area unless stock were controlled or more grazing were obtained, for example, through an arrangement with the Double Drift Nature Reserve. A more radical suggestion, which might be resisted in the community but would find more favour than admitting cattle or goats to Reserve land, would involve a cooperative venture between the motivated herders of Gwabeni and the Reserve authorities in the semi-domestication or breeding of suitable species of game animals, such as the eland, for sale to other reserves, hunting or the table.

Livestock production, particularly with cattle and goats has better prospects than field cultivation in Gcinisa. In the northern areas, a stocking rate of about 3 ha/LSU is recommended under optimal management conditions. A ratio of about 6 sheep to 1 cow is viable in this area. The optimal management is considered to involve rotational grazing using a combination of High Performance Grazing and High Utilisation Grazing, and the veld does not need to be rested for seed production (see Beckerling *et al.* 1993 Danckwerts and Teague 1989 for further details).

In the remainder of the areas where overgrazing has occurred, a stocking rate of about 8 ha/LSU is recommended, with 3 sheep for every head of cattle. High Performance Grazing is recommended in order to promote a change in grass composition towards the more nutritious species. It is also recommended that

one third of the area be rested each year in order to promote the seeding of the nutritious grass *Themeda triandra*.

Assuming that stock are grazed throughout Gcinisa Location, these figures translate to a total of about 453 LSU. Again, this assumes that optimal management conditions apply, and that goats are not also grazed. Meanwhile, on the ground, cattle alone approximated that number in 1994 and, extrapolating from the stockholdings of the sampled houses, there would have been slightly more than 300 goats and about 600 sheep. Such was the state of overstocking after 15 years of drought and it would tend to increase during the slightly wetter 1990s.

Management of the veld to increase its future productivity can be achieved only by appropriate use of fencing or by herding to control stock movements. The provision of water sources in the north east of the location would also help to redistribute the grazing pressure. Fencing and providing new stock dams are capital-intensive projects which would require government intervention. There was plenty of motivation for herding among the majority MHHs in Gcinisa, but we were not in a position to judge their capacity to control stock movements. The complaints of those whose fields and gardens were grazed suggests that there was room for improvement in this area.

Another area in which households were motivated was also counterproductive. In relation to both the veld types found in Gcinisa, burning is unnecessary unless there is an excess of moribund vegetation. Yet burning is carried on enthusiastically throughout Gcinisa, whether there is excessive dead grass or not. The practise is a threat to livestock production since it removes much of the available forage at a critical time of year.

Although cattle and especially sheep exceed goats in Gcinisa goats may be too numerous even then, and should not be allowed

to increase under present conditions. This is because about half of the diet of goats should consist of browse if they are to maintain condition, and suitable trees are scarce in the area. In order to increase the potential for goat foraging, the regeneration of thorn trees should be permitted. Such a policy would also secure the long-term supply of fuelwood. But the pressing short-term needs for free fuel as well as overstocking of goats would make the regeneration of thorn-tree stocks highly unlikely.

Garden cultivation

If in both Gwabeni and Gcinisa field cultivation is unlikely to be revived and any recovery of stock farming is likely to be detrimental to the environment, there is at least a third option in the broad domain of agriculture, that of gardening.

Garden cultivation is an activity which is feasible, benign and popular with the households of both communities. Gardening is, moreover, an activity which the elderly can manage and the unskilled young can easily learn; which does not require cooperation beyond the household and is not heavily genderized or viewed as the prerogative of any particular age-group. The autonomy and independence of gardening is a particular advantage in communities undergoing a process of social involution in which organisation beyond the household tends to be problematical. On these grounds alone, the focus for plant food production in both Gwabeni and Gcinisa should be seen as the home garden rather than fields.

Apart from the social sense that gardening makes in these post-peasant communities, there are compelling ecological and economic advantages in home gardening. Gardening indirectly promotes conservation of the environment: both the consumption

of home-grown domesticated vegetables and the common practice of domesticating wild vegetables and plants in gardens take the pressure off the wild species and thereby promote biodiversity. The marginal conditions for any cultivation in this drought-prone region invite intensification because it permits the selection of the best soils and requires less expenditure on fencing and other capital inputs than field cultivation. Where irrigation is regarded as out of the question for field cultivation in Gwabeni and Gcinisa, this need not apply to gardens, depending on how they are sited. From the viewpoints of the gardeners themselves and government, gardening offers the best prospects for a successful investment in these villages. The more successful producers can market their surpluses locally (where there is no competition from commercial market gardeners or greengrocers) and even where gardening does not produce a 'cash crop' it supplies the household with 'free' produce thereby improving nutrition and preserving small incomes for other priorities.

Cultivation, even on a small scale and with a high degree of flexibility, is viable only if certain minima in terms of water provision and soil quality can be reached. In Gwabeni, vegetable growing is more likely to be successful on the Outspan than on the present house sites along the ridge tops, where soils are very shallow. But even on the Outspan and in Gcinisa's more favoured garden sites, care should be taken not to incorporate too much of the subsoil into the upper layer. Those involved in building houses on the Outspan should take care not to remove the topsoil in areas required for cultivation. Conservation of the scarce good soil sites is vital for successful gardening in Gwabeni, and soil improvement with organic materials would improve the soil fertility and texture.

Although households in Gcinisa, and to a lesser extent in Gwabeni, clearly have members with a sound knowledge of conventional gardening techniques, the viability and productivity of their gardens could be boosted by adopting of appropriate permacultural methods, particularly those which aid water conservation. NGOs such as Abalimi Bezekhaya and Food Gardens Foundation have been able to assist poor communities elsewhere in South Africa in increasing their home food production even on very poor soils and during water shortages. Masibambane, an NGO located in Peddie, offer some advice on gardening techniques to local people.

Garden cultivation has the best prospects for sustainability of any agricultural activity which might be revived, continued or introduced into Gwabeni and Gcinisa, but the barriers to success are considerable. Under conditions of communal land tenure and free-ranging cattle, any crop has to be securely fenced lest it be grazed. Effective fencing, even for a small garden, has been beyond the means of the majority of households, and many have been deterred from gardening as a result. Gardening without inorganic fertilizers and pesticides can be as hazardous as gardening without secure fencing in the former Ciskei, yet these aids were also found to be beyond the means of most households. The crucial requirement of the successful gardener is plenty of water, but in the absence of either water-reticulation or furrows, irrigating gardens by bucket is immensely labour-intensive. Not every household has the capacity to supply the garden as well as household needs so long as water has to be hauled in buckets and drums from distant dams or pumps.

Small grants to household heads for fencing, fertilizers and pesticides as part of a horticultural extension service would address the first two obstacles. The last obstacle is more difficult

to overcome. Grants for rainwater tanks and guttering, such that every household could meet its domestic needs from this convenient source during the summer months would release energy, labour and the more dubious water-sources for irrigating the garden by hand. The problem with this scenario is that it would offer no advantage over the present situation during the winter months, when the tanks would be dry, and any perennials, such as fruit trees, would suffer.

The necessity of a reliable and accessible water supply

If the most viable bulwark against complete dependency on relatives employed beyond the community or on the state is the home garden, and the single greatest barrier to any productive activity is the labour expended on water-carrying, then it is clear that water reticulation should be the top priority of any development plan for Gwabeni and Gcinisa and other communities in a similar position. After the fieldwork on which this report was based was completed, Gcinisa obtained a reticulation system, but it was intended for household use only, and consists of five standpipes for the entire settlement. Although the water was intended for household use, it is too 'sour' for household purposes other than cleaning floors, but it would be suitable for watering gardens, depending on how the crops grown react to brackish water. A better system would be one which distinguished between the qualities, directing 'sour' water to the gardens and 'sweet' to the homesteads. The best of all in this area of high evapotranspiration would be one which delivered water to the gardens via a drip system in order to conserve it.

As with grants for tanks reticulation would release labour from water-carrying for both household and garden purposes which

could be redirected towards tilling, weeding and harvesting/marketing. Gardening would not be the only indirect beneficiary of water-reticulation. Water-carrying competed for the time of women with self-help economic activities such as knitting and sewing and prejudiced the education of the children by exhausting them before school began and leaving them with little time for homework afterwards. Where educational success and women's self-help schemes are among the few avenues out of the peri-urban poverty trap, the importance of addressing water-supply in communities such as Gwabeni and Gcinisa becomes even more central to sustainable community development.

