



182968931F

Developing and supporting nutrition in two kinds of isolated communities

Catherine Payze • Sam Pretorius

Centre for Sociopolitical Analysis
Human Sciences Research Council
Pretoria

Human Sciences Research Council
134 Pretorius Street
0002 Pretoria

1997

ASS/BBS-60



© Human Sciences Research Council, 1997

The HSRC Co-operative Research Programme: Affordable Material Provision is situated within the Group: Social Dynamics. One of the emphases of the programme is to investigate ways of establishing infrastructure and amenities that are simultaneously affordable to many people and constitute an efficient investment of national resources.

This report describes two investigations into ways in which isolated communities obtain food and how they could obtain it more easily.

The HSRC does not necessarily agree with all the conclusions reached by the authors.

HSRC Co-operative Research Programme: Affordable Material Provision

Series editor: *Ina Snyman*

ISBN 0-7969-1723-X

HSRC No.: 97/EMMMCC

Published by the HSRC, Pretoria

Obtainable from:
HSRC Publishers
Private Bag X41
PRETORIA
0001

Tel.: (012) 302 2004/2014/2912
Fax: (012) 302 2891

RGN BIBLIOTEEK 7 MAR 1997	
HSRC LIBRARY	
CALL NUMBER	ACCESSION NUMBER
001.30720 68 HSRC ASS 60	8097790

EKSERP

Die navorsing waarop hierdie verslag gebaseer is, het uit twee afsonderlike projekte bestaan. Een hiervan is hoofsaaklik in 'n landelike gebied uitgevoer waar voeding onvoldoende is te midde van volop voedsel en groot voorspoed in die nabygeleë bewaringsgebiede.

Die ander projek is uitgevoer in 'n stedelike gebied waar konflik hoogty gevier het, en dit mense se vermoë om te werk of werk toe te gaan en voedsel te bekom belemmer het. Oplossings soos voedselhulp, selfhelptuinery en infrastruktuurskeping word bespreek.

ABSTRACT

The research on which this report is based consisted of two separate projects. One was carried out mainly in a rural area where nutrition was insufficient amid an abundance of food and great prosperity in the nearby conservation areas. Important recommendations are made on ways in which parks and game reserves can be brought in greater harmony with the people in their immediate environment.

The other project was carried out in an urban area where conflict was the order of the day, and this influenced people's ability to work or go to work, and to obtain food. Solutions such as nutritional assistance, self-help gardening and the creation of infrastructure are discussed.

RECEIVED
1980
1980

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	1
I. GENERAL INTRODUCTION	3
II. MEETING THE NUTRITIONAL NEEDS OF ISOLATED URBAN COMMUNITIES	5
INTRODUCTION	5
SKETCHING THE CONTEXT	9
High levels of violence: a thing of the past?	9
Nutritional status of hostel residents	9
MEETING NUTRITIONAL NEEDS	10
Examining the existing infrastructure	10
Food aid	10
The informal sector: <i>spaza</i> shops	14
The formal sector: shops	15
Vegetable gardens	15
IMPROVING THE EXISTING INFRASTRUCTURE	15
Food aid	15
Expanding vegetable gardening projects	16
CONCLUSION	16
REFERENCES	17
APPENDIX: QUESTIONNAIRE	19
TABLES	
1 Department of Health minimum requirements vs O'Connor Foundation contributions	11
2 Grouped minimum requirements vs O'Connor Foundation contributions	12
3 Department of Health minimum requirements vs O'Connor Foundation contributions (one male and one female aged 25-50 and two children aged four to six over 60 days per food parcel)	13
4 Grouped minimum requirements vs O'Connor Foundation contributions	13

	Page
III. NATURE CONSERVATION AS RESOURCE CONSERVATION AND THE PROVISION OF NUTRITIONAL AND SOCIAL INFRASTRUCTURE	21
INTRODUCTION	21
RESEARCH DESIGN	21
Research problem	21
Aims of the research	21
Concise description of the research design	22
QUALITATIVE RESEARCH METHODS FOLLOWED	22
FOCUS OF THIS CHAPTER	22
CONTEXTUALISATION OF THE PROJECT	23
STRATEGIES USED TO ATTAIN CO-OPERATION	25
NEIGHBOUR RELATIONS DEVISION (NRD)	25
The permaculture project	27
The water committee	27
The environmental education centre	28
"Outside" assistance	28
POSITIVE INTERACTION	30
START OF RELATIONS	30
Organisational relations	30
Personal relations	31
MUTUAL BENEFIT FROM INTERACTION	34
THE CATTLE-GAME PROJECT	34
INFRASTRUCTURE ASSISTING IN THE IMPROVEMENT OF NUTRITIONAL STANDARDS	36
PERMACULTURE	36
OTHER PROJECTS	37
Cattle-game project	37
Candle making	37
Fencing project	37

SHORTCOMINGS AND NEGATIVE INTERACTION	39
IGNORING PROTOCOL	39
PERSONAL CAPACITIES VERSUS ORGANISATIONAL STRUCTURES	39
CONCLUSION	41
REFERENCES	42
APPENDIX	45
Qualitative methods	45
Qualitative interviewing	45
Standardised versus informal/non-directive interviewing	45
Sampling	47
Analysis	48
FIGURES	
Strategies used to attain co-operation	29
Positive interaction	33
Benefiting mutually from interaction	35
Material benefits and nutrition	38
Negative interaction	40
IV. GENERAL CONCLUSIONS	49

EXECUTIVE SUMMARY

In the context of the general standard of living in South Africa in the 1990s, there is an ever-increasing need to provide sustainable nutritional infrastructures within different communities. This need seems to become even more accentuated within communities that are subject to isolation in one form or another. Against this background, a research project was formulated, aimed at investigating the existing nutritional infrastructures in two different types of isolated communities. The research project was undertaken by the authors during 1994 and 1995 in the form of two case studies.

MEETING THE NUTRITIONAL NEEDS OF ISOLATED URBAN COMMUNITIES

The first study makes practical suggestions on improving existing ways of providing nutritional requirements to communities. This is essentially a *treatment of symptoms* approach, meaning that the larger system (in this case South African societal structures) in which nutrition plays only a minimal part as a sub-element of poverty, is not challenged. Rather, this system is reinforced by providing possibilities for relief of only some of the effects of one element within the system (poverty), thereby legitimising the current composition of the system although it is, in effect, harmful to many of the people living within it. However, in many ways, there seems to be no alternative to this approach at this time.

Despite the negative effects of formulating microlevel interventions rather than macrolevel interventions, and thereby legitimising a system that is essentially harmful to its users, it is unfortunately also true that the very lives of those users often depend on it. It is against this background, therefore, that practical suggestions for improving existing nutritional infrastructures are provided in the first case study of this report.

Two models of intervention emerged from the research which are viable in improving the provision of nutritional products to poor communities who have become isolated, due to high levels of violence. While the first model indicates a systematic intervention on national level, the second indicates a subsystematic intervention on the level of malnutrition only. The first intervention can treat a variety of causes and related causes; the second only some of the effects. However, as indicated earlier, since funding for nutrition is more likely to decrease than to increase, the second model remains vital in sustaining and improving the lives of those people dependent on it.

NATURE CONSERVATION: RESOURCE CONSERVATION AND THE PROVISION OF NUTRITIONAL AND SOCIAL INFRASTRUCTURE

The research done in this area noted that conserving nature and natural resources also benefits communities. However, if this is to be attained, effective channels of communication are essential.

By paying specific attention to their neighbour relations the KaNgwane Parks Corporation (KPC) has been able to assist the communities surrounding their (both the KPC's and the communities') nature reserves to truly benefit from their interaction. As a result of this positive interaction, small but effective development programmes could be (and are being) implemented, thereby increasing the self-

sufficiency of these communities, which in turn impacts positively on their nutritional standards.

Care must, however, be taken that the expertise of people involved in initiating and implementing such development programmes is successfully carried over to other capable persons. This will ensure that the success of development programmes is not dependent upon the particular capabilities of individuals. Care must also be exercised to ensure that the information gathered concerning local communication protocol, is adhered to by all who are involved with the community in a developmental capacity.

In this study therefore (in contrast to the first study), the position was taken that any system, regardless of its size or structural constitution, or the perceived legitimacy that keeps it intact, can be challenged or altered, at least in theory. It was with this in mind that a study was envisaged that could result in an effective challenge and subsequent alteration of the existing system (societal structures). The practical implications of an effective challenge of this nature would, in effect, mean an intervention on the level of the larger system (in this case directed at the *causes of poverty*), which would alter the system (preferably) without damaging other elements or the relationships between elements within the system.

It is hoped that some lessons can be abstracted from the content of this case study, and the processes concerned successfully reapplied elsewhere.

I. GENERAL INTRODUCTION

In the context of the general low standard of living in South Africa in the 1990s, there is an ever-increasing need to provide sustainable nutritional infrastructure in different communities. This need seems to become even more accentuated in communities that are isolated in one form or another. Against this background, this research project, which aimed to investigate the existing nutritional infrastructure in different types of isolated communities, was formulated.

The research was undertaken by the authors during 1994 and 1995 and took the shape of two case studies. Each of these case studies is presented in a separate chapter and details concerning the practicalities of each study are provided within these chapters. The report concludes with some recommendations, both at the microlevel and the macrolevel.

The aim of the project was essentially twofold. In the first place, practical suggestions on improving existing ways of providing nutritional requirements to communities were envisaged. This is in essence a *treatment of symptoms* approach, meaning that the larger system (in this case South African societal structure) in which nutrition plays only a minimal part as a subelement of poverty, is not challenged. A system whereby aid is given to impoverished communities, without giving them building blocks for bettering their position, is not ideal. However, there currently seems to be no alternative to this approach. Budgets are constantly decreasing, and the Reconstruction and Development Programme (RDP) has to cope with simultaneous demands from a variety of spheres such as land affairs, health, education, etc. In view of these and other factors it seems unlikely that many of the interventions required to treat the causes, rather than the symptoms, will materialise in the near future.

Hence, despite the negative effects of microlevel interventions, and the consequent legitimisation of a system that is essentially harmful to most of its users, it is unfortunately also true that the very lives of those users often depend on microlevel intervention. It is against this background that practical suggestions for improving the existing nutritional infrastructure are provided in the first case study of this report.

In the second place, however, any system, regardless of its size or structure, or the perceived legitimacy that keeps it intact, can be challenged or altered, at least in theory. It was with this in mind that a study was envisaged that could result in an effective challenge and subsequent alteration of the existing system (societal structure). An effective challenge of this nature would mean an intervention at the level of the larger system (in this case directed at the *causes of poverty*), which would alter the system (preferably) without damaging other elements or the relationships between elements within the system.

The conservation case study is a good example of such a challenge. It is hoped that some lessons can be abstracted from the content of this case study, and successfully reapplied elsewhere.

II. MEETING THE NUTRITIONAL NEEDS OF ISOLATED URBAN COMMUNITIES

Catharine Payze

INTRODUCTION

The situation in South Africa with regard to malnutrition and poverty is bleak. According to the Bureau for Market Research, 16,4 million people in South Africa were living below the minimum subsistence level in 1989. A conservative estimate indicates that some 18 million people are presently living below the minimum subsistence level. Updated statistics on how many of these people are in need of nutrition intervention are unavailable. By applying anthropometric criteria, the Committee for the Development of a Food and Nutrition Strategy for Southern Africa estimated that 2,3 million people in South Africa were in need of nutritional assistance in 1989. According to UNICEF¹ approximately 15 % of the under-five population are underweight as a result of a short-term shortage of food, and between 30 % and 40 % are stunted, which is an indication of a long-term food shortage (Kloka, 1994:9).

In 1989, South Africa produced enough food to supply double the food energy needs of her residents, yet in the same year between one and two-thirds of all black children suffered from malnourishment (Burger, 1989:75). Many authors have indicated a close relationship between poverty and malnutrition (see, for example, Johnston, 1987; Anon, 1992; Monckeberg, 1992). Furthermore, malnutrition due to poverty not only stunts growth, it also claims lives. In 1989 gastro-enteritis resulting from malnutrition caused one-third of all deaths among black children under the age of five (Burger, 1989:74).

It is becoming more and more obvious that malnutrition cannot be combated by addressing the effects of poverty alone. While interventions such as food enrichment or food parcels, which target the effects of poverty, remain necessary the causes of poverty also need to be addressed before a long-term solution to the problem of malnutrition can transpire. Concerning this, Schuftan (1979a:97) argues as follows:

This traditional approach to the nutrition problem focusing on the individual and his (often medical) problem without giving much consideration to the search of the underlying causes of the problem most often overlooks causes found in such apparently unrelated issues as the end of colonialism, the emergence of political and economic dependency, rapid urbanisation and population growth ... In contrast to this approach to the nutrition problem, others suggest that malnutrition is to be thought of as a biological translation of socio-economic,

1 UNICEF: United Nations Children's Fund

cultural and historical phenomena, being a social disease "par excellence" whose elimination requires a change in a country's entire social, economic and political organisation and choice of development strategy. Those who accept this more holistic approach contend that there are many factors that contribute to malnutrition.

Hence, the long-term solution to malnutrition lies primarily in addressing the causes of poverty and secondarily in addressing the existing effects of malnutrition. However, this solution requires nationally based intervention in economic as well as social policy formulation. In practice this would mean, among other things, more buying power for the poor via raised wages, a reformulated nutritional policy and increased reinvestment in agriculture (Schuftan, 1979a:98; 1979b:30). However, such intervention presupposes successful competition, by those involved in the field of nutrition, for limited national resources in a country heavily burdened by demands geared towards the RDP. In view of this it seems unlikely that the national economy will, at least in the near future, be able to sustain the types of long-term interventions in poverty described above. Hence, ineffective as it may be in the long run, the treatment of malnutrition as a symptom of poverty currently remains necessary.

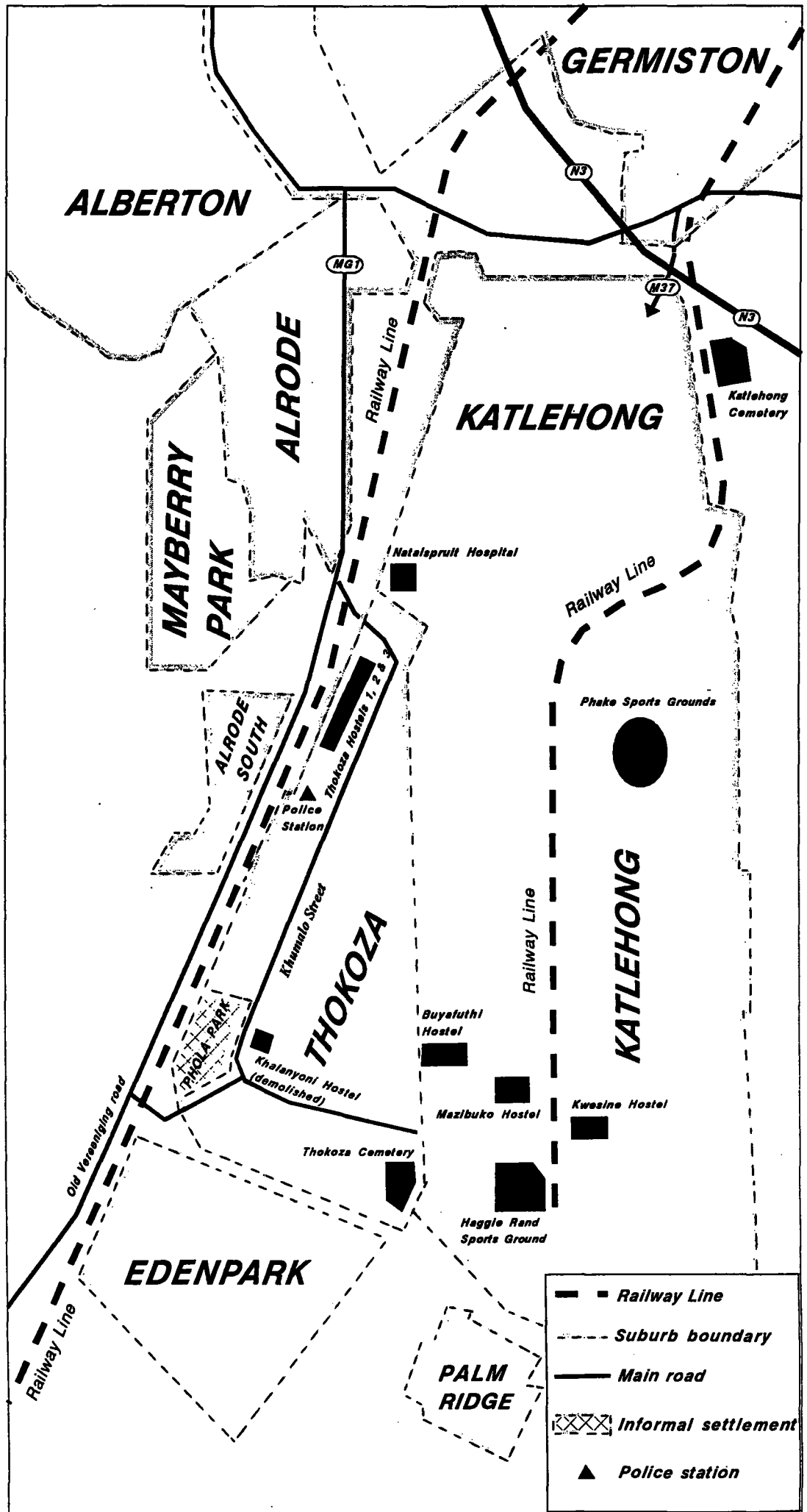
The problems of malnutrition in South Africa are further complicated in some areas by consistently high levels of violence. One such area is Katorus on the East Rand (comprising the Katlehong, Thokoza, Phola Park and Vosloorus areas). Minnaar (1994a:27) traces the beginnings of the violence on the East Rand to 1990 and what he terms the "Reef township war". In examining this war, it becomes obvious that a number of attacks and counter attacks in 1990 led to a division in which the townships became essentially ANC(African National Congress)-aligned, while most of the hostels in the area became IFP(Inkatha Freedom Party)-aligned. This in turn resulted in the creation of many so-called "no-go" areas into which none of the parties could venture without risking their lives. One of these no-go areas was the infamous Khumalo Street, which housed hostels on one side of the street and township houses on the other side. The declaration of Khumalo Street as a no-go area had particularly significant consequences for residents of hostels such as Kwesine, since this street was their main access to their places of employment and, essentially, to the outside world. As the violence continued to escalate, the existing infrastructure also began deteriorating. Of this, Minnaar (1993:68) states:

Public transport came to a complete standstill with taxis refusing to enter any area near a hostel, while the railways discontinued some services to the East Rand after train drivers were threatened. Services to the hostels were also stopped with no delivery vans being allowed through.

The isolation of the hostel residents was further exacerbated by the continuous sabotaging of railway lines which frequently cut off residents' contact with the outside world. The effect of the isolation of Khumalo Street on hostel residents, may be best understood through examining the map of Katorus.

Other areas on the Reef also fell prey to violence, resulting *inter alia* in the isolation of certain sections of communities. Carmichael (1993) describes, for example, the breakdown in community relations and subsequent political violence in

KATORUS AREA: EAST RAND



Alexandra, which led to the KwaMadala (M1) hostel becoming the stronghold of many of those who supported the IFP or still had strong ties with what was then KwaZulu in Natal. On the other hand, those living in the township were essentially ANC-aligned. These groups clashed violently and frequently with each other, while the Internal Stability Unit (ISU) of the South African Police did not seem committed to stopping the violence. Carmichael (1993) states:

Groups and individuals took the law into their own hands in the name of the "right to self-defence". In practice this usually meant indiscriminate attacks followed by indiscriminate retaliation some hours or days later. Snipers might shoot across the border in either direction; or there might be an attack or petrol bombing on a shack or house, or the killing of a person deemed to be in the "wrong" area and thus a "spy" or an "attacker".

The consistent high levels of violence brought with them another complicating factor, namely internal displacees. Minnaar (1994b) describes three categories of internal displacees:

... those hostel residents expelled from the hostels in the first round of violence in mid-1990; Zulu-speaking township residents [or the girlfriends, etc. of hostel residents] who came under attack from the youth and sought refuge in the hostels; and the residents living in houses nearby to the hostels forced out by the hostel residents and the other displacees.

This internal displacement directly impacted on the availability of food. While persons living in the hostels were already experiencing difficulties in acquiring food, they now also had to share what little they had with the constant stream of internal displacees seeking refuge in the hostels.

In view of this a research project was undertaken to investigate the existing infrastructure² of two relatively isolated hostel communities with the aim of illustrating both the positive aspects as well as the shortfalls of this infrastructure. This chapter is concerned with the results of that evaluation. As such, the chapter focuses on some of the factors at play in attempting to meet the nutritional needs of isolated communities, as became evident during the data-gathering and analysis phases of the project. The hostel communities included in this project were those of Kwesine in Katlehong, and KwaMadala in Alexandra. During the course of the project, both hostels were visited and several interviews conducted with residents, as well as with workers and organisations based in the community. Furthermore, fieldnotes were taken and an attempt was made to verify the factual correctness of the data.

A great deal of literature was also consulted to obtain the background information necessary for proper contextualisation of the data. The results of the research process up to this point are given below. Firstly, the context is sketched in terms of the current political background as well as the nutritional status of the communities concerned.

2 For the purposes of this chapter "infrastructure" is defined as those things that make food available to isolated communities. Examples of these are aid schemes and *spaza* shops (informal grocery shops).

Secondly, information about current infrastructure contributing to meeting nutritional needs in the area is presented, followed by some concluding remarks.

SKETCHING THE CONTEXT

High levels of violence: a thing of the past?

In 1995 elation about the historic elections has begun to fade away, exposing the realities of the *new South Africa*. Although the high levels of violence seem to have subsided, memories remain, keeping alive the mistrust and straining a fragile reconciliation process. Carmichael (1993) conveys this most aptly:

It struck me deeply that people in the shacks, and generally on the ground, felt completely empowered to organise for "self-defence" but still desperately lacked a sense of being empowered to make peace.

While this statement pertains to the events of 1992 in Alexandra, the renewed outbreaks of violence before the elections in April 1994 indicate the continued pertinence of violence. Hence it is not surprising that people on the ground have rebuilt their lives by incorporating the mistrust rather than by challenging it.

At Kwesine a road was bulldozed from the back of the hostel, rendering the Khumalo Street access point redundant for all practical purposes. While this increased the safety of hostel commuters, it also increased costs. Taxi fares were more expensive, as were prices at the *spaza* shop. This meant that hostel residents stood to pay more either way, whether in increased cost for food at the *spaza* shop, or cheaper food bought from town but reached via increased taxi fares. In a hostel with high numbers of unemployed, the detrimental effects of either choice on the nutritional status of hostel residents have to be considered.

At KwaMadala there were several *spaza* shops. Furthermore, residents were free to shop at formal shops about 1 km from the hostel premises. Hostel residents seemed to prefer buying on the premises, apparently because it was more convenient. A quick glance at some of the prices charged by the *spaza* shops also indicated that one would not save much by buying elsewhere, especially considering that the taxi fare would need to be added to the total amount spent off premises. The good value for money was in all probability due to the fact that there were several *spaza* shops on the KwaMadala premises that competed for the same clientele.

From the above it is evident that Kwesine as well as KwaMadala residents chose to create the kind of infrastructure that could ensure that their nutritional needs would be met, regardless of whether they were subjected to high levels of violence or not. Hence, although much of the violence subsided in the past year, it remained far from being a thing of the past in the minds of hostel residents and, therefore, also in their construction of reality as expressed in their physical infrastructure.

Nutritional status of hostel residents

Determining the nutritional status of the poor is a process fraught with complications. While the weight-for-age ratio is considered a good indication of nutritional status in children, up-to-date statistics for determining malnutrition in adults are not readily available (Kloka, 1994:9). The general nutritional status of a community can be

abstracted by measuring malnutrition in the form of the incidence of certain diseases. However, enquiries at Natalspruit hospital revealed that current statistics for the incidence of pellagra, kwashiorkor and marasmus, diseases most commonly associated with extreme levels of malnutrition, were not available for the area at that time. Currently the National Nutrition and Social Development Programme (NNSDP) is using socio-economic guidelines to determine the most likely candidates for assistance concerning malnutrition. They are:

- Children from birth to two years of age, especially those at a high risk of developing malnutrition.
- Pregnant women who are not picking up weight satisfactorily, and underweight lactating women.
- Children two to six years of age, especially those in areas inaccessible to support organisations.
- Primary school children six to 13 years of age, including needy children who do not attend school.
- The aged, the chronically ill and the unemployed, especially those with no support and no access to existing aid such as social grants. (Kloka, 1994:9)

All of the above categories were present in the hostels. While some aid for these people did exist, residents and donor organisations alike agreed that it was insufficient.