Development, of course, should not be reducible to a process of releasing labour for sustainable economic activities. On humanitarian and health grounds alone there is need to bring a speedy end to a situation in which the arduous task of water-carrying is left to the very old and the very young, neither of whom are physically matched to the task and are thus placed at risk of injury. The only factors which stand between the consumers of the water and water-borne diseases is their canniness in drawing water selectively and their remarkable natural resistance.

There is a case for irrigation for gardens adjacent to homesteads in already-nucleated settlements such as Gcinisa or the more concentrated sections of Gwabeni such as Nala and the new sites on the Outspan. It would also be an extension of domestic reticulation, at little extra cost yet with excellent prospects of success in this region of weak community-wide cooperation but increasingly flexible and motivated households.

Other prospects for sustainable development

While the gardening needs of Gwabeni and Gcinisa are so similar that they can be discussed together, other prospects for development have to take account of the considerable differences in situation and environment in the two communities.

In the last century the local people in Gwabeni exported fuel wood to Grahamstown. It is only the fact that their former hinterland was annexed first by white farmers and later by the Nature Reserve that prevented them from continuing to exploit this resource. Wood lots on some of the land no longer used for crops or grazing would be a sustainable way of both supplying local needs and generating income by supplying neighbouring settlements. The familiar obstacles of free-ranging browsers, a lack of cooperation beyond households and the shortage of male labour would, however, impede this project as in the other cases. The most practicable way of meeting the fuel needs of households which cannot afford fossil fuels, would be to prevail on the Reserve to improve the access of individuals and groups to the Nature Reserve for the purposes of collecting dead wood.

Indeed, the Nature Reserve as much as any other external agency holds the key to the sustainable development of the Gwabeni community. As noted in chapter 7, there is a whole range of resources besides fuel-wood which can be utilized by the households of Gwabeni without prejudicing the habitat from the point of view of the animals or the conservationists. If eco-tourism continues to expand in southern Africa, the Reserve's expanding infrastructure could offer employment as domestics, game-guards and rangers to the younger men and women of the surrounding villages. The obstacles to this process are not so much practical as ideological, according to Ainslie

(1994) who identifies an entrenched suspicion of and desire to exclude indigenous human inhabitants and neighbours of the reserves which has to be overcome before any meaningful integration of these communities can take place.

One of the anomalies of Gwabeni is that the black-owned Breakfast Vlei Hotel, sited virtually at a main gate to the reserve, has no relationship with it other than supplying the occasional drink to an off-duty game guard. So long as the hotel remains without electricity or reticulated water there are limits to its capacity to exploit the spill-over from the Reserve's tourists. The potential of this historic building with its interesting past and expanding accommodation will have to await the arrival of these services before it can be tapped.

Having been sited on cleared former white farmland, the households of Gcinisa never had access to virgin bush and fuel-wood and other growing resources have always been scarce. The poorest households, which depend the most on what remains of the natural environment for fuel would benefit from wood-lots but, as before, it is hard to see how a community that cannot reliably separate arable from grazing lands keep the goats out of new and vulnerable woodlots where browse is so scarce in the area. Households may have no choice but to continue either purchasing fuelwood or substituting fossil fuels.

Gcinisa is not as physically close to a single site of tourism as Gwabeni is, but it is adjacent to the national road which links several developed, underdeveloped and potential resorts along the coast. If the recovery of the South African economy and the efforts of the regional government to attract tourism create a demand for construction labour and domestic staff Gcinisa will be well positioned to supply them. Increased tourist activity and electrification would also stimulate the production of crafts

aimed at this market as well as making it feasible as a site of industry.

Environmental maintenance

One of the revelations of this study was the extent of knowledge about and concern for the environment among the householders of Gwabeni and Gcinisa. It is a sentiment they share with their new regional government, which is also more committed than hitherto to the ideals of local consultation and accountability, as well as various NGOs. This conjunction offers an opportunity to redress the damage to the environment of the former Ciskei which has been ensuing especially in this century. Until now, the perception, at both government and village levels seems to have been that drought is an unfortunate act of God for which people cannot be prepared. This view inhibits appropriate planning, and has had disastrous consequences in the present drought cycle. Drought, however, is a natural part of the climatic conditions of the region and any planning, at local as well as regional levels, needs to take this into account.

Where drought is endemic, soil conservation is paramount. Where soil erosion has already ensued, as in Gwabeni, comprehensive gully reclamation measures need to be imposed not only at the site of dongas but in the areas uphill, and these areas must be protected from grazing until they have become fully revegetated. The methods implemented by agricultural extension officers in Gwabeni in the past have not been sufficient to halt the erosion.

Whenever soil is removed from sites which are vulnerable to erosion, the ground should be smoothed over and revegetation encouraged. The problem with implementing this solution is that

it requires excluding stock until such time as the revegetation is complete. Where a tradition of unrestricted grazing is in place, and fencing is hard to finance and implement, conservation measures which require this precondition cannot succeed.

The area in which the environment was most respected in Gwabeni and Gcinisa was that of water and its vulnerability to contamination (see chapter 8). At the same time, it was very difficult for the local people to manage successfully the disposal of human waste. In respect of these communities with their chronic shortages of willing male labour it would be worth investigating pit toilet designs which facilitate breakdown of waste matter and therefore last much longer than others. At Masibambane, a development NGO based in Peddie, people can be trained in construction of such a toilet and can then construct them for no more than R200 using local materials.

General

Economic development at the regional and national levels benefiting the migrant diasporas of the two villages and creating new urban employment opportunities will indirectly benefit the villages where the migrants tend to maintain rural homes and economic interests. The change of national and regional government will eventually see the Reconstruction and Development Programme implemented in communities like Gwabeni and Gcinisa and improvements in the provisions for the elderly and their dependents. Beyond such externally-derived initiatives, it is hard to see the residual, demographically-distorted populations which remain in the rural areas of South Africa actively promoting instances of sustainable development in their communities. In Gwabeni and Gcinisa, anyway, the residual population does

not have the capacity in respect of labour, skills and capital to restore field cultivation and any increase in stock farming would destroy the local environment -- unless land rites were extended, in which case the male labour scarcity would be the principal obstacle.

Local aspirations to revive larger-scale agrarian activities would, in all probability, dissolve rapidly if the much more viable enterprise of the already popular home garden were given support along the lines suggested above. Such a policy has to be linked to other dimensions of the modernization of the communities, especially concentration of the settlement pattern closer to transport and services nodes and irrigation linked to water reticulation. Electrification, and the labour savings water reticulation, particularly, would facilitate might make Gcinisa, at least, an attractive proposition for limited industrial development. The coincidence by which both villages find themselves adjacent to areas with tourist potential could see more of their younger members employed in this sector locally rather than working in the civil service or migrating to the cities.

With the advent of democracy and the promise of increased economic growth in South Africa, perhaps Peddie District, which produced the first European-style peasantry (for a time) in Africa, will witness a European-style demise of its peasants:

The peasants and the nation are each other's headaches. A Stalinist solution -- wipe them out or let them die -- is everywhere considered wrong or impractical. There are in all [European] countries sufficient peasants, sufficiently well organised, to make it plain that a total disregard of their problem would bring about national insecurity.

Certainly peasant culture will die. But the peasants themselves are sufficiently robust to ensure that their death will not be a sudden one and will not be too painful... Governments spend large sums of money in attempting to develop the rural areas by improving farming techniques, by consolidating holdings, by encouraging various forms of cooperation, and by promoting the development of industries (including tourism) in the rural areas (Bailey 1971).

Should it materialise in South Africa that scenario would certainly be what the remnant populations of places like Gwabeni and Gcinisa deserve following the generations of hardship dealt them during the periods of colonialism and apartheid. To the extent that the forms of redress associated with the post-peasant complex -- gardening rather than farming, employment in tourism, social pensions -- benefit women as much as or even more than men, women's long-standing subordination in South Africa's black patriarchies would be simultaneously redressed. In Gwabeni and Gcinisa the post-peasant process has already begun. Whether regional and national levels of government will be as nurturing of its post-peasant communities as those of Europe very much depends on the future development of the South African economy and the ANC's recognition or its dependence on the black rural vote in the Eastern Cape.