Upon interviewing some residents about their food intake, the following transpired. Firstly, since many of those living in the hostels were unemployed, they often ate less than the minimum amounts set by nutritionists and the Department of Health (1994). Furthermore, due to factors such as internal displacement, the aid that had originally been intended for one person was frequently shared among whole families. The staple diet of the unemployed persons who were interviewed mostly consisted of grains (such as porridge and bread) and vegetables (morogo, cabbage, spinach) once a day. Water, which was freely available at both hostels, was often the only liquid taken. Where protein formed part of the diet, it was eaten infrequently and usually in the form of chicken or soya. Fruit was also seldom included in the diet.

The diets of employed persons differed considerably, both in quantity and quality. Meals were taken regularly and meat and vegetables were usually included on a daily basis. Red meat as well as chicken were eaten.

MEETING NUTRITIONAL NEEDS

Examining the existing infrastructure

Food aid

It seemed that two organisations, namely the O'Connor Foundation and the South African Red Cross (SARC) mainly provided aid in the area, at least until the April 1994 elections. However, since the elections only the O'Connor Foundation has

continued with the provision of aid. It seems that the SARC stopped providing aid due to funding problems. According to Richard Mollentze, the O'Connor Foundation began providing aid in the form of food supplements in 1959. Since then it has become a seemingly well-established community-driven facilitator that works closely with about 180 grassroots organisations to provide relief to the poor. The O'Connor Foundation is politically non-aligned, and utilises community representatives from various political parties who work side-by-side to combat problems surrounding poverty. This foundation has continuously provided food aid to hostels, especially during periods marked by very high levels of conflict on the Reef, notably 1990-1994. Funding is obtained from various sources, including the NNSDP. Mollentze estimates that the O'Connor Foundation was aiding about 40 000 families daily at the time. The O'Connor Foundation provided food aid both to children in crèches and to unemployed adults.

However, the aid was insufficient, as is shown below. The table below illustrates the amounts and types of food provided by the O'Connor Foundation to unemployed adults on a monthly basis. This compares with the Department of Health's (1994) minimum monthly requirements for adult men (age 25-50). (The original tables of the

Table 1: Department of Health minimum requirements vs O'Connor Foundation contributions

TYPE	MINIMUM	O'CONNOR	
Milk	1 200 g	500 g	41,67 %
Mince/soya	257 g (mince)	250 g dried soya	97,28 %
Fish	279 g	425 g	152,33 %
Chicken	514 g	-	-
Canned beans	1 757 g	500 g (dried)	28,46 %
Eggs	13	-	-
Peanut butter	429 g	410 g	95,57 %
Cabbage	2 571 g	-	-
Pumpkin	2 379 g	-	-
Carrots	900 g	-	-
Potatoes	2 079 g	-	-
Onions	600 g	-	-
Tomatoes	1 350 g	-	-
Maize	5 400 g	2 500 g	46,30 %
Mealie rice	1 800 g	1 500 g	83,33 %
Sugar	1 200 g	500 g	41,67 %
Jam	900 g	-	-
Margarine	600 g	-	-
Bread	8 400 g	-	-
Oil	600 g	690 g	115 %
Coffee	107 g	-	-
Tea	107 g	-	-
Salt	129 g	-	-
Vinegar	86 ml	-	-
Curry	43 g	-	-

Department of Health state weekly requirements that have been divided by seven and multiplied by 30 to obtain the totals presented here.) The proportions that the O'Connor Foundation food provisions form of the Department of Health's minimum requirements are also stated in percentages.

Although Table 1 indicates the proportions of O'Connor Foundation provisions, it may be easier to gain an overview by grouping foods into categories (bearing in mind that different vegetables or proteins, for example, have different nutritional values per unit of weight and cannot, strictly speaking, be grouped together). A concise table of grouped items is presented in Table 2.

According to Mollentze, the food parcels were originally intended to provide one-third of the nutritional requirements of unemployed adults. As can be seen from Table 2, this goal was more or less attained. Nevertheless, several complicating factors need to be considered. Firstly, these food parcels were not intended to provide people with all their dietary requirements. Rather, it was thought that the parcels would alleviate some of the strain of tight budgets, while the bulk of people's dietary requirements would be met via income from piecemeal work. However, piecemeal work was difficult to find, especially as a result of increasing competition for a limited number of jobs. Hence, a parcel intended to provide one-third of a person's dietary requirements often had to meet all of a person's needs. This was of course not possible.

Table 2: Grouped minimum requirements vs O'Connor Foundation contributions

TYPE	MINIMUM	O'CONNOR	
Milk	1 200 g	500 g	41,67 %
Mince/soya/fish/chicken/peanut butter	1 479 g	1 085 g	73,36 %
Vegetables	7 800 g	—	—
Beans	1 757 g	500 g	28,46 %
Eggs	13	—	—
Maize/mealie rice/bread/potatoes	17 679 g	4 000 g	22,63 %
Sugar/jam	2 100 g	500 g	23,81 %
Margarine/oil	1 200 g	690 g	57,50 %
Coffee/tea	214 g	—	—

Secondly, various factors, such as the fact that so many internal displacees were sharing accommodation with hostel residents, caused the same parcel, which was insufficient for one person in the first place, to be shared among a whole family. Furthermore, although some vegetable gardens existed in both hostels, the extent to which these supplemented the daily nutritional intake of residents was not determined), they were physically too small to cater for everyone's needs.

While the O'Connor Foundation in exceptional circumstances provided two parcels to one family each month, financial constraints on the organisation did not allow for this to be commonplace. Instead, according to Mrs Connie Zikalala (a project manager for the O'Connor Foundation and in charge of food distribution at Kwesine hostel), some hostels, including Kwesine, were only supplied with food parcels every second month.

Hence, in order to compare the O'Conner Foundation provisions with the Department of Health minimum requirements, it is necessary to multiply by 60 days the minimum daily requirements of two adults and two children (estimated average family). These figures are illustrated in the following tables.

Table 3: Department of Health minimum requirements vs O'Connor Foundation contributions (one male and one female aged 25-50 and two children aged four to six over 60 days per food parcel)

TYPE	MINIMUM	O'CONNOR	
Milk	9 600 g	500 g	5,21 %
Mince/soya	2 056 g	250 g dried soya	12,16 %
Fish	2 232 g	425 g	19,04 %
Chicken	4 112 g	-	-
Canned beans	14 056 g	500 g (dried)	3,56 %
Eggs	104 g	-	-
Peanut butter	3 432 g	410 g	11,95 %
Cabbage	20 568 g	-	-
Pumpkin	19 032 g	-	-
Carrots	7 200 g	-	-
Potatoes	16 632 g	-	-
Onions	4 800 g	-	-
Tomatoes	10 800 g	-	-
Maize	32 400 g	2 500 g	7,72 %
Mealie rice	14 400 g	1 500 g	10,42 %
Sugar	6 000 g	500 g	8,33 %
Jam	4 800 g	-	-
Margarine	3 900 g	-	-
Bread	33 600 g	-	-
Oil	4 116 g	690 g	16,76 %
Coffee	428 g	-	-
Tea	428 g	-	-
Salt	772 g	-	-
Vinegar	516 ml	-	-
Curry	256 g	-	-

Table 4: Grouped minimum requirements vs O'Connor Foundation contributions

TYPE	MINIMUM	O'CONNOR	
Milk	9 600 g	500 g	5,21 %
Mince/soya/fish/chicken/peanut butter	11 832 g	1 085 g	9,17 %
Vegetables	62 400 g	-	-
Beans	14 056 g	500 g	3,56 %
Eggs	104	-	-
Maize/mealie rice/bread/potatoes	97 032 g	4 000 g	4,12 %
Sugar/jam	10 800 g	500 g	4,63 %
Margarine/oil	8 016 g	690 g	8,61 %
Coffee/tea	856 g	-	-

Bearing in mind that those dependent on food parcels were unemployed, and that the vegetable gardens did not produce sufficiently to cater to the needs of everyone, the situation at Kwesine hostel was bleak. This was exacerbated by the escalated taxi fares and the high prices at *spaza* shops.

As far as children in the hostel were concerned, the O'Connor Foundation also provided the crèche at KwaMadala with food supplements. According to Mollentze, the food supplements provided to the crèche included milk powder and peanut butter on a daily basis, while bread was provided every Monday, Wednesday and Friday. Although the bread truck no longer delivered to the hostel, a hostel resident who worked in collaboration with the O'Connor Foundation fetched the bread and delivered it to the crèche. Soup was provided in winter, and orange juice in summer. Sometimes the children also received jam or fish.

The informal sector: spaza shops

As far as could be determined, only one *spaza* shop existed at Kwesine (which meant that it could charge what it liked), while several *spaza* shops existed at KwaMadala. Although the prices were largely out of reach of the unemployed, the shops compensated partly for the isolation of the hostels. It seemed that different shops sold different items and so all made a living. Furthermore, the items for sale at all *spaza* shops were reasonably priced, probably due to the pressures of economic competition. Fieldnotes of the visit to KwaMadala indicate the items for sale at different shops:

Shop 1:

Tins: fish, meatballs, corned meat, spaghetti, corn, condensed milk. Powder milk, maize, potatoes, bread, peanut butter, cooking oil, eggs, apples, tomatoes, onions, cabbage, sugar, tea, coffee, cooldrinks (e.g. Coke), Cool Aid, Yogi Sip, Willard's chips, biscuits and alcohol (beer and spirits).

Shop 2:

Tomatoes, onions, nuts, maize, eggs, oil. Tins: fish, beans, curry. Salt, sugar, curry powder, tea.

Shop 3:

Rice, mealie rice, maize, bread, sugar, peanut butter, soup, tomatoes, potatoes, condensed milk, coffee, tea, coffee creamer, tomato sauce, Oxo, mayonnaise, cooking oil. Tins: fish, corned meat, curry, peas, mixed vegetables. Sweets (mints).

Shop 4:

Mangoes, grapes, red peppers, green peppers, eggs, maize. Tins: corned meat, curry, fish. Coffee, coffee creamer, tea, shortening, cooking oil, biscuits, sweets (mints).

It is evident from the above that residents' nutritional needs could, for the most part, be met by the provisions supplied by the various *spaza* shops. This infrastructure was useful in a variety of ways. Firstly, informal employment opportunities were provided. Secondly, the isolation of residents from the surrounding community became a non-issue with regard to the nutritional survival of hostel residents.

Thirdly, the existence of several of these shops introduced a competitive economic system which ensured reasonable prices.

The formal sector: shops

Many hostel residents also reported buying food from formal shops at their places of employment and, in the case of KwaMadala, from the formal shops situated about 1 km from the hostel premises. However, in the case of Kwesine where many people could not afford taxi fares and no shops existed nearby, residents mostly had no access to formal shops. It should also be borne in mind that the road from the hostel to town was a recent development aimed specifically at providing safe, non-inhabited access to and exit from the hostel. Hence, exactly those reasons that necessitated the bulldozing of this road in the first place also isolated hostel residents from any contact with formal shops in close proximity to the hostel premises (see earlier discussion: Sketching the context).

Vegetable gardens

Both hostels had vegetable gardens, although gardening seemed to be practised on a much larger scale at Kwesine than at KwaMadala. Watering these gardens did not seem to be a problem, since the hostels were serviced with municipal water. One of the gardens was irrigated by means of the fire hose which had been pulled through a window and tied up in the garden. Apparently there was little control over who owned or worked in these gardens, other than the size of the allocation for each person. However, at that time it was not an issue, since many residents did not cultivate their own gardens and, therefore, gardening space was freely available. However, the gardens were not big enough to meet the needs of all residents at either of the hostels.