APPENDICES

Appendix I: Specimen of a Household Survey Schedule

A. GENERAL

I Circumstances of Interview

SCHEDULE NUMBER	
NAME OF INTERVIEWER	
DATE OF INTERVIEW	
LOCATION	GWABENI / NYANISO

II Details of Respondent(s)

NAME		
SEX [M or F] AND AGE [years]		
STATUS IN HOUSEHOLD [head of household, wife, son/daughter, other relative (specify)]		

III Description of Household

1. WHO IS THE OWNER OF THIS HOMESTEAD?

1.1. NAME:	
1.2. CLAN NAME:	

2. WHO BUILT THIS HOMESTEAD? HOW LONG AGO?

NAME	
RELATIONSHIP TO OWNER [if not owner]	
APPROX DATE OF FOUNDING	

3. HOW MANY BUILDINGS MAKE UP THIS HOUSEHOLD? HOW MANY ARE FOR PEOPLE, HOW MANY FOR ANIMALS OR TOOLS OR STORAGE? HOW MANY ROOMS IN THE LIVING QUARTERS?

BUILDINGS...	NUMBER	ROOMS
FOR PEOPLE [living quarters]		
FOR ANIMALS OR STORAGE		

4. PLEASE LIST THE PEOPLE WHO LIVE IN THIS HOUSEHOLD INCLUDING THOSE ADULTS WHO WORK AWAY AND THOSE CHILDREN NOT PRESENT BUT WHO ARE STILL CONSIDERED TO BELONG TO THE HOUSEHOLD

NO.	NAME	WHERE-ABOUTS [CODES]	SEX [M/F]	AGE	ORIGIN [CODES]
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

Codes:

ORIGIN

- 1 = Gwabeni/Nyaniso Location
- 2 = Adjacent location
- 3 = Other Peddie location
- 4 = Other Ciskei location
- 5 = Eastern Cape, RSA
- 6 = Other RSA province
- 7 = Other [specify]

WHEREABOUTS

- 1 = (If adult) lives permanently in village, never elsewhere
- 2 = (If adult) lives permanently in village now, formerly elsewhere
- 3 = (If adult) lives permanently elsewhere, visits village occasionally (once a year or less)
- 4 = (If adult) lives permanently elsewhere, visits village frequently (at least four times a year + holidays)
- 5 = (If child) parents live permanently in village
- 6 = (If child) parents live permanently elsewhere
- 7 = Other [specify]

4. (CONTINUED)

NO.	STATUS [CODE]	SCHOOL [CODE]	WORK OUTSIDE HOME [CODE]	TYPE OF WORK [CODE]	IF UNEM- PLOYED, FORMER WORK [CODE]	IF RETIRED, FORMER WORK [CODE]
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						

Codes:

<p>STATUS</p> <p>1 = Household head 2 = Partner (wife) 3 = Partner (not wife) 4 = Son/daughter 5 = Grandchild 6 = Head's parent 7 = Partner's parent 8 = Head's relative 9 = Partner's relative</p>	<p>WORK OUTSIDE HOME</p> <p>1 = local (in village) 2 = Peddie 3 = Other Ciskei town 4 = Port Elizabeth 5 = East London 6 = Other [specify</p>
<p>EDUCATION</p> <p>1 = No school 2 = Sub A - Std 1 3 = Stds 1 - 5 4 = Stds 6 - 8 5 = Stds 9 - 10 6 = Further education [specify]</p>	<p>TYPE OF WORK</p> <p>1 = Domestic 2 = Agricultural 3 = Mining 4 = Industrial 5 = Education 6 = Clerical 7 = Uniform 8 = Informal 9 = Other [specify]</p>

5. DOES ANYONE IN THIS HOUSEHOLD PLAN TO MOVE PERMANENTLY EITHER WITHIN THIS LOCATION OR AWAY FROM THIS LOCATION AT ANY POINT IN THE NEAR FUTURE?

	INTERNAL MOVE	EXTERNAL MOVE
YES		
NO		
D.K.		

10. IF EXTERNAL MOVE PLEASE SUPPLY DETAILS:

NO.	NAME	PLACE [CODE]

Codes

PLACE	
1 = adjacent location	5 = eastern Cape city
2 = other Ciskei location	6 = other RSA town
3 = other Ciskei town	7 = other RSA city
4 = eastern Cape town	8 = abroad

9. IF MOVING EITHER INTERNALLY OR EXTERNALLY, WHY ARE THEY PLANNING TO MOVE?

NO.	NAME	REASON

IV Household Economy I: Fixed and Moveable Assets

1. DOES THE OWNER OF THIS HOMESTEAD OWN ANY HOUSES/FLATS/SHOPS ELSEWHERE?

YES	NO
-----	----

2. IF YES, PLEASE GIVE DETAILS BELOW:

TYPE OF PROPERTY [shop, house, flat, etc.]	APPROX. VALUE	PLACE

3. DOES THIS HOUSEHOLD HAVE ANY OF THE FOLLOWING ITEMS?

ITEM	YES [CROSS]	NO [CROSS]
FRIDGE		
WASHING-MACHINE		
RADIO		
HI-FI		
TELEVISION		
VIDEO RECORDER		
MOTOR VEHICLE		

4. DOES THIS HOUSEHOLD HAVE ANY DRAUGHT OR FARMING EQUIPMENT BEYOND THE BASIC HAND-TOOLS? [SPECIFY BELOW]

V Household Economy II: Sources of Income

1. WHAT IS THE GROSS MONTHLY INCOME OF EACH BREADWINNER (NOT COUNTING PENSIONERS)? [i.e., before tax, rent or any other deduction]

NO. [from h/h chart]	NAME	AMOUNT [TO NEAREST RAND]
1.		
2.		
3.		
4.		
5.		
6.		
TOTAL		

2. WHAT, IF ANY, IS THE MONTHLY INCOME DERIVED FROM PENSIONS?

TYPE	NO. OF PENSIONERS	R	C
OLD AGE PENSION			
DISABILITY PENSION			
TOTAL			

3. WHAT, IF ANY, IS THE MONTHLY INCOME DERIVED FROM REMITTANCES?

REMITTERS	AMOUNT
1.	
2.	
3.	
4.	
5.	
TOTAL	

4. WHAT ARE YOUR OTHER SOURCES OF INCOME, IF ANY?

ACTIVITIES	APPROX INCOME [RANDS]
AGRICULTURE/STOCK SALES	
HOME INDUSTRIES	
SERVICES	
INFORMAL SECTOR	
OTHER [specify]	
TOTAL	

VI Household Economy III: Expenditure

1. WHAT ARE THE MAIN EXPENSES OF THIS HOUSEHOLD? [E.G. RENT; STAPLE FOODS, OTHER FOODS, ANIMAL FOOD AND FODDER; MEDICINES, DIP, SEED; SCHOOL FEES, BOOKS, UNIFORMS; FURNITURE, CAR REPAYMENTS; FARM EQUIPMENT; RITUALS, HOSPITALITY, SOCIALIZING (ALCOHOL); CLOTHING; CHURCH; TRANSPORT] [See how far you can get before you have to prompt]

ITEM	AMOUNT [RANDS]
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

2. DO ANY MEMBERS OF THIS HOUSEHOLD SUPPORT PEOPLE WHO DO NOT LIVE HERE WITH CASH OR GOODS?

YES	NO
-----	----

3. IF YES, PLEASE SUPPLY DETAILS:

NAME	AMOUNT	RELATION TO HEAD	DESTINATION	FREQUENCY

VII THE GAME RESERVE -- GWABENI ONLY

1. HOW DO YOU FEEL ABOUT THE GAME RESERVE?

VERY NEGATIVE	NEGATIVE	INDIFFERENT	POSITIVE	VERY POSITIVE
---------------	----------	-------------	----------	---------------

ELABORATE:

2. DO YOU DEPEND ON THE GAME RESERVE FOR ANY OF THE FOLLOWING?

VARIABLE	CROSS
EMPLOYMENT	
GRAZING	
HUNTING	
GATHERING FOOD [other than meat]	
GATHERING HERBS [for healing]	
WOOD FOR FUEL	
WOOD FOR BUILDING	
WATER	
OTHER [specify]	

3. IF YOU DEPEND ON THE RESERVE, HOW OFTEN DO YOU GO THERE?

FREQUENCY	CROSS
MORE THAN ONCE A DAY	
ONCE A DAY	
EVERY SECOND DAY	
ONCE A WEEK	
ONCE A MONTH	
LESS THAN MONTHLY	

VIII THE COMMONAGE AND THE COAST -- GCINISO ONLY

2. DO YOU OR OTHER MEMBERS OF YOUR HOUSEHOLD DEPEND ON THE COMMONAGE OR THE COASTLINE FOR ANY OF THE FOLLOWING?

VARIABLE	COMMONAGE	COAST
EMPLOYMENT		
GRAZING		
HUNTING		
GATHERING FOOD [other than meat]		
GATHERING HERBS [for healing]		
WOOD FOR FUEL		
WOOD FOR BUILDING		
WATER		

OTHER [specify]		
-----------------	--	--

3. IF YOU DEPEND ON THE COMMONAGE AND/OR THE COAST, HOW OFTEN DO YOU GO THERE?

FREQUENCY	COMMONAGE	COAST
MORE THAN ONCE A DAY		
ONCE A DAY		
EVERY SECOND DAY		
ONCE A WEEK		
ONCE A MONTH		
LESS THAN MONTHLY		

IX Health

1. WHAT ARE THE HEALTH PROBLEMS, IF ANY, IN THIS HOMESTEAD?

2. HAS ANYONE IN THIS HOUSEHOLD BEEN ILL IN THE PAST YEAR?

NO.	NAME	CONDITION [USE VERNACULAR TERM]

3. WHAT DID YOU DO ABOUT IT? [First time]

NO.	NAME	NOTHING	HOME REMEDY	DIVINER	CLINIC	HOSP

3. WHAT DID YOU DO ABOUT IT? [Second time]

NO.	NAME	NOTHING	HOME REMEDY	DIVINER	CLINIC	HOSP

4. WHAT DID YOU DO ABOUT IT? [Third time]

NO.	NAME	NOTHING	HOME REMEDY	DIVINER	CLINIC	HOSP

5. WHO USUALLY LOOKS AFTER SICK PEOPLE IN THIS HOUSEHOLD?

NO.	NAME

B. GENDER, HIERARCHY AND THE DIVISION OF HOUSEHOLD LABOUR

I DIVISION OF LABOUR BY GENDER AND AGE

1. WHAT ARE THE NORMAL TASKS OR RESPONSIBILITIES ASSOCIATED WITH THE MALES IN THE HOUSEHOLD?

XHOSA	ENGLISH	TASKS/RESPONSIBILITIES
INKWENKWE	BOY	1. 2. 3. 4.
UMFANA	YOUNG MAN	1. 2. 3. 4.
INDODA	MATURE MAN	1. 2. 3. 4.
IXHEGO	OLD MAN	1. 2. 3. 4.

2. WHAT ARE THE NORMAL TASKS OR RESPONSIBILITIES ASSOCIATED WITH THE FEMALES IN THE HOUSEHOLD?

XHOSA	ENGLISH	TASKS/RESPONSIBILITIES
INTOMBI	GIRL	1. 2. 3. 4.
UMFAZANA	YOUNG WIFE	1. 2. 3. 4.
UMFAZI	MATURE WOMAN	1. 2. 3. 4.
IXHEGOKAZI	OLD WOMAN	1. 2. 3. 4.

II

WATER

1.

WHAT IS YOUR PRIMARY SOURCE OF WATER?

SOURCE	YES	NO
STREAMS		
PRIVATE TANK		
COMMUNAL BORE HOLE		
COMMUNAL PONDS		
BUY WATER		

2. PLEASE DESCRIBE WHERE YOU GET YOUR WATER FROM [name of area, stream, dam, pond..]:

RAINY SEASON	DRY SEASON

3. WHAT PROVISION DO YOU MAKE FOR POSSIBLE SHORTAGES OF WATER DURING DRY PERIODS?

PROVISION	DOMESTIC	GARDENS	ANIMALS
DRUMS			
TANKS			
CART			
PIPES			
NOTHING			

4. IF YOU DO NOTHING, OR LESS THAN YOU WOULD LIKE TO DO, WHAT IS PREVENTING YOU FROM MAKING PROVISION FOR DRY PERIODS?

VARIABLE	YES/NO
LACK OF KNOWLEDGE/SKILLS	
LACK OF MONEY	
LACK OF LABOUR	
LACK OF TIME	
AGED	
DISABLED	
OTHER [specify]	

5. WHO IN THIS HOUSEHOLD ARE RESPONSIBLE FOR FETCHING WATER? HOW MANY TIMES A DAY?

NUMBER [get from household chart]	SEX [1 = M, 2 = F]	QUANTITY [LITRES]	TIME TAKEN [MINS]	TIMES PER DAY

6. DO YOU HAVE ANY PROBLEMS IN SUPPLYING YOUR HOUSEHOLD WITH WATER?

1.
2.
3.

7. HOW CAN THESE PROBLEMS BE SOLVED?

1.
2.
3.

III

Fuel

2. WHAT IS YOUR PRIMARY SOURCE OF FUEL? [Indicate what it is used for in the appropriate column]

SOURCE	COOKING	LIGHTING	HEATING
GATHERED WOOD			
BOUGHT WOOD			
PARAFFIN			
GAS			
CANDLES			
GENERATOR			
SOLAR PANEL			
MAINS ELECTRICITY			

2. IF YOU GATHER WOOD FOR FUEL, PLEASE DESCRIBE WHERE YOU GET IT FROM [name of area, direction, where it is near...]:

3. WHO IN THIS HOUSEHOLD ARE RESPONSIBLE FOR FETCHING WOOD-FUEL? HOW MANY TIMES A WEEK?

NUMBER [get from household chart]	SEX [1 = M, 2 = F]	QUANTITY [IN ADULT HEADLODES]	TIME TAKEN [IN MINUTES]	TIMES PER WEEK

4. IS WOOD BECOMING SCARCE AROUND HERE?

YES	NO
-----	----

14. IF YES, WHAT IS YOUR HOUSEHOLD DOING ABOUT IT?

SOLUTION	YES	NO
COLLECT FROM FURTHER AFIELD		
BUY WOOD		
USE ALTERNATIVE FUEL		
PLANT TREES		

15. DO YOU HAVE ANY OTHER PROBLEMS IN SUPPLYING YOUR HOUSEHOLD WITH FUEL?

1.
2.
3.

16. HOW CAN THESE PROBLEMS BE SOLVED?

1.
2.
3.

IV

OTHER NATURAL RESOURCES

1. DO YOU GATHER ANY OF THE FOLLOWING FROM THE ENVIRONMENT?

RESOURCE	Y/N	SELDOM	OFTEN	NEVER
SAPLINGS FOR BUILDING				
GRASS, REEDS FOR THATCHING				
WILD VEGETABLES TO EAT				
ALOE PRODUCTS				
HERBS FOR MEDCINES				
OTHER [specify]				

2. IN CASE(S) OF NO, WHY NOT?

C. CULTIVATION AND ANIMAL HUSBANDRY

I Cultivation

1. HOW MANY FIELDS DO YOU HAVE?

NUMBER:

2. IF NONE, HAVE YOU EVER HAD A FIELD OR FIELDS IN THE PAST?

YES	NO
-----	----

3. IF NO, WHY NOT?

4. IF YES, WHAT HAPPENED TO IT/THEM?

5. IF YOU HAVE ONE OR MORE FIELDS, PLEASE SUPPLY THE FOLLOWING:

FIELD	USED?	ABANDONED?	USED NOW?	LAST USED [YEAR]
1.				
2.				
3.				

6. HOW MANY GARDENS DO YOU HAVE?

NUMBER:

7. IF NONE, HAVE YOU EVER HAD A GARDEN OR GARDENS IN THE PAST?

YES	NO
-----	----

8. IF NO, WHY NOT?

9. IF YES, WHAT HAPPENED TO IT/THEM?

10. IF YOU HAVE ONE OR MORE GARDENS, PLEASE SUPPLY THE FOLLOWING:

GARDEN	USED?	ABANDONED?	USED NOW?	LAST USED [YEAR]
1.				
2.				
3.				