When asked what they cultivated in their gardens, residents mentioned tomatoes, cabbage, spinach, potatoes, maize, green beans, and pumpkin. Comparing this list, combined with the O'Connor Foundation food parcels, to the minimum dietary requirements as set out by the Department of Health, a person's requirements were almost completely met in terms of the different types of food. (However, problems surrounding quantities still remained.)

IMPROVING THE EXISTING INFRASTRUCTURE

Food aid

While the O'Connor Foundation was making a vital contribution to the survival of people, shortages in food supplies remained. Furthermore, much uncertainty existed concerning future funding by NNSDP. The effect of these and other factors was detrimental both to the work of the O'Connor Foundation and to the people. As Mollentze stated: "Before, we needed 30 000 parcels and got 14 000. Now we need 44 000 and we are getting 10 000. The gap just keeps on widening."

However, while more aid was obviously needed, Mollentze cautioned that the way in which it was provided needed to be carefully evaluated. For example, simply increasing the amount of food in the parcels might also not be a useful solution,

since the recipients of these parcels sometimes sold some of the food in order to obtain money with which to buy other commodities such as cigarettes. The same problem might apply to providing vouchers with which to buy food: Such vouchers might also be redeemed for cigarettes or anything else in the shops that participated in the scheme.

Expanding vegetable gardening projects

Vegetable gardens would practically solve the problem of meeting the food needs of isolated urban communities at a variety of levels. Although people cannot grow their own milk or meat, many of the effects of malnutrition can be combated through the effective use of vegetable gardening. However, there seems to be a shortage of seeds, and no knowledge of permaculture gardening techniques was evident during visits to the hostels. Addressing both of these factors can lead to more effective gardening, both as far as economic principles and providing more food to larger numbers of people are concerned.

CONCLUSION

It would appear that hostel residents had indeed created the kind of infrastructure that ensured that their nutritional needs would be met regardless of the absence or presence of violence in and/or around their places of residence and, to a large extent, also regardless of the intensity of such violence. However, this infrastructure remained inaccessible to large numbers of residents, especially at Kwesine hostel, due to persistent unemployment and the resulting poverty. Hence residents were frequently dependent on outside help such as food aid parcels.

However, as can be seen from Tables 4 and 5, such aid met a fraction of this need and, without some form of state-aided intervention, the nutritional situation in these hostels looks bleak. Considering the current lack of success of the RDP and the continued budget cuts in an already-overburdened Department of Health, no such aid seems imminent, and it can be expected that the lives of the unemployed residents will take a turn for the worse.

REFERENCES

- Anon. 1992. Farm school feeding scheme changes lives. *South African Outlook*, Jul./Aug.: pp 94-99.
- Die Burger. 1989. Wanvoeding eis al hoe meer kinderlebens. *Social Work*, 25(1):74-75.
- Carmichael, E.D.H. 1993. *Violent political conflict and peacemaking in Alexandria*. Paper presented to the IMSSA Community Conflict Resolution Service Seminar. NP: 9 May.
- Department of Health. 1994. *Huishoudelike rantsoenskaal 1 vir baie laekoste-maaltye*. Pretoria: Department of Health.
- Johnston, F.E. (Ed.). 1987. *Nutritional anthropology*. New York: Alan R. Liss.
- Kloka, D. 1994. Affordability in the National Nutrition and Social Development Programme. *Afford-ability*, Feb./March:9-11.
- Minnaar, A. 1993. East Rand townships under siege. *Indicator SA*, 10(4), Spring:67-70.
- Minnaar, A. 1994a. Violence on the East Rand. In: IDP & HSRC. *The National Peace Keeping Force, violence on the East Rand and public perceptions of the NPKF in Katorus*.
- Minnaar, A. 1994b. *Internal displacees: The nowhere people*. Unpublished document.
- Monckeberg, B. 1992. Getting to grips with nutrition and health policy: The Chilean experience. *South African Outlook*, Jul./Aug.:88-93.
- Schuftan, C. 1979a. The challenge of feeding the people: Chile under Allende and Tanzania under Nyerere. *Social Science and Medicine*, Vol. 13C:97-107.
- Schuftan, C. 1979b. Household purchasing-power deficit: A more operational indicator to express malnutrition. *Ecology of Food and Nutrition*, Vol. 8:29-35.

APPENDIX: QUESTIONNAIRE

1. Please specify everyone living with you in a family context in this hostel and tell me how old they are, what they do during the day, and so forth:

Person	Age	Gender	Income	What do they do during the day?
Self				
Husband/wife/girlfriend/boyfriend/other				
Child #1				
Child #2				
Child #3				
Child #4				
Child #5				
Other				
Other				
Other				
Other				
Other				

2. Which of the following do you eat/drink?

Type	How much	How often
Water		
Milk		
Coffee/tea		
Coldrink		
Grains/starch/porridge		
Bread		
Fish/meat/chicken/beans/soya		
Vegetables		
Fruit		
Eggs		
Margarine/butter/oil/fat		
Sugar/jam		
Nuts		
Fast foods		

3. Where do you get your water from?
4. Where do you get your food from?
5. How do you get your food?
6. Does the food you buy cost you more than it costs someone who is not living in the hostel?

Yes	Do not know	No
-----	-------------	----

7. Is the food you eat readily available?

Yes	Sometimes	No
-----	-----------	----

If sometimes/no, please explain the reasons for this:

.....

8. Do you experience problems with buying food or getting it into the hostel?

Yes	Sometimes	No
-----	-----------	----

If yes/sometimes, please describe

.....

9. Do you have access to a clinic?

Yes	No
-----	----

If yes, please describe

.....

If no, please explain.....

.....

10. Do you have access to a feeding scheme?

Yes	No
-----	----

If yes, please describe.....

.....

If no, please explain.....

.....

11. Do you get aid from someone?

Yes	No
-----	----

If yes, what and from whom?

.....

12. To which of the following do you have access?

TYPE	DESCRIPTION
Transport	
Electricity	
Schools & crèches	
Health facilities	
Cooking facilities	
Ablution facilities	

III. NATURE CONSERVATION AS RESOURCE CONSERVATION AND THE PROVISION OF NUTRITIONAL AND SOCIAL INFRASTRUCTURE³

Sam Pretorius

INTRODUCTION

RESEARCH DESIGN

Research problem

Environmentalists who administer conservation areas such as parks, as well as black communities who live in or near these conservation areas, have a vested interest in the most beneficial utilisation of the land. Isolated communities have a particular interest in sustainable sources of nutrition, while environmentalists wish to protect the environment. The question is whether environmentalists and these communities can jointly make use of the land and other resources for the benefit of both.

Aims of the research

The research was an attempt to provide detailed and in-depth information (dense interpretation, as postulated by Denzin, 1989) on the interaction (action and reaction) between black communities in and around conservation areas, environmental protection structures and the land. The information gathered was analysed in order to identify:

- Strategies used to attain co-operation between the communities and conservationists.
- In what way positive interaction occurred.
- How communities and conservationists benefited from this interaction with each other and with nature.
- The kind of infrastructure that would improve the nutritional standards of the community.

Shortcomings and negative interaction are also identified so that these can be avoided in future implementations of the same kind of programme in other areas.

³ For the purposes of this case study "infrastructure" is defined as: official channels of communication with conservation bodies, environmental and educational training facilities and community-based social organisations.

Concise description of the research design

The research design was based on the qualitative method that accentuates descriptive data. Two KaNgwane conservation sites and the rural black communities living in and around them were studied.

QUALITATIVE RESEARCH METHODS FOLLOWED⁴

Different forms of interviewing were used, but the "free attitude" and open-ended types were used most often throughout the research. Almost all the questions asked during formal and informal interviews revolved around the relationship between the interviewee (as an individual or representative of the community) and the conservation bodies in the area. Participant observation (with emphasis on "observation") was also carried out, particularly where I was invited to informally attend a gathering or meeting. However, as my presence was of great interest to the "respondents", it was not always necessary to explicitly ask questions. Once it became known that the author had come to "find out a bit more about the relations between the parks and the people", data generation became more natural, while at the same time staying focused.

In gathering information the sampling process can be described as largely homogeneous, theory-based and opportunistic (Miles & Huberman, 1994:28). This type of sampling was used due to time constraints and unexpected findings that disrupted preconceived ideas concerning the relations between the respondents.

The theoretical underpinnings of the study were formed by grounded theory principles and systems theory. Systems theory was used because the community and conservation bodies shared the same area and their actions significantly influenced each other.⁵ Since the one theory is a body of constructed thoughts (grounded theory) and the other a principle whereby thought is structured (systems theory), neither one can be said to have been used in a pure sense. The reason for combining the theories was that systems theory fitted the study well since the Parks Board, the communities and the environment formed a system, but as some irregularities (in terms of a "system") occurred, a "grounded theory" was also needed. The irregularities in terms of a "system" are expounded later in this chapter.

FOCUS OF THIS CHAPTER

The concepts "ecotourism" and "sustainable development" have become generally known and much has been written about projects both in South Africa and abroad that have successfully put these concepts into practice. Most discussions have, however, focused on the nature of the projects and not on the process of their

4 An elaboration on the qualitative research methods that were followed can be found at the end of this chapter in Appendix C.

5 They influence each other significantly enough for them to be identified as a system for the purposes of this discussion.

implementation. It is therefore the aim of this chapter to focus on the KaNgwane Parks area, which is administered by the KaNgwane Parks Corporation (KPC), and to analyse the interaction between the park officials and the communities surrounding the parks. Areas of positive and negative interaction are discussed as well as how the communities and the KPC benefited from their relationship with nature and each other. Much attention is given to the communication between the KPC and the communities. The parks-people relationship was seen as "open" in the sense that intervening variables could not be controlled or predicted. However, if the concept of an open system is used, an underlying principle is needed to bind and focus a theoretical discussion. Wilden (1980:361) provides us with a qualifying principle:

In the open system ... homogeneity can only be sought in the relationships of the system. Since information itself is a relation, the study of open systems must involve the dialectics of their informational relationships.

The theoretical boundaries and the predetermined focus of this study were therefore in accord, since both centred around communication as a principle of primary importance. In relation to this, what Wilden (1980:431) has to say about communication is noteworthy:

What probably distinguishes human communication, of which language is an integral part, from all other levels of communication ... is that the primary goal of human communication appears to be the INVENTION OF GOALS. In other words, the goal of human goalseeking is the process of creating goals.

Taking this into consideration, it may be said that both the KPC and the communities were setting certain goals, through their communication. The question is, however, to what extent their distinct goals overlapped. They both depended on nature, the one being a highly evolved system of conservation and the other a fairly simple system of consumption; consumption being fuelled by the need for nutrition and conservation being driven by the fear of loss. Could the environment in which the communities lived (both within and without the game parks) be utilised through co-administration (and thus communication) with conservation bodies to provide a sustainable nutritional infrastructure?

CONTEXTUALISATION OF THE PROJECT

It is unlikely that a project such as this would have had any use, were it not for the fact that South Africa is a less-developed country (LDC), meaning that our degree of development makes it necessary for us to utilise our natural resources for their economic benefit. It

has been suggested that ... the survival of ecological systems and the enhancement of socio-economic well-being are mutually dependent processes which might be related via sustainable development [in LDC countries, such as South Africa] (Welch, 1994:8).

Welch continues to say that the most pressing need for LDCs is the social imperative to raise their domestic living standards. In LDCs, growth-at-any-cost programmes to attain higher living standards have fallen into disrepute, mainly because of the inaccessibility of international trade for pressures, resulting in a search for sustainable economic growth practices. "Practices" refer to individual actions, and are the key concept because

it is acknowledged that appropriate responses to global scale problems — including the environment [and poverty] — will be generated nationally, even locally, and will lack uniformity (Welch, 1994:9).

Solutions to the question on how to accomplish the convoluted practice of sustainable development will therefore most likely be generated by local communities.

This discussion finds a theoretical basis in the work of a few systems-oriented authors, the first being Pierre Bourdieu (who is more concerned with "structure", but nevertheless fits into the current discussion). His concept of "*habitus*" is important in placing the RDP and sustainable development and their implementation, into focus. Concerning "*habitus*" he says the following:

The structures constitutive of a particular type of environment (e.g. the material conditions of existence characteristic of a class condition) produce habitus, systems of durable, transposable dispositions ... that is, as principles of the generation and structuring of practices and representations which can be objectively "regulated" and "regular" without in any way being the product of obedience to rules (Bourdieu, 1977:72; also see Wilden, 1980:355-356).

The applicability of the concept "*habitus*" stems from the fact that the poor are hardly ever capable in and of themselves of generating solutions to problems such as poverty and the depletion of natural resources, purely because their *habitus* objectively prevents them from coping with the objective constraints that their own *habitus* imposes on them. If "expectancy" in the following statement by Gurin and Gurin (1970, quoted in Phares, 1988: 498) is replaced with "*habitus*" the point will become clearer. According to them

a low expectancy of attaining valued goods and an expectancy of powerlessness ... are shaped or changed by environmental events. Stated otherwise, we can best raise expectancies for success and self-determination by providing an environment in which success occurs (e.g. employment) and in which individual effort actually influences outcomes.

So, solutions to poverty and sustainable development need to be generated in local communities, but at the same time local communities, or shall we say local systems, need to be enabled to see beyond their own "structuring structures". One way of doing this, is to change the environment. This, once again, is not something that can

be "thought up" and "implemented", but comes from far greater systemic transformations (morphogenesis).

*As distinct from natural evolution, morphogenesis in history involves slightly different processes [as opposed to biology]. The "instructions" of the system — its economic values, the informational organization of its relations of production according to certain parameters, the matter-energy of its productive "forces" — are not subject to error or chance in the sense that the errors in coding and transmission by DNA and RNA are the result of random recombinations, "accidents", or random radiation ... once the technology of the system — as expressed in its organization of energy in production — begins to change in a significant quantitative sense the relations of the ecosystem (**exploitation of the natural environment, exploitation of some parts of the social ecosystem by others**), positive feedback inevitably results, and inevitably leads either to qualitative changes or destruction (Wilden, 1980:367) (bold added).*

Positive feedback⁶ occurred in a number of ways in South Africa, not the least of which were the April elections of 1994, which led to the creation of a new government (which is implementing the RDP). At the environmental level, occurrences such as the hole in the ozone layer and the explosion at the Chernobyl nuclear power station generated positive feedback on environmental issues globally. We can therefore speculate that the combination of political and environmental "qualitative changes" resulted in the creation of a project such as the RDP and the Project Preparation Facility (PPF) — which is a subdivision of the RDP programme. In terms of what has been said earlier concerning poverty "[t]he framework of the PPF will offer assistance in identifying financially viable job-creation opportunities **within the communities' own areas**" (Report, Consultative Conference, 1994:8) (bold added).

It is at this theoretical junction that the research undertaken links up with what has been said thus far. The implementation of the RDP programme together with global concern about the clash of interests between game reserves and local people (Koch, 1994:27) seem to have generated positive feedback in the KaNgwane area and resulted in the creation of the KPC's Neighbour Relations Division (NRD).

STRATEGIES USED TO ATTAIN CO-OPERATION

NEIGHBOUR RELATIONS DIVISION (NRD)

The NRD was primarily implemented due to lack of consultation with the community (Mr Michael Mndawe of KPC). The NRD was part of the KPC communications

⁶ Negative feedback aims at homeostasis (input equal to output); positive feedback aims at change (Wilden, 1980:96).

division which also dealt with public relations, the media and internal communications. The communications division lacked focus concerning "neighbour relations" as such. As Michael Mndawe said: "There were a lot of problems with the communication division, and the game reserves [of the KPC] were having problems with these communities" (in and around the KPC area). The projects which were implemented previously were imposed by "experienced experts" (Report, Consultative Conference, 1994:6) and the relevant communities were not involved in the planning and implementation of the projects. As a result of this, even the simplest of projects, such as candle making, generated distrust. I was told that "[c]andle making was also making a big problem ... they were afraid that they would not get electricity because they were making candles". The idea of "helping" the community to generate extra funds by making candles, ended up clouding the relationship between the community and the KPC. As Mr Mndawe said:

You know, you do a lot of things for the community and become demoralised [because of the poor results]. That happens if you do not consult, otherwise they feel that they are enslaved.

Another function of the NRD was to accomplish interrelated development.

We believe that development is interrelated, such as fence making, because if they [the community] have permaculture gardens they need to fence them, [but now they make the fences] instead of buying the fences. So, although it has nothing to do with conservation it does help the community (Mndawe interview).

The NRD therefore served as the primary "feedback" tool in the systemic relation between the KPC and the community. It was the primary "gateway" for positive and negative feedback in the system. The neighbour relations division of the KPC, was evolving into the neighbour relations division of the community.

My initial thought concerning the NRD was simply that Mr Lane (the head of the communications division) had employed additional personnel to handle the workload. I had no idea that some of the projects that were implemented in the past, although very innovative and of themselves "beneficial" to the community, created such confusion. Koch (1994:23-24) relates a similar incident concerning the creation of a new communal game reserve near the Numbi gate of the Kruger National Park (KNP). The chief of the small village wanted the reserve to be created but the people of the area were opposed to it. However, the people only made their feelings known when the planning stage had been "finalised" by the KNP and the chief. I perceived the NRD to be a part of the KPC and not as a link between the community and the KPC, although it was, of course, both.

The permaculture⁷ project

The NRD also expanded on the creation of the permaculture project because

at that time there was permaculture but it did not have a formal organisation, a formal structure, and so we started a permaculture club ... we took the people [of the permaculture club] to the Kruger National Park and other parks so that they can see that we are doing the right thing and not just telling them things, and we also took them to the GEM [Group for Environmental Monitoring] conference (Mndawe interview).

So, although a lot of time and energy had previously been spent on establishing a permaculture project, the community did not have any representative body of their own which could manage the project. As far as structure was concerned, they had to rely on the KPC. The permaculture project in essence belonged to the KPC and not to the community. By taking the members of the permaculture club to other areas where permaculture was practised, they were given the opportunity to assess for themselves whether "their" project was up to standard or not. The degree to which they later operated the permaculture project on their own is aptly illustrated by this transcription of their application for funding:

APPLICATION FOR PERMACULTURE PROJECT FUND

We, the undersigned Empakeni Permaculture Village Club hereby confirm that the Permaculture project is Community based and land has been official [sic] allocated to us by the local Tribal Induna.

We further affirm that the above named project ... will be supervised by the KaNgwane Parks Corporation. The fund can be utilised by us with immediate effect and KaNgwane Parks Corporation has confirmed its [readiness] to give us the Permaculture Skills and designs (Empakeni Permaculture Club, 1994).

The water committee

The NRD assisted in the formation of the "water committee" whose task it was to "facilitate presentations for water project[s] in the sub-regional settlements" (minutes of water committee meeting, 1994). The water committee consisted of members of

7 Permaculture is a technique whereby vegetables can successfully be grown in dry regions with minimum resources and capital. In permaculture, cultivation items such as cardboard and grass are used to retain moisture; old tyres and milk cartons serve as pots, and a leaking tap provides the supreme sprinkling system. Dongas are turned into vegetable gardens, since they serve as mini valleys that retain water, and household waste is turned into compost. Whatever is at hand is used as best as possible to ensure the survival of the crops. Different kinds of vegetables are planted together (the combinations of which are too many to enumerate here) which complement each other, while the scent of weeds serves to ward off unwelcome insects.

the community who were concerned with the provision of running water for the community.

The environmental education centre

At the time of writing this report the NRD was finalising co-operation between the KPC and the community regarding the building of an environmental education centre for the community. The community wanted to be part of the decision making and was therefore involved in decisions concerning the site, the purpose of the centre, adjustments to the kitchen, kiosk and storeroom, facilities for braais, and so forth (Register of decisions, Daantjie community, 1994).

“Outside” assistance

The NRD assisted the following organisations and communities outside operational boundaries with advice concerning permaculture:

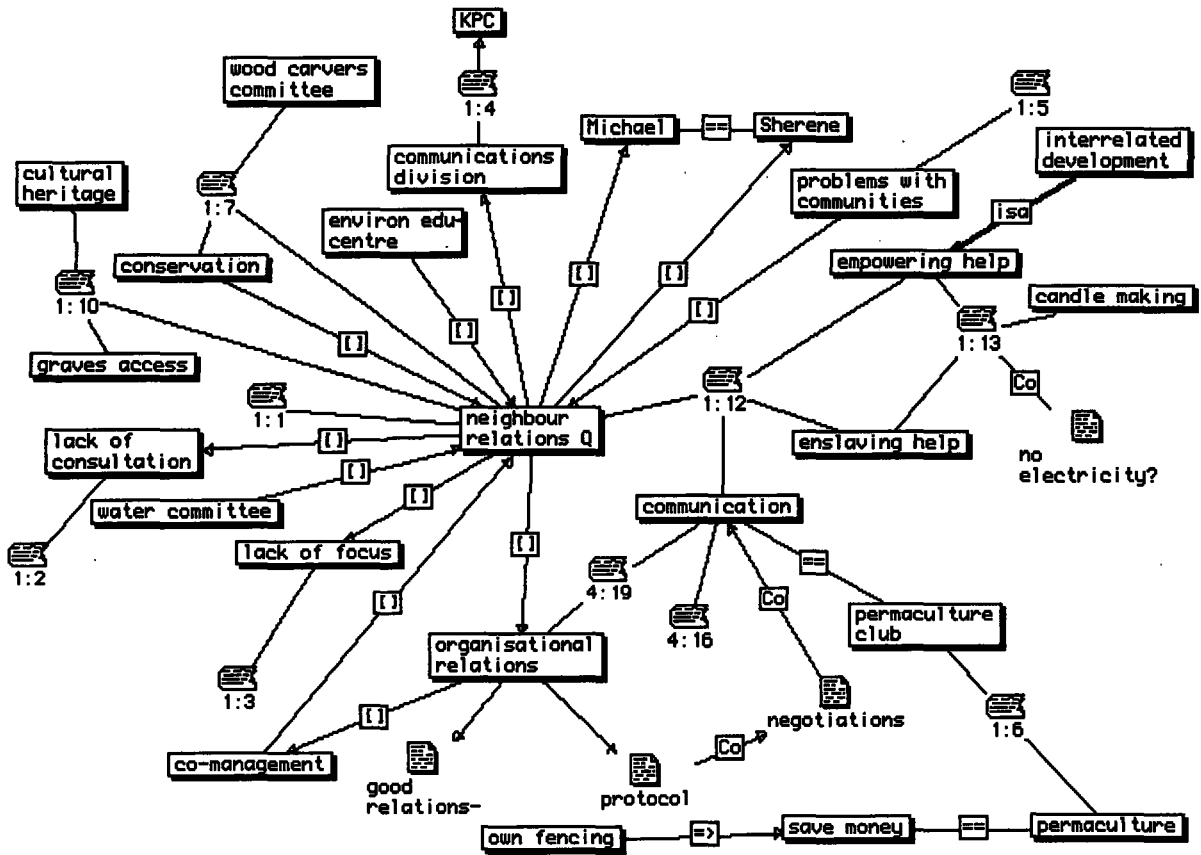
- The Gardening Service Organisation
- Kanyamanzane community
- Thula South Evergreen Farm at Thulamahashe
- Rodeval

These instances of assistance to outside communities depict the evolution of the NRD from a liaison office between the KPC and the community, to something more closely resembling a community development office, administered by the KPC. As Velly Makwakwa (GEM National Conference Proceedings, 1994:24) said: “[T]he KPC applies a variety of flexible approaches to conservation, and effectively functions as a rural development organisation.”

The NRD attained co-operation from the community by involving them in every detail pertaining to the planning of projects envisaged for the community. They succeeded in initiating projects and handing them over to the communities in such a way that the communities saw the projects as their own. This was achieved by integrating the communities’ ideas and suggestions into the planning and implementation of projects, thereby transforming them into community-based projects.

The graphical representation above of the topics discussed shows how the ideas and information presented were generated by the data gathered/created in the research process. Not all the “nodes” are represented, since they were sorted in terms of their particular applicability to the current discussion. They are, however, shown here in order to give the reader an idea of how many linkages exist between the various concepts, although reproducing the same density in a discussion would lead to a great deal of repetition. For this reason graphic representations such as the above are provided throughout the chapter, which hopefully will assist the reader to grasp the complexity of the system.

STRATEGIES USED TO ATTAIN CO-OPERATION



KEY TO RELATIONS DEPICTED IN FIGURE:

- == is associated with ...
- [] is a part of ...
- <> contradicts
- isa is a ...
- Co comment
- => is a cause of ...