11. DO YOU GROW ANY CROPS? DO YOU SELL ANY CROPS?

11.1. CROPS GROWN	11.2 CROPS SOLD
1.	
2.	
3.	
4.	
5.	

12. IF YOU SELL ANY CROPS, WHO DO YOU SELL THEM TO?

13. WOULD YOU LIKE TO HAVE MORE LAND TO CULTIVATE?

YES	NO
-----	----

14. IF YES, WHY?

15. IF NO, WHY NOT?

16. IF YES, HOW DO YOU THINK YOU WILL OBTAIN MORE LAND?

17. HOW DO YOU FEEL ABOUT CULTIVATION?

VERY POSITIVE	POSITIVE	INDIFFERENT	NEGATIVE	VERY NEGATIVE
---------------	----------	-------------	----------	---------------

18. WHY DO YOU FEEL THIS WAY?

19. HOW OFTEN DO YOU USE THE FOLLOWING WHEN CULTIVATING:

AID	NEVER	SOMETIMES	EVERY TIME
MANURE			
COMPOST			
FERTILISER			
INSECTICIDES			

20. IN GENERAL, WHAT ARE THE PROBLEMS WITH CULTIVATING IN THIS AREA?

1.
2.
3.
4.
5.

21. HOW CAN THESE PROBLEMS BE OVERCOME?

1.
2.
3.
4.
5.

II

LIVESTOCK

1. WHAT KINDS OF LIVESTOCK DOES THIS HOMESTEAD HAVE?

TYPE	PRESENT NUMBER
CATTLE	
GOATS	
SHEEP	
PIGS	
DONKEYS	
HORSES	

2. DO YOU HAVE MORE OR FEWER NOW THAN IN THE PAST?

MORE	FEWER
------	-------

3. WHY DO YOU HAVE MORE/FEWER/NO LIVESTOCK?

4. DO YOU THINK THIS HOMESTEAD WILL HAVE LIVESTOCK IN THE FUTURE?

YES	NO	D.K.
-----	----	------

5. WHY DO YOU THINK THIS?

6. IN GENERAL, WHAT ARE THE MAIN DIFFICULTIES AFFECTING LIVESTOCK IN THIS AREA?

1.
2.
3.
4.
5.

7. WHAT DO PEOPLE DO ABOUT THESE PROBLEMS?

1.
2.
3.
4.
5.

Appendix II: Detailed Vegetation Description

The following descriptions related to figure 3.5 and 3.6. Xhosa species names are indicated where these were given by local people.

*Gwabeni*¹

(i) Savanna (S)

The average density of tree is about one per 100m², and most are less than 3m height and branch near ground level. Dominant tree species are *Acacia karroo*, *Maytenus heterophylla* (*umqaqoba*), *Rhus longispina*, and *Scutia myrtina* (*isiphingo*). The bitter aloe *Aloe ferox* and the prickly pear *Opuntia ficus-indica* (*itolofya*) are also common, and *Pteronia incana* has invaded in some areas.

The herbaceous layer consists of more than 95% grass. The common grasses are *Cynodon dactylon*, *Sporobolus fimbriatus*, *Sporobolus africanus*, *Digitaria eriantha*, *Aristida congesta*, *Eragrotis obtusa* and *Eragrotis curcula/chloromelas* - mostly increaser II species (those which increase under heavy grazing pressure due to selective grazing of the more nutritious species). *Panicum* sp., a decreaser, is also found, mainly around the bases of trees where livestock have been unable to graze. This grass composition indicates a degradation of mixed sweetveld in which the nutritious grass *Themeda triandra* (a decreaser species - that is one which decreases under heavy grazing pressures because it is preferred by stock) would be abundant under lower grazing pressure. This is indeed the case in much of the adjacent nature reserve.

(ii) Valley, bushveld, Southern variation (VB)

Most of these trees branch well above ground level and are typically 1-3m in height. Common species include *Maytenus heterophylla* (*umqaqoba*), *Ozoroa Mucranata* (*umphembe*), *Ptaeroxylon obliquum* (*unthathi*), *Euclea undulata*, *Euphorbia tetragona* and *Pappea capensis*. Spekboom (*Protulacaria afra*), a shrub which is thought to be preferred by domestic livestock in this area, is rare (possibly due to a historically high browsing pressure). *Pteronia incana* has invaded the herbaceous layer in patches where the trees have been eliminated, and there is a sparse cover of grass elsewhere.

(iii) Karroid Vegetation (KV)

This is a dwarf shrubland representing 'advanced degradation' of the Southern variation of Valley Bushveld (according to Acocks 1975). The herb layer consists mainly of *Pteronia incana* and *ocoma ciliata*. The grasses have been virtually eliminated and consist mainly of *Cynodon dactylon*, and there is a large amount of exposed soil. *Aloe tenior* occurs at a low density but is conspicuous in some areas. The invasion by karroid subshrubs indicates that the herbaceous cover has been largely removed by herbivores in the past, commonly known as 'overgrazing'. These subshrubs are virtually unpalatable to domestic livestock, and of little benefit in controlling soil erosion.

KA is the same as K, but with *Aloe ferox* being conspicuous (generally at a density of more than 1/100m²).

KB is intermediate between VB and K; with a sparse cover of trees found in Valley Bushveld and a herbaceous layer dominated by *Pteronia incana*.

(iv) Secondary grassland (G)

This occurs in areas which have been cleared of woody vegetation in the past, particularly for cultivation and habitation. The dominant grasses are *Cynodon dactylon*, *Sporobolus fimbriatus*, *Sporobolus africanus*, *Digitaria eriantha* and *Aristida congesta*, once again mostly increaser II species. Careful management is generally needed to return such lands to more productive grazing (F. Hobson, Dohne Agricultural Development Institute, pers. comm.).

Secondary grassland invaded by *Acacia Karroo* (GA) is another variation of the secondary grassland described above. It consists of previously cultivated areas which have been invaded by *Acacia Karroo*. This is a natural process which typically occurs in such areas some years after cultivation has ceased, reflecting an increase in soil nutrients (F. Hobson, pers. comm.) Most of the trees are less than 1m in height and the branches are too narrow to be of much use for fuelwood.

Secondary grassland invaded by Karroid subshrubs (GK); the most common subshrubs are *Pteronia incana* and *Chrysocoma ciliata*. The soil is exposed in about 30% of the area. The grass consists mostly of a sparse covering of *Cynodon dactylon*.

*Gcinisa*²

(i) Grassland

The composition of the grass layer at Gcinisa differs markedly between. The northern parts of the Location and the areas close to the settlement and east of the main road. Area (i) consists of sourveld dominated by *Heteropogon contortus* and *Themeda*

triandra which are decreaser species. Area (ii) includes mixed veld dominated by *Cynodon dactylon*, *Sporobolus africanus* and *Hyperrhenia hirta*. Other grasses common in this area are *Digitaria eriantha* and *Sporobolus fimbriatus*. These grasses are mostly increaser II species.

(ii) Reverine vegetation

This vegetation type is dominated by large trees such as *umqwenye* (*Harpephyllum caffrum*), *umsintsi* (*Erythrina caffra*). Also present are trees locally known as *isiphingo* (*Scutia myrtina*), *umnga* (*Acacia karroo*), *isundu* (*Phoenix reclinata*), *umqaqoba* (*Maytenis heterophylla*) and *ubongisa* (not identified).

Appendix III: Detailed Soil Results

(a) Gwabeni

Site	Depth (mms)	Ph	C%	Salinity Texture	Topsoil Texture	Subsoil Texture	Comments
Nala	700	6.0	6.7	63.6	SC	S	High stone content
Nwqebeba	600	6.6	8.0	50.0	SC	SC	High stone content
Bhobho A	400	6.1	5.0	11.2	SCL	SL	
Bhobho B	400	4.7	6.9	72.2	SL	S	High stone content
Bhobho C	300	6.0	5.4	10.7	SL	S	
Outspan A	400	6.1	3.8	17.4	SL	S	Rocky
Outspan B	200	6.0	13.4	29.0	C	S	Rocky
Donga	1 000	7.0	7.5	21.6	N/A	N/A	

Note: Many Mishap soils were found but were not sampled.

(b) Gcinisa

Site	Depth (mms)	Ph	C%	Salinity (ms/m)	Topsoil Texture	Subsoil Texture	Comments
East of Main Road	400	5.8	2.6	10.7	SL	SCL	Westleigh
Near Settlement	450	3.9	2.9	8.0	S	CL	Westleigh
In Settlement	400	6.0	3.7	15.9	S	CL	Westleigh
West of Main Road	250	7.4	7.8	80.1	C	CL	Ka 1 000
Tributary Side A	800	6.7	4.4	67.5	SCL	C	Ka 1 000
Riverside	800	5.7	1.3	84.2	S	S	
Tributary Side B	800			75.6	S	S	

Note: Westleigh soil type was found in numerous other sites as well; Riverside soil type was found in a strip of < 100m on either side of the Nyulutsi river.