POSITIVE INTERACTION

START OF RELATIONS

Organisational relations

When I asked the induna at Mpakeni how their relations with the KPC had started he replied: "Firstly when they [the KPC] started the project of that game reserve, that's when the relations started. But, before the game reserve started, with the negotiations" (Mpakeni interview, 1994). It should be noted that the induna said that their relations with the KPC started when the KPC wanted to expand the borders of the Mthethomusha game reserve. This is not such an obvious point as it may seem at first, since the KPC seems to have acted firstly out of self-interest and only secondly considered the possible benefits of such a project for the community. The KPC did not remove people from their land to establish a game reserve, but started negotiations, and to this action the community reacted positively. Their relations thus started by positive communication; if the KPC had declared a game reserve without negotiating, it would have been negative communication.⁸

Concerning the nature of their relationship the induna said

that negotiation was very good, in a very good spirit. Very good neighbour relations, then that relations continued right from there and we are walking together right up to this point now, I wish that it continues like this (Mpakeni interview, 1994).

When I asked for clarification as to what the induna meant by saying that the relations were "good", he said that they were "good in the sense that there is usual contact with, there are meetings and individual visits" to him. He further attributed their good relations to the fact that the KPC kept their word.

[W]hen the negotiations started the KaNgwane Parks Corporation expressed that [through] their operation[s] in the area ... they will make it a point that we benefit from [their operations], and that benefit we do experience now and that relation that started there that there were no suspicions that maybe they [the KPC] were going to make a lot of profit and forget about the people who moved out of the area, from the game reserve, so the people was properly settled at one place and they moved from the places where they were scattered ... but now they see that moving out has benefited them (Mpakeni interview, 1994).

The "good relations" between the KPC and the community also stem from the fact that the NRDs adhered to the local protocol with regard to communication. When we arrived at Mpakeni, nobody greeted anyone else and it was obvious that this was done deliberately. When the induna arrived, we greeted him first and only then did

⁸ Actions are also seen as communication.

the other people gathered there along with our company start to exchange greetings. In this manner the NRD showed respect for the customs of the local community and once again the "communication" (verbal and non-verbal) indicated a positive and constructive relationship.

Up to this point everything that was said fitted into what I expected to hear as to why the relations between the community and the KPC were favourable. It also fitted nicely into the systemic model, in the sense that there were two subsystems that were separate, but functioned in the same environment. The creation of the NRD assured a degree of negative entropy⁹, bringing stability to the system through the creation of better organisational structures. Its success flowed from the fact that it created a good "system" of communication. What I did not take into consideration was that searching for the "start of the relations" between the KPC and the community would not lead to an answer "within" the history of the current system as defined in the study (i.e. since the creation of the NRD). In other words, by searching for the "success formula" in the workings of the NRD and the methods of communication that they employed, I was looking in the wrong place. The following quotation from Wilden (1980) hints as to why this is so, and is expanded upon in the next section:

If it is impossible in the study of open systems to guarantee that observation of the element or the component isolated from its context (as in mechanics) will yield scientific, repeatable results, then homogeneity must be sought elsewhere: that is to say, in the RELATIONS between components. And in so far as all contextual feedback relationships in open systems defy "objective" punctuation ... one will not waste one's time seeking for a positivistic ORIGIN for the system (Wilden, 1980:244).

Personal relations

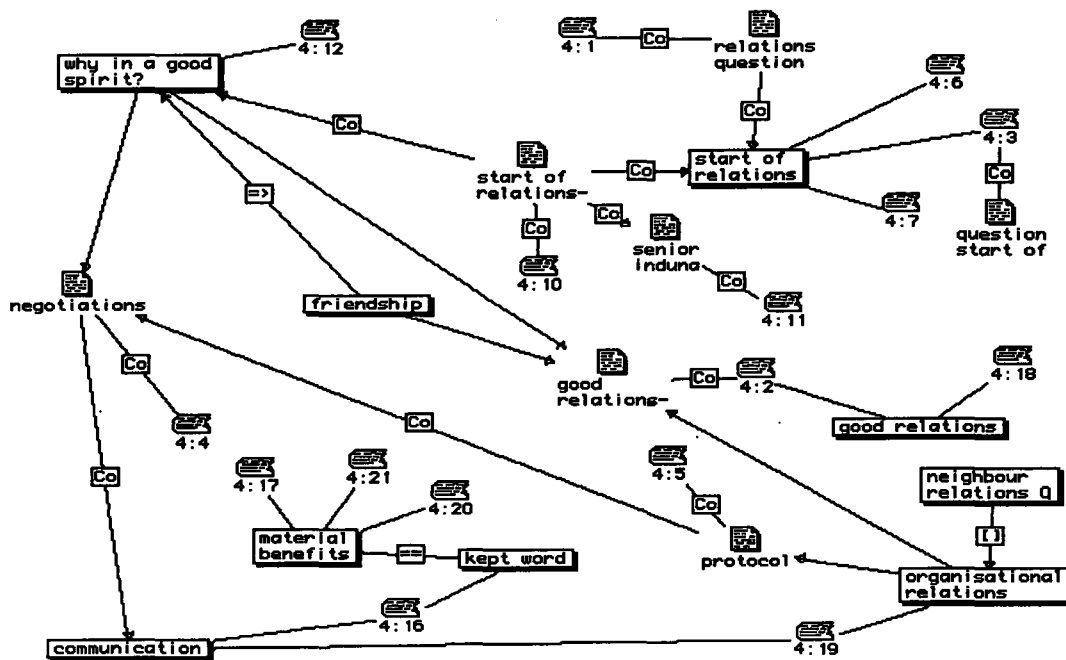
In the previous section it was pointed out that I mistakenly assumed that the KPC and community structures formed the only, or at least primary, components of the "system". The mistake became evident when Mr Mndawe said: "Did I tell you that the chief and I, we are friends?" (Mpakeni interview, 1994). Mr Mndawe went on to say that he and Chief Nkosi studied together at university, before he became a "chief". They did their first year in public administration together, they shared the same room and they even cooked meals together (Mpakeni interview, 1994). Mr Mndawe was also a friend of the chief's brother, the senior induna. So, whenever

9 If the system is ... morphogenic — increasing in order of organisation, capable of elaborating new structures — it is negatively entropic (Wilden, 1980:204).

there are things which has not gone right ... I just start talking [to Chief Nkosi] as if nothing has happened, just start chatting and discussing, so they [the KPC] are very surprised when I come back with the report and it is positive. There was no problem (Mr Mndawe, Mpakeni interview, 1994).

Their personal relationship therefore had an immense effect on the "system". Indeed, the positive relationship between the community of Chief Nkosi and the KPC was to a great extent dependent on this. This conviction is supported by the fact that the KPC lacked such good relations with the Lomshiyo community of Chief Dlamini, which was situated next to the area of Chief Nkosi. Even if we were to speculate that Chief Nkosi might be a better ruler than Chief Dlamini, how much of such hypothetical reasoning would be influenced by the fact that Mr Mndawe and Chief Nkosi had been friends for a very long time? And even if we could somehow "objectively" classify Chief Nkosi as a "better ruler", how much of his behaviour would be attributable to the informal pressure that his friendship with Mr Mndawe placed on him to be a "better ruler" in the first place? The second question bears more directly on the fact that Mr Mndawe voiced his concern about the "cattle-game" project in the area of Chief Dlamini (see the later description of the scheme for details). Chief Dlamini's people alleged that he regarded the game in this conservation area as belonging to him and not the community and apparently only let his own cattle graze in the conservation area. In other words, although the KPC had implemented a scheme that should benefit the entire community, it was ineffective. It was ineffective because of poor communication and we were reminded that "open systems are essentially those which are capable of constructing, or are required to construct, within certain constraints, their own relation to an environment" (Wilden, 1980:359). In other words the KPC's relations with Chief Nkosi and his community were positive due to the friendship between Mr Mndawe and Chief Nkosi. On the other hand the relationship between the KPC and Chief Dlamini's community was weak because no KPC representative had a special relationship with Chief Dlamini.

POSITIVE INTERACTION



KEY TO RELATIONS DEPICTED IN FIGURE:

- == is associated with ...
- [] is part of ...
- <> contradicts
- isa is a ...
- Co comment
- => is a cause of

MUTUAL BENEFIT FROM INTERACTION

It is often assumed that in the interaction between a conservation body and communities in its area, the community benefits the most, since it has the least resources. However because poverty is the biggest threat to conservation, the "benefit" of interaction for the conservation body lies in the continuation and possibly even the expansion of the conservation body. It therefore makes sense that the National Parks Board should develop a clear corporate social responsibility, writes Fourie (1994:127).

THE CATTLE-GAME PROJECT

The cattle-game project was basically a programme that extended the boundaries of an existing reserve by obtaining land from the local tribal authority. The land that the tribal authority made available for extending the existing conservation area still belonged to the community. The community benefited from this arrangement in various ways, the most important being that they were still allowed to let their animals graze in the area which they "donated". In addition to this the local induna (or whoever was chosen for the task) actually managed the park together with the KPC, due to the fact that he controlled access to the reserve on "their" land. The game on this land was also donated to the local community, making it "their" game, a strategy that seems to have curtailed poaching. The KPC therefore benefited in the sense that they had less administration to do (in terms of controlling access to the reserve) and the game that they placed inside the reserve did not get poached. Through their positive relationship the community and the KPC thus benefited mutually from their interaction.

The following were identified as the disadvantages and advantages of the cattle-game project near Mpakeni and advantages for the KPC and/or the community:

Disadvantages/constraints

1. *A heavily populated urban eastern/northern boundary.*
2. *Inaccessibility.*
3. *Mpakeni village:*
 - 3.1. *The village was in the centre of the area.*
 - 3.2. *The villagers felt that they did not benefit from Mthethomusha, or that funds from Mthethomusha were never used to develop Mpakeni.*
4. *Large patches of agriculture in the higher lying areas.*
5. *A public road going to Mpakeni.*
6. *Numerous isolated "kraals" in the higher lying areas.*
7. *A low carrying capacity — due to high rainfall, sourveld, gradient, etc.*

Advantages: KPC/nature conservation

1. *Created a buffer for Mthethomusha.*
2. *Limited control over natural resources.*
3. *Hunting of plains game — limited by Southern Sun in Mthethomusha — could be done in this area.*

4. Educational walks could be undertaken — no dangerous animals.
5. Could instil a nature conservation ethic in the community.

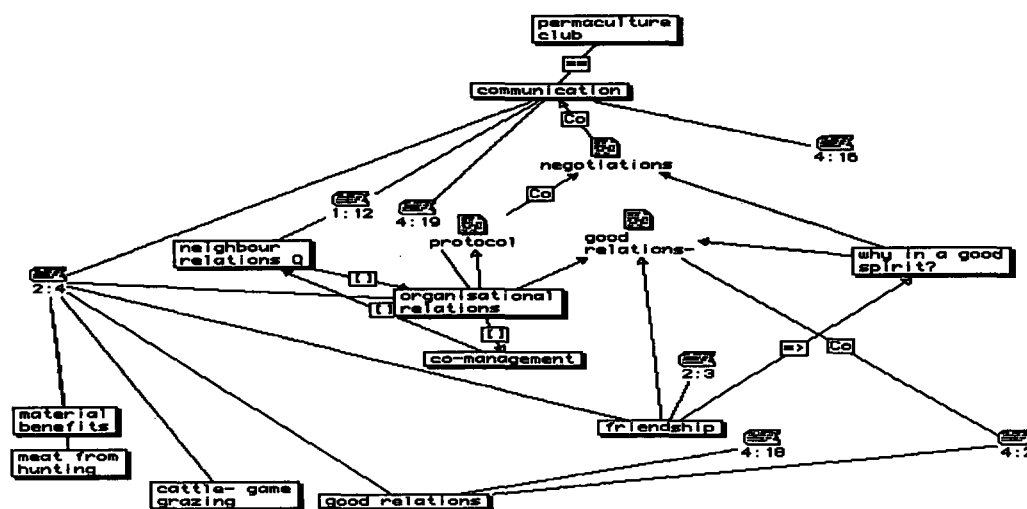
Advantages: community

1. Secured cattle — controlled access.
2. Secured the resources for own use.
3. Increased carrying capacity.
4. The entire community will own the game, i.e. not only cattle owners and wood collectors would benefit from the resource.
5. Financial benefit: hunters; possible hunting camp and entertainment centre opportunities; gate takings; possible toll road.
6. Job opportunities — short and long term.

(Memo on cattle-game project — Mpakeni, 1994)

The conservation of nature in cattle-game reserve areas therefore conserved resources for both the nature conservationists and resident communities.

BENEFITING MUTUALLY FROM INTERACTION



KEY TO RELATIONS DEPICTED IN FIGURE:

- | | | | |
|----|------------------------|-----|-------------------|
| == | is associated with ... | [] | is part of ... |
| < | contradicts | isa | is a ... |
| Co | comment | => | is a cause of ... |

INFRASTRUCTURE ASSISTING IN THE IMPROVEMENT OF NUTRITIONAL STANDARDS

Although this research paper does not assess the nutritional standards in the communities studied, it is based on the assumption that activities related to economic wellbeing and growth in rural areas improve nutritional standards in these communities. This notion is supported by Schuftan (cf. 1979:29):

The problem with many nutritionists is that, although they recognise poverty as the main cause of world-wide malnutrition, they do not focus their implementation strategies on how to directly attack this underlying problem.

Austin (1981:2) also agrees with this by saying that “[m]alnutrition is fundamentally a poverty problem”. Hornik (1988:xii) discusses this topic along the same vein when talking about development programmes:

One set of program developers argued that previous projects rarely benefited the poor. They explained that failure in political terms: a program controlled by central authorities and not by its beneficiaries inevitably serves the needs of the central authorities ... The answer is to be found in small-scale efforts, run for and by the beneficiaries (see also Austin, 1981:6).

In reply to this the business plan of the Eastern Transvaal Project Preparation Facility (PPF) states, concerning the identification of development projects, that “[c]ommunities (civil society) decide, local government can advise and inform” (Report, Consultative Conference, 1994). Concerning prioritisation of projects it states: “Civil society or the community should implement own projects and be involved in every project.” In regard to the monitoring and evaluation of such projects it says: “The whole affected community (civil society) — this means the public at the local level and not only a representative structure such as an RDC [Regional Development Council] — should make the final evaluation in conjunction with government structures” (Report, Consultative Conference, 1994).

PERMACULTURE

Instead of providing a description of all the technical details of “permaculture” I would like to highlight the changes it brought to the community:

Before permaculture they had to go to the open market and buy some vegetables, so now at Lupisi they are consuming the vegetables, but they are also selling some vegetables from their gardens. It is very cheap, they are no longer spending much time ... buying vegetables and spending much for transport. But, everything is right there in the community and they are using resources even there in the community (Mpakeni interview, 1994).

Moreover the food marketing system may contribute to malnutrition due to its inefficiency, lack of infrastructure and exploitative practices, all of which can reduce the needy group's access to food (Austin, 1981:4). By growing their own crops, the community can sell their extra produce as well as save the costs of travelling to the market.

I "inspected" permaculture gardens at Lupisi, Mzinti and Mpakeni (where they had just started a permaculture project) and judging by the vegetables, permaculture was a successful enterprise in these areas. The plants were very healthy, especially since no insecticides were used. Only natural products available in the vicinity, such as certain weeds that were normally plucked out when starting a vegetable garden, were used. The community got seeds from the KPC for a rand or two, depending on how much they wanted. The essence of permaculture is that resources that are readily available to the community, and that cost them very little or nothing at all, should be used. At Lupisi, where implementation had started roughly a year before, permaculture was so successful that even "in the winter, they have been harvesting vegetables in season and selling". Lupisi, it should be noted, was very dry, even in the rainy season. At the time of the study the permaculture gardens were virtually the only green patches to be seen.

OTHER PROJECTS

Cattle-game project

This project has already been discussed under the "mutual benefits" section of this chapter. This section focuses on the economic and nutritional benefits that the community will derive from this project.

The area to be included in the Mthethomusha reserve for the "cattle-game project" was not fenced, and this led to people from other areas cutting down live trees in this reserve area and collecting firewood on the land of the Mpakeni people. If the land was included in the Mthethomusha reserve, the KPC would fence the area while the Mpakeni community would still have full access to the area in order to let their cattle graze or to collect firewood. The KPC in addition proposed to set up a hunting camp and the total amount paid for hunting would go to the community. Culled animals would also be given to the community, as well as any meat that the hunters did not want (Mthethomusha interview, 1994).

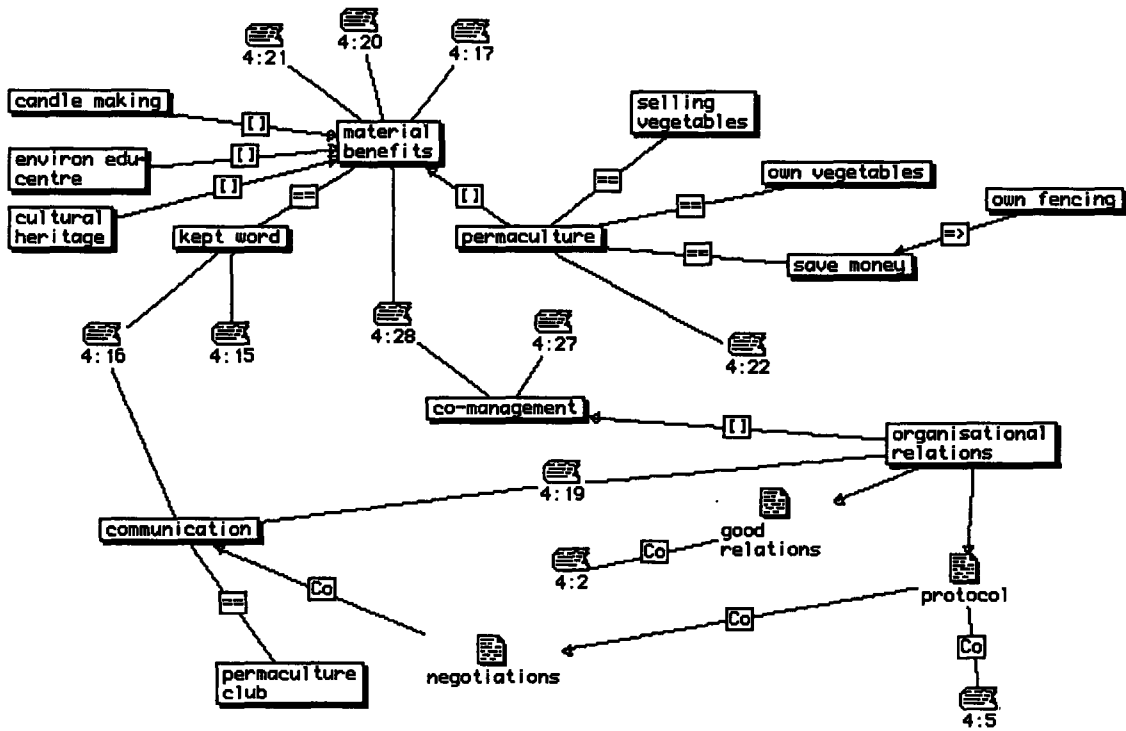
Candle making

The candle making project that had previously been the source of misconception between the KPC and the community, also began to generate an income, since only decorated candles were manufactured.

Fencing project

The KPC also assisted the communities in making their own fences because if they had permaculture gardens they needed to fence them, but instead of buying the fences the KPC helped them to make fences. Therefore, although fence making has nothing to do with conservation, it does help the community, because they save money.

MATERIAL BENEFITS AND NUTRITION



KEY TO RELATIONS DEPICTED IN FIGURE:

- ==** is associated with ...
- []** is part of ...
- <>** contradicts
- isa** is a ...
- Co** comment
- =** is a cause of

SHORTCOMINGS AND NEGATIVE INTERACTION

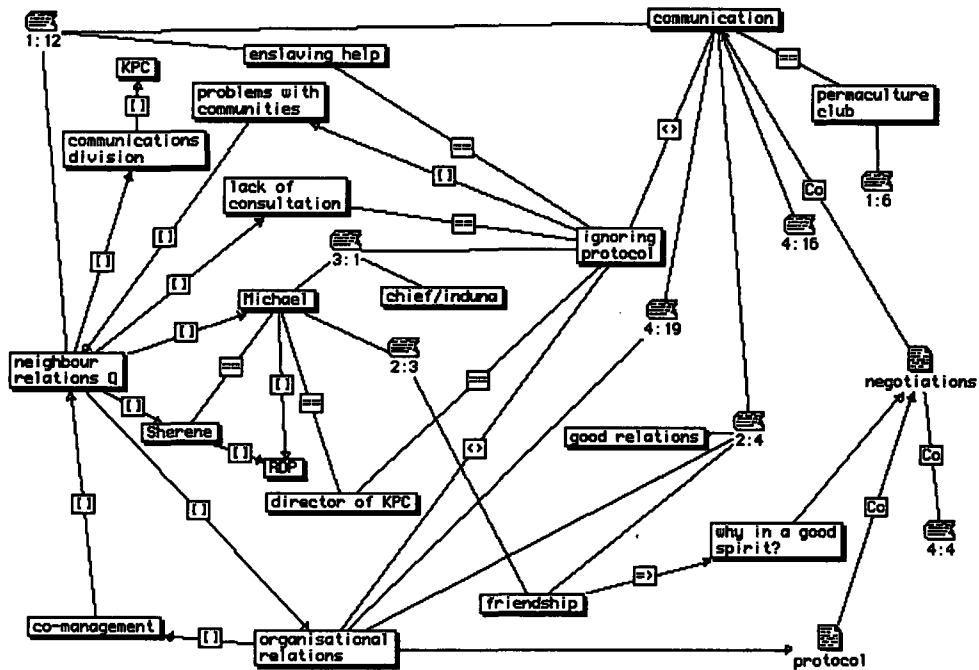
IGNORING PROTOCOL

A member of the community told me of an incident when the director of the KPC spoke to members of the community without first greeting or consulting Chief Nkosi, or at least one of the indunas. This placed the NRD officer in the position of having to go back to the chief and explain why the director of the KPC did not come to greet him. This created unnecessary friction in the system. Moreover, if the director had done this to Chief Dlamini the damage to their relationship would have been far worse. Since Mr Mndawe would not have been able to alleviate the tension between Chief Dlamini and the KPC through his friendship, as he was able to do with Chief Nkosi, the damage would take far longer to repair. It seems therefore that the feedback from the community, in terms of how they wanted to be communicated with, did not reach the higher structures of the KPC, or else they did not deem the protocol of the community important enough to respect. Whatever the case may be, this aspect needs more attention.

PERSONAL CAPACITIES VERSUS ORGANISATIONAL STRUCTURES

The staff of the NRD were so dedicated to their task that if they were to leave their posts for some other position, the neighbour relations programme would be adversely affected. This was especially so since both Michael Mndawe and Sherene Mayet were involved in implementing the RDP in Mpumalanga. In addition to Ms Mayet's work as neighbour relations officer, she also fulfilled the role of regional co-ordinator for the RDP, and both she and Mr Mndawe were previously involved in community development. Furthermore, although Ms Mayet and Mr Mndawe were officers in a subdivision of a subdivision of the KPC, they filled very prominent positions in the RDP. Although the infrastructure of the KPC was imperative for the success of many development programmes, the success of the NRD greatly depended on Mr Mndawe and Ms Mayet in their personal capacities. It would therefore be wise for them to carry their expertise over to other capable persons by training them in the field and telling them how and why they reacted as they did to situations in their day-to-day interaction with the community.

NEGATIVE INTERACTION



KEY TO RELATIONS DEPICTED IN FIGURE:

- = is associated with ...
- [] is part of ...
- <> contradicts
- isa is a ...
- Co comment
- => is a cause of ...

CONCLUSION

This chapter discussed ways in which communities in or near conservation areas could benefit from the conservation of natural resources in those areas. But if this is to be attained, effective channels of communication are essential. By paying specific attention to their neighbour relations the KPC was able to assist the communities in and around the nature reserves to truly benefit from their interaction. As a result of this positive interaction, small but effective development programmes could be implemented, thereby increasing the self-sufficiency of these communities. This in turn impacted on their nutritional standards. Care must, however, be taken to carry over the expertise of people involved in the initiation and implementation of such development programmes to other capable persons. This will ensure that the success of development programmes is not entirely dependent upon the particular capabilities of specific individuals. Care must also be taken that local protocol with regard to communication is adhered to by all who are involved with the community in a developmental capacity.