Appendix IV: Land Capability Classifications³

(a) Gwabeni

Area	Soil Capacity Class	Soil/Terrain Limiting Factors	Climatic Rating	Land Capability Order
Outspan and Bhubho ridgetop	2-5	Shallow effective depth.	C4	B ¹ - C
Other ridgetops	5	Mechanical limitations (stones)		C
Valley slopes	5-8	Erosion hazard Shallow effective depth. Mechanical limitations (stones)		B ²

(b) Gcinisa

Area	Soil Capability Class	Soil/Terrain-Limiting Factors	Climatic Rating	Land Capability Order
River flood-plain	2	Flood hazard (rare)	C4	B1 - C
Other	4	Shallow effective depth. Poor internal drainage	C3	B3

Key to Land Capability Order

- A Arable, high potential land with few limitations
- B Arable land with moderate to severe limitations
- C Grazing and forestry land (non-arable)
- D Non-agricultural land
- 1 Small areas could be of high potential (A) under irrigation
- 2 High potential arable land (A) under irrigation
- 3 Not suited to irrigation

Appendix V: Veld Condition Assessments⁴**(a) Gwabeni**

Site	Veld Condition Score (%)	Grazing Capacity (Ha/LSU5)
Bhobho north	10	62
Bhobho central	35	9
Bhobho south	28	11
Outspan A	56	11
Outspan B	56	11
Nqwebeba	18	17

(b) Gcinisa

Site	Veld Condition Score (%)	Grazing Capacity (Ha/LSU)
East of Main Road A	32	9
East of Main Road B	51	6
Near settlement	36	8
North-western corner	40	7
Eastern corner	85	2
North of Eliphezulu dam	90	3
Northern corner	83	2

Appendix VI: Current Costs of rainwater Tanks and Accessories

(a) Rainwater Tanks, by Type, Volume and Price

Tank Volume (Litres)	Asbestos (Rands)	Galvanised (Rands)
900	632	400
1 350	934	516
2 250	1 262	633
2 700	N/A	720
3 600	N/A	925
4 500	2 229	1 043
6 750	N/A	1 550
9 000	N/A	6 099

(b) Accessories, by Type and Price

Accessory	Asbestos (Rands)	Plastic (Rands)
Gutters (125mm by 1.8m)	128.45	N/A
Gutters (125mm by 4.5m)	N/A	165.61
Downpipe (100mm by 0.9m)	23.50	N/A
Downpipe (125mm by 2.0m)	N/A	28.90
Stop end	3.55	3.04
Central nozzle	13.75	10.29
Gutter brackets	2.51	3.04
Downpipe brackets	5.20	3.09
Filter system	7.99	7.99

ENDNOTES

1. See fig. 3.5, chapter 3.
2. See fig. 3.6, chapter 3.
3. Following Scotney *et al.* (1991).
4. The method is described in Beckerling *et al.* (1993).
5. Large Stock Unit per hectare.

BIBLIOGRAPHY

- Acocks, J**, (1988), "The veld types of South Africa", *Mem. Bot. Surv. S. Afr.* p.40.
- Ainslie, A**, (1994), "Mid-fish river zonal study: An analysis of the relationship between the nature conservation authorities and their neighbours in the Fish River area", ISER, Rhodes University, unpublished report.
- Ainslie, A, Fox, R and Fabricius, C**, (1994), "Towards policies for feasible and sustainable natural resource use: The mid-Fish River zonal study, Eastern Cape", ISER, Rhodes University, unpublished report.
- Bailey, F**, (1971), "Introduction", in Bailey, F (ed) *Gifts and poison*, Blackwell, Oxford.
- Bank, L**, (1993), "Beyond the stereotypes: households, gender and poverty in squatter settlements in the Eastern Cape", ISER, Rhodes University, unpublished Paper.
- Barnes, R**, (1987), "*Invertebrate zoology*", 5th edition, New York, Holt, Rinehart and Winston.
- Bay, E**, (1982), "*Women and work in Africa*", Boulder, Colorado, Westview Press.
- Branch, B**, (1994), "Land management and control in the rural areas of South Africa: A case study of the Peddie District", Rhodes University, unpublished honours dissertation.
- Beckedahl, H, Bowyer-Bower, T, Dardis, G, and Hanvey, T**, (1988), "Geomorphic effects of soil erosion", in Moon, B and Dardis, G (eds), *The geomorphology of Southern Africa*, Johannesburg, Southern Book Publishers.

- Beckerling, A, Mbelu M, Scogings, P, and Trollope, W,** (1993), *Simplified techniques for assessing veld condition for livestock production*, Alice, Fort Hare, University Press.
- Beharia, L** (ed), (1983), *Women and development: the sexual division of labour in rural societies*, New York, Praeger.
- Bekker, S, De Wet, C, and Manona, C,** (1981), "A Socio-economic survey of the Amatola Basin: Interim report", ISER, Rhodes University, Grahamstown.
- Bembridge, T,** (1986), "An overview of agricultural and rural development problems in less developed areas of Southern Africa", *Development Southern Africa* 3, (1), pp. 20-36.
- Bender, D,** (1967), "A Redefinement of the Concept of Household: Families, Coresidence and the Domestic Functions", *American Anthropologist* 63, pp. 493-504.
- Board, C,** (1964), "The rehabilitation programme in the bantu areas and its effect on the agricultural and rural life of the bantu of the Eastern Cape", *South African Journal of Economics*, 32.
- Boonzaier, E and Ramphele, M,** (1988), "The position of African women: Race and gender in South Africa", in Boonzaier, E and Sharp, J (eds), *South African keywords: The uses and abuses of political concepts*, Cape Town, David Philip.
- Boserup, E,** (1970), *Women's role in economic development*, London, George Allen and Unwin.
- Bozzoli, B,** (1983), "Marxism, feminism and South African studies", *Journal of Southern African Studies*, 9, 2, pp. 139-171.
- Branch, B,** (1994), "Land management and control in the rural areas of South Africa: A case study of the Peddie district", Rhodes University, Geography honours dissertation.
- Briscoe, J and De Ferranti, D,** (1989), *Water for rural communities*, Washington, World Bank.

- Bruton, M and Gess, F**, (eds) (1988), *Towards an environmental plan for the Eastern Cape*, Grahamstown, Rhodes University.
- Brydon, L and Chant, S**, (1989), *Women in the Third World: Gender issues in rural and urban areas*, Gloucester, Edward Algar.
- Bundy, C**, (1979), *The rise and fall of a South African peasantry*, London, Heinemann.
- Burgess, R**, (1984), *In the field: An introduction to field research*, London, Allen and Unwin.
- CCWR** (Computing Centre for Water Research), Pietermaritzburg -- database of climatic records.
- Charton, N** (ed), (1980), *Ciskei: Economics and politics of dependence in a South African homeland*, London, Croom Helm.
- Chappell, C.A. and Brown, M.A.** (1993), "The use of remote sensing in quantifying rates of soil erosion", *Koedoe*, 36 (1).
- Charlton, S**, (1984), *Women in Third World development*, Boulder, Colorado, Westview Press.
- Christopher, A**, (1982), *South Africa*, London, Longmans.
- Ciskei Dept of Agriculture and Forestry**, (1994), *National soil conservation strategy*. Vol 1.
- Ciskei Commission** (1980), *The Quail report*, Pretoria, Conference Associates.
- Cleaver, F and Elson, D**, (1995), "Women and Water Resources: Continued Marginalisation and New Policies", *Gatekeeper Series* No. 49, London, International Institute for Environment and Development.
- Cook, G**, (1980), "Ciskei towns, an integrated system?" in Fox, R and Daniel, J (eds), *50 years of geography at Rhodes University: Essays in honour of J. V.L. Rennie*, Grahamstown, Rhodes University.

- Cross, C**, (1991), "Informal tenants against the state: Landholding systems in African rural areas", in De Klerk, M (ed), *A harvest of discontent. The land question in South Africa*, Cape Town, IDASA.
- Danckwerts J. and Teague W**, (1989), *Veld management in the Eastern Cape*, Pretoria, Dept. Agriculture and Water Supply.
- Daniel, J and Webb, N**, (1980), "The image of agriculture in two Ciskeian rural communities", in Charton.
- De Lange, A, Van Averbeke, W, Sonandi, A, Lesoetsa, T, Witbooi, W and Mei, P**, (1994), "A description and analysis of the soils and climate and the agricultural land use systems", *Lower Fish River Zonal Study*, Alice: ARDRI.
- Deliwe, D, Mantla, Z and Mthetho, M**, (1994), "Household economies in the Fish River area", ISER, Rhodes University, unpublished paper.
- De Wet, C**, (1987), "Betterment planning in South Africa: some thoughts on its history, feasibility and wider policy implications", *Journal of Contemporary African Studies*, 6 (1-2).
- _____, (1989), "Betterment planning in a rural village in Keiskammhoek, Ciskei", *Journal of Southern African Studies*, 15 (2).
- _____, (1991), "Some socioeconomic consequences of villagization schemes in Africa and the future of 'betterment villages' in the 'new South Africa", *Development Southern Africa*, 8 (1).
- Department of Water Affairs**, (1986), "Management of the water resources of the Republic of South Africa", Hydrological Sciences *Symposium Proceedings*, 2.
- Deshingkar, P**, (1994), "Integrating gender concerns into natural resource policies in South Africa", unpublished

report, LAPC/World Bank/BITS Project on Natural Resource Management.

- Development Bank of Southern Africa** (1985), *Ciskei development information*, BBSA, Sandton.
- Due, J.** (1982), "Constraints to women and development in Africa", *Journal of Modern African Studies*, 20 (1), pp. 155-166.
- Els, W., et al.**, (1971), *The Ciskei - A Bantu Homeland: A general survey*, Alice, Fort Hare University Press.
- Engelbrecht, H, Fincham, R, and Selvan, D.** (1978), "Health facilities and socio-economic aspects of disease in the Ciskei region", Working Paper, Conference on the Economics of Health Care in Southern Africa.
- Erasmus, J.** (1991), *Economic and social memorandum. Region, D DBSA*, Halfway House.
- Erwee, J, and Radder, L.**, (1984), *A Socio-economic/demographic profile based on the 1980 population census*, Institute for Planning and Development, University of Port Elizabeth.
- Fabricius, C.** (1994), "The relations between land management and biodiversity -- comparing commercial and communal livestock farming to nature conservation in the mid-Fish River valley", ISER, Rhodes University, unpublished Report.
- Fabricius, M and McWilliams, J.** (1991), *Population development survey of five magisterial districts in the Republic of the Ciskei*, Port Elizabeth, Institute for Planning Research.
- Fabricius, C, Palmer, A.R. and Burger, M.** (1994), "Satellite images, landscape patchiness and land use in the Great Fish River valley", unpublished Report, Cape Nature Conservation, Eastern Cape Region.
- Freeman, C.** (1981), "An assessment of the territorial

- development of the Ciskei with special reference to independence", Rhodes University, unpublished honours dissertation.
- Fortes, M,** (1949), *The Web of kinship among the Tallensi*, London, OUP.
- Fox, J,** (1972), *Viruses in water*, Oxford, Blackwell Scientific Publications.
- Fuggle, R and Rabie, M,** (1992), *Environmental management in South Africa*, Juta & Co.
- Godden, G,** (1978), *Ciskei problem statement, Ciskei development conference*, Zwelitsha, Ciskei.
- Goody, J,** (1958), *The developmental cycle in domestic groups*, Cambridge, CUP.
- Goudie, A,** (1986), *The human impact on the natural environment*, Cambridge, Mass, the MIT Press.
- Guyer, J,** (1981), "Household and community in African studies", *African Studies Review* 24:87-137.
- Hall, S, Prins, F and Kay, N,** (1994), "Don't call them mongrels", *Farmer's Weekly*, 4 February 1994.
- Hammel, E,** (1972), "The Zadruga as process", in Laslett, P and Wall R (eds), *Household and family in past time*, Cambridge, CUP.
- Hammond-Tooke, W D,** (1975), "The symbolic structure of Cape Nguni cosmology", in Whisson, M and West, M (eds), *Religion and social change in Southern Africa*, Cape Town, David Philip.
- _____, (1985), "Descent groups, chiefdoms and South African historiography", *Journal of Southern African Studies*, 11 (2).
- Hartmann, M,** (1988), "The soils of the Eastern Cape", in Bruton M, and Gess, F (eds), 1988, *Towards an environmental plan for the Eastern Cape*, Grahamstown, Rhodes University.

- Hill, Kaplan, Scott.** (1991), *Ciskei national water development plan*, Project 14133-3331, Hill, Kaplan, Scott, Bisho.
- Hirschmann, D.** (1994), *Urban women and civil society in the Eastern Cape*, ISER, Rhodes University, Development Studies Working Paper No. 63.
- Holbrook, G.** (1992), "The social structure of an irrigation scheme", unpublished M A dissertation, Rhodes University, Grahamstown.
- Hugo, W.** (1977), *Pharmaceutical microbiology*, Oxford, Blackwell Scientific Publications.
- ISAS.** (1991), "Women, households and environmental change: A proposal for regional research in Southern Africa", Institute of Southern African Studies, National University of Lesotho.
- Johnson, M and Keyser, A.** (1976), *Explanatory notes: 1:250 000 Geological Series*, 3226 King Williams Town, Pretoria, Government Printer.
- Joubert, S.** (1982), "A monitoring programme for an extensive national park", in Owen-Smith, R (ed), *Management of large mammals in African conservation areas*, Pretoria, Haum.
- Kerton-Johnson, O.** (1994), "An examination of the settlement patterns in the lower Fish River area", Rhodes University, unpublished Geography honours dissertation.
- Kirby, P.** (1960), "The history of Peddie District before 1848", in Bullock, J (ed), *Peddie settlers' outpost*, Grahamstown, Grocott and Sherry.
- Kopke, D.** (1988), "The climate of the Eastern Cape", in Bruton and Gess (eds).
- Kotze, D., et al.**, (1985), *Balanced development in South Africa*, Pretoria, Human Sciences Research Council.

- Laslett, P.** (1969), "Size and structure of the household in England over three centuries", *Population Studies* 23, pp. 199-223.
- Letsoala, E.** (1988), *Land reform in South Africa*, Johannesburg, Skotaville.
- Loutfi, M.** (1980), *Rural women: Unequal partners in development*, Geneva, ILO.
- Loxton R.F, Venn and Associates**, (1979), *Lower Fish River irrigation project*, vol. 2. Loxton, Venn and Associates Ltd, Ciskei.
- MacNeillie, G.** (1994), "The past, present and future living conditions and resource use of two villages in the Tyefu region of the Ciskei", Rhodes University, unpublished Geography honours dissertation.
- Magewu, N.** (1994), "An investigation into the viability of subsistence agriculture in the Tyefu area (Mankone) --Peddie", Rhodes University, unpublished Geography honours dissertation.
- Maaren, H.** (1987), "Application of remote sensing and image processing in hydrology and water management: Preliminary experience and a glance in the future", *Hydrological Sciences Symposium Proceedings*, Vol 2.
- Mare, G.** (1980), *African population relocation in South Africa*, Johannesburg, SAIRR.
- Mbangata, M, O'Connell, M and Johnson, C.** (1982), *Imifino*, Umtata, Transkei Appropriate Technology Unit.
- McAllister, P.** (1979), "The rituals of labour migration among the Gcalecka", Rhodes University, unpublished M A dissertation.
- _____, (1986), "The impact of relocation on social relationships in a 'betterment' area in Transkei", *Development Southern Africa*, 3.

- _____, (1987), "Xhosa beer drinks and their oratory", Rhodes University, unpublished Ph D dissertation.
- _____, (1989), "Resistance to 'betterment' in the Transkei: A case study from Willowvale district", *Journal of Southern African Studies*, 15 (2).
- McCracken, J, Pretty, J and Conway, G**, (1988), *An introduction to rapid rural appraisal for agricultural development*, London, Institute for Environment and Development.
- Michalek, J, Wagner, T, Luczkovich, J and Stoffle, R**, (1993), "Multispectral change vector analysis for monitoring coastal marine environments", *Photogrammetric Engineering and Remote Sensing*, vol. 59, No. 3.
- Moock, J** (ed), (1986), *Understanding Africa's rural households and farming systems*, Boulder, Colorado, Westview Press.
- Moodie, D**, (1992), "Town women, country wives: Migrant labour, family politics and housing preferences at Vaal Reef Mines", *Labour, Capital and Society*, 25.
- Moser, C and Peake, L**, (1987), *Women, human settlements and housing*, London, Tavistock.
- Nelson, N**, (1981), *African women in the development process*, London, Frank Cass.
- Netting, R, Wilk, R and Arnould, E** (eds), (1984), *Households, comparative and historical studies of the domestic group*, Berkeley, University of California Press.
- Norton, P, Burdett, P, Coetzee, K and Palmer, A**, (1984), *Handbook of standardised monitoring techniques for Cape nature reserves*, Cape Town Department of Nature Conservation.
- Ortner, S and Whitehead, H**, (1981), *Sexual meanings: The cultural construction of gender and sexuality*, Cambridge, CUP.

- Page, D** (ed.), (1979), *Strategy and guidelines for the physical development of the Republic of Ciskei*, Vol 2. Institute for Planning Research, University of Stellenbosch.
- Page, D**, (1978), *A National plan for the Ciskei. Ciskei Development Conference*, Zwelitsha, Ciskei.
- Palmer, A, Crook, B and Lubke, R.** (1988), "Aspects of the vegetation dissertation.
- Palmer, A and Avis, A,** (1994), *The description, mapping and evaluation of recent change in the contemporary vegetation patterns*, Land and Agriculture Policy Centre, Mid-Fish River Zonal Study.
- Pardy, B** (1994), "Sustainability: an ecological definition for the Resource Management Act 1991 (1993)", 15. *New Zealand's University Law Review* 351.
- Patel, L,** (1992), *Restructuring social welfare: Options for South Africa*, Johannesburg, Ravan.
- Peckham, B,** (1994), "Mid-Fish River zonal study: Legal aspects", unpublished report
- Peires, J,** (1981), *The House of Phalo*, Johannesburg, Ravan Press.
- , (1989), *The dead will arise: Nogqawuse and the great Xhosa cattle-killing movement of 1856-7*, Johannesburg, Ravan.
- Pickup, G and Chewings, V,** (1988), "Forecasting patterns of soil erosion in arid lands from Landsat MSS data", *Int.J. Remote sensing*, 9 (1).
- Platzky, L and Walker, C,** (1985), *The surplus people*, Johannesburg, Raven Press.
- Potgieter, J.,** (1982), *The cost of basic needs of the migrant worker and his family in the national states of Bophuthatswana, Kwazulu, Transkei, and Ciskei as calculated by means of the household subsistence level survey technique.* Institute for Planning Research, University of Port Elizabeth.

- Rail, C**, (1989), *Groundwater contamination*, New York, Technomic Publishing Company, Inc.
- Ramphela, M**, (ed.), (1994), *Restoring the land: environment and change in post-apartheid South Africa*, Johannesburg, Panos.
- Ramphela, M and Boonzaier, E**, (1988), "The position of African women: race and gender in South Africa", in Boonzaier, E and Sharp J (ed), *South African keywords: the uses and abuses of political concepts*, Cape Town, David Philip. Republic of Ciskei, (1984/85), *Department of Agriculture and Forestry: Annual Report*.
- Richings, T**, (1980), "The Ciskei constitution", in Charton (1980).
- Ritchie, J, Spraberry, J and McHenry, J**, (1974), "Estimating soil erosion from the redistribution of fallout", *Soil Sci. Soc. Am. Proc.*, 30.
- Robinove, C**, (1982), "Computation with physical values from Landsat digital data", *Photogrametric Engineering Remote Sensing*, 481.
- Rodda, A**, (1991), *Women and the environment*, London, Zed Books.
- Rothstein, F**, (1983), "Women and men in the family economy: an analysis of the relations between the sexes in three peasant communities", *Anthropological Quarterly*, 56, 1.
- Rowntree, K**, (1994), *Water resources, Lower Fish River zonal study*, Rhodes University, Grahamstown.
- Sabins, F**, (1982), *Remote sensing: principles and interpretation*, San Fransisco, Freeman and Co.
- Sansom, B**, (1974), "Traditional economic systems", in W.D. Hammond-Tokke (ed), *The Bantu-speaking peoples of Southern Africa*, London, Routledge and Kegan Paul.
- Saphire, H**, (1992), "Politics and protest in shack settlements of the Pretoria-Witwatersrand-Vereeniging Region, South

- Africa, 1980-1990", *Journal of Southern African Studies*, 18 (3).
- Scotney, D, Ellis, F, Nott R, Taylor, K, Van Niekerk, B, Verster, E, Wood, P**, (1991), *A System of soil and land capability classification for agriculture in South Africa*, Agriculture and Environment Affairs.
- Segar, J**, (1992), "Health care at the village level: Ciskei and Transkei", *Journal of Contemporary African Studies*, 11 (2).
- Shiva, V**, (1988), *Staying alive: women, ecology and development*, London, Zed Books.
- Schumacher, E**, (1977), *Small is beautiful: A study of economics as if people mattered*, London, Abacus.
- Smith, R and W.L. Stamey**, (1965), "Determining the range of tolerable erosion", *Soil Science*, 100
- Stanier, R, Doudoroff, M and Adelberg, E**, (1958), *General microbiology*, London, Macmillan.
- Surplus People Project**, (1983), *Forced removals in South Africa: Volumes 1-5 of the Surplus People Project Report*, CapeTown, SPP.
- Switzer, L**, (1993), *Power and resistance in an African society: The Ciskei Xhosa and the making of South Africa*, Pietermaritzburg, University of Natal Press.
- Tanser, F**, (1994), "The use of satellite imagery in mapping soil erosion status in the Breakfast Vlei area with a view to optimal environmental management", Rhodes University, unpublished Geography honours dissertation.
- Troeh, F**, (1980), *Soil and water conservation for productivity and environmental protection*, Englewood Cliffs, N J, Prentice-Hall.
- Van Vlaenderen, H and Nkwinti, G**, (1993), "Participatory research as a tool for community development", *Development South Africa*, 10 (2).

- Venn, A**, (1978), *Regional planning for community development with particular reference to strategy for the rural sector as adopted in the Ciskei*, Ciskei Development Conference, Zwelitsha, Ciskei.
- Vos, A**, *South African water law*, Cape Town, Juta.
- Walker, C** (ed), (1990), *Women and gender in Southern Africa*, Cape Town, David Philip.
- Watson, J**, (1977), "Introduction", in Watson, J (ed), *Between two cultures: Migrants and minorities in Britain*, Oxford, Blackwell.
- Weaver, A**, (1989), "Soil erosion rates in the Roxeni basin, Ciskei", *South Afr. Geog. Journ.* 71(1).
- Weyland, P**, (1993), *Inside the Third World village*, London, Routledge.
- White, G, Bradley, D and White, A**, (1972), *Drawers of Water*, Chicago, University of Chicago Press.
- Wilk, R and Netting, R**, (1984), "Households: changing forms and functions, in Netting *et al.*
- Wilson, F**, (1972), *Migrant labour in Southern Africa*, Johannesburg, SPROCAS.
- Wolf, E**, (1983), *Europe and the people without history*, Berkeley, University of California Press.
- Yawich, J**, (1981), *Betterment: The myth of homeland agriculture*, Johannesburg, SAIRR.
- Youthed, J**, (1994), "A spatial and temporal analysis of rainfall in the lower Fish River area", ISER, Rhodes University, unpublished Geography honours dissertation.
- Zolnerzack, B**, (1962), *Zwischer's textbook of microbiology*, Englewood Cliffs, N J, Prentice-Hall.

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It is hoped that the report will draw attention to the plight of the neglected rural communities in South Africa and elsewhere.

About the author and researchers:

Robin Palmer is a Senior Lecturer in Anthropology. He has conducted rural research in Italy and South Africa. The team of researchers from Rhodes University, Grahamstown, South Africa were *Dumisani Deliwe*, an anthropologist and a very experienced researcher with interest in herding, agriculture and gardening; *Karen Higginbottom* a zoologist with a strong interest in human ecology; *Andrew Ainslie* and *Michelle Cocks* who have honours degrees in Anthropology; Michelle was most interested in women's tasks and the role of the environment in health and healing; and *Nicky Motteux* is a graduate who has majored in Anthropology and Geography.



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