REFERENCES

- Austin, J.E. 1981. *Nutrition programs in the third world*. Cambridge: Oelgeschlager, Gunn & Hain.
- Baker, W.J., Hyland, M.E., Van Hezewijken, R., & Terwee, S. 1989. *Recent trends in theoretical psychology*, Volume II. New York: Springer-Verlag.
- Bogdan, R.C. & Biklen, S.K. 1982. *Qualitative research for education*. Boston: Allyn & Bacon.
- Bourdieu, P. 1977. *Outline of a theory of practice*. Cambridge: Cambridge University Press.
- Denzin, N.K. 1989. *Interpretive interactionism*. London: Sage.
- Empakeni permaculture club. 1994. (Personal memo).
- Fourie, J. 1994. Comments on national parks and future relations with neighbouring communities. *Koedoe*, 37(1):123-136. Pretoria.
- GEM (Group for Environmental Monitoring). 1994. *National conference proceedings*. Proceedings of a conference by the Group for Environmental Monitoring.
- Hornik, R.C. 1988. *Development communication*. New York: Longman.
- Koch, E. 1994. *Reality or rhetoric? Ecotourism and rural reconstruction in South Africa*. UNRISD discussion paper.
- Memo on cattle-game project, Mpakeni. 1994. (Personal memo).
- Miles, M.B. & Huberman, A.M. 1994. *Qualitative data analysis*. London: Sage.
- Minutes of water committee meeting. 1994.
- Mndawe interview. 1994. (Interview with Michael Mndawe).
- Mpakeni interview. 1994. (Various persons).
- Mthethomusha interview. 1994. (Various persons).
- Phares, E.J. 1988. *Clinical psychology*. California: Brooks/Cole Publishing Company.
- Phillips, B. 1985. *Social research methods*. Belmont, California: The Dorsey Press.
- Register of decisions. 1994. Daantjie community. (Personal records).
- Report, Consultative Conference. 1994. *Civil society and RDP processes in the Eastern Transvaal Province*. 11 November (unpublished).

Schuftan, C. 1979. Household purchasing-power deficit: A more operational indicator to express malnutrition. *Ecology of Food and Nutrition*, Vol. 8:29-35.

Smaling, A. 1994. *Course material for the qualitative methodology winter school*. Unpublished manual.

Strauss, A. & Corbin, J. 1990. *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park: Sage.

Traub, R.E. 1994. *Reliability for the social sciences*. Thousand Oaks, California: Sage.

Welch, R. 1994. Enhanced environmental management: The case for conditional economic growth in LDCs. *Sustainable development*, Vol. 2, Part 3, Winter.

Wilden, A. 1980. *System and structure*. New York: Tavistock Publications.

APPENDIX

Qualitative methods

Qualitative interviewing

This exposition starts by typifying quantitative and qualitative interviewing techniques/methods in order to dispel some of the misconceptions about them. The chief objective is, however, to briefly discuss the scientific worth of qualitative interviewing as utilised in this study.

Standardised versus informal/non-directive interviewing

The aim of the technique/method of standardising interviews is to achieve uniformity of questions asked and therefore also comparable responses, based on the assumption that the questions are unambiguous. Standardisation is seen to contribute to "reducing random error, i.e. improving reliability, as well as reducing systematic error or bias, i.e. improving validity of the interview research results" (Smaling, 1994:91; Phillips, 1985:120). If a method is judged to be reliable and valid, it is objective.

Objectivity is a relation between a method/person and an object of study; it is not an attribute, as a method or person cannot be said to be objective, *per se*. If the relation between a method or person and an "object" of study is said to be objective, what do we mean? Firstly, that a person or method "lets the object speak" (Smaling, 1994:18) and secondly that a person or method "does not distort the object" (Smaling, 1994:18). The first meaning emphasises minimal interference from the side of the interviewer in "obtaining" information from the subject (respondent). The second meaning emphasises minimal interference from the side of the interviewer/method/researcher as far as the information "given" by the object of study is concerned. By letting the object speak and not distorting the object, justice is done to the object (Smaling, 1994:77).

Let us return to reliability and validity. If the goal of using a structured interview is to reduce random errors, the researcher who chooses such a method needs to reconsider his/her choice. This might seem to be a very risky statement, but let us analyse why it is said that a structured interview reduces the occurrence of random errors. The notion is that a standardised stimulus is to be "admitted", which will then cause a reaction on the part of the object of study. By keeping the stimulus constant, variances in the objects can be detected, and the responses of the objects are then said to have been obtained objectively. What is disregarded in this equation is that people respond totally differently to stimuli than natural phenomena. People have different backgrounds and different cultures, they place themselves in a social hierarchy, and they take into account who is providing the stimulus (asking questions) when they answer (respond). For this reason admitting a standardised stimulus (interview) will create a situation wherein random errors are committed

constantly, which seriously cripples the concept of reliability (see also Traub, 1994:72, 155-156). The object of study and the interviewee *interact* with each other. This implicit interaction is (in most cases) disregarded when the objectivity of the method/study is evaluated. What is attained here is "objectivity without an object" (Smaling in Baker, Hyland, Hezewijken & Terwee, 1989:157). Decontextualisation takes place due to assumed depersonalisation of the interviewer and interviewee. A standardised interview does not "let the object speak" and it does "distort the object". The fact that the objects who interpret the questions react differently to the researcher or may think that the questions are inappropriate, distorts the eventual findings at the outset. The moment a questionnaire is constructed on the table of the researcher, it is already distorting the findings of the study. "Letting the object speak" does not occur, because by trying to avoid random errors no room is left for finding unsuspected responses. An "error" can here only be defined as a deviation from a standard measure (the response which occurred the most). Therefore, the objective is to hope to measure as much as possible of the same response. The structured interview *makes* the object speak, it does not *let* the object speak. The amount of interference from the side of the interviewer in obtaining information is very high, since the respondent is limited to the questions asked, in the format and order in which they are asked, as well as the meanings attached to them by the researcher.

To briefly summarise what has been said thus far: Objectivity is a relation between the researcher and the researched which can be expressed as *doing justice to the object of study* (Smaling, 1994:77). However, standardised interviews do not necessarily do justice to the object of study.

"Letting the object speak" and "not distorting the object", would in practice mean that the object is given the opportunity to freely express his or her thoughts on a certain topic. In this study a "value free" question was the basis (that is, it was the first and central question) of most of the interviews. The respondents were requested to "tell me about [their] relations with the KPC", instead of being asked questions such as: Are your relations with the KPC good or bad? Are they good/bad because of the communication between you and the KPC? Is the communication good/bad because the KPC consults with you/does not consult with you, on a regular basis? Etcetera.

Justice was thus done to the object of study, and the information obtained from the "objects" of study can be said to have been obtained "objectively". The major drawback of qualitative methods, however, is the analysis phase. What makes the interpretation of qualitative data such an "un-objective" practice is the issue of reliability. To circumvent this unreliability an "audit trail" (Smaling, 1994:82) has to be provided to enable other researchers to follow exactly which steps were taken during the analysis phase. To accomplish this successfully, it is recommended that a computer package be used that assists in qualitative data analysis.

Sampling

The sampling for this study was largely “homogeneous, theory based and opportunistic” (Miles & Huberman, 1994:28). These three categories are characteristic of “theoretical sampling” (Strauss & Corbin, 1990:176-177). This means that sampling is done “on the basis of concepts that have proven theoretical relevance to the evolving theory”.¹

Homogenous sampling: Sampling of this sort means that situations, people and settings of the same sort are included in the sampling procedure. This type of sampling is useful when there are time constraints on the study, or the study involves a very specific focus — in this case the KPC and communities immediately surrounding reserves belonging to the KPC.

Theory-based sampling: An example of theory-based sampling in this study is the request to speak to Chief Dlamini. I was given a fair amount of information concerning Chief Nkosi, and theorised that the friendship between Mr Mndawe and Chief Nkosi might explain why the KPC and Chief Nkosi got along so well. I did not know about Chief Dlamini when I started out with the study, but I did know about Mr Mndawe and Chief Nkosi, so when I heard about Chief Dlamini, I included him in the study (see Bogdan & Biklen, 1982:149). This links up with the next type of sampling.

Opportunistic sampling: This type of sampling is called *open sampling* by Strauss and Corbin (1990:181). The idea here is to be open to unexpected relevant concepts that might be revealed, and as is shown above, this was indeed the case with this study, as the concept of *friendship* proved to be invaluable. As Strauss and Corbin (1990:181) put it: “The sampling is open to those persons, places, situations that will provide the greatest opportunity to gather the most relevant data about the phenomenon under investigation.”

As a result of these sampling procedures 19 people were interviewed in seven interview situations during the period 13 to 16 November 1994; six documents produced by the subjects of the study were also procured during this time and, where relevant, included in the analysis.

1 “Because the investigator cannot possibly present all the data in toto to the readers, it is necessary to reduce the data. The principle here is to present an accurate description of what is being studied, though not necessarily all of the data that have been studied [...] The theoretical formulation that results not only can be used to explain that reality but provides a framework for action” (Strauss & Corbin, 1990:22).

Analysis

For an elaborate discussion of this topic the reader is referred to the work of Miles and Huberman (1994), namely *Qualitative data analysis*. A few brief remarks are, however, made here concerning the process of analysing the data.

A computer analysis program called ATLAS/ti was used in the final analysis phase of this research (previous phases were carried out in the field — see Bogdan & Biklen (1982:145-155)). This computer package facilitates the systematic application of all assigned codes to the texts. In qualitative analysis codes mean placing “[c]onceptual labels ... on discrete happenings, events, and other instances or phenomena” (Strauss & Corbin, 1982:61). Miles and Huberman (1984) define a code as:

an abbreviation or symbol applied to a segment of words — most often a sentence or paragraph of transcribed field notes — in order to classify the words. Codes are categories ... They are retrieval and organising devices that allow the analyst to spot quickly, pull out, then cluster all the segments relating to the particular question, hypothesis, concept, or theme.

Altogether 47 codes were assigned to the texts analysed in this study. Virtually all these codes are reflected in this report. A large number was taken from the texts themselves, which ensures that the concepts used by the respondents are carried over to this “re-presentation” of the data gathered. This report itself therefore also aims at “letting the object speak without distorting it”, and therefore, “doing justice to the objects studied”.

IV. GENERAL CONCLUSIONS

The central theme of both studies presented here were poverty and the nutritional deficits that it created.

The first study focused on the isolation of hostel residents in the Katorus and Alexandra areas, and the subsequent nutritional problems that this created. It also indicated the role of high levels of violence in the problem. Due to the particular location of Kwesine, the violence there effectively cut residents off from the outside world. Their isolation was exacerbated by problems of transport, which meant that residents had difficulty in getting to their places of employment, as well as to shops in order to buy food.

However, out of their isolation hostel residents created a new infrastructure comprising shops, spaza shops, vegetable gardens, crèches, etc. Furthermore, their plight was, at least partially, alleviated by aid from the O'Connor Foundation. Nevertheless, some problems remained.

For example, the O'Connor Foundation obviously needed more funding (especially in the light of uncertainties about the NNSDP). Furthermore, the way in which aid is provided needs to be carefully evaluated in order to ensure that the people on the ground eventually receive the aid intended for them.

Another problem was that the isolation imposed upon the hostel dwellers by years of violence had severed them from organisations that could assist them in their gardening efforts. The hostel residents have requested assistance in this matter, but to no effect. Permaculture in particular can make a vital difference here, especially in the case of the residents of Kwesine.

The research done in the KaNgwane area focused on nutritional deficits and ways to overcome poverty through developmental programmes, with particular reference to communities near nature reserves. The contribution of the KaNgwane Parks Corporation (KPC) to nutrition in the area was presented from the perspective of the relationship between their Neighbour Relations Division (NRD) and the community. After arguing that poverty leads to malnutrition, instances of positive interaction between the KPC and the community were presented. In particular, projects initiated and implemented by the KPC were investigated. The reasons for the success or failure of such developmental projects were found to depend largely upon the nature of the communication between the KPC and the community. As communication with the community fell within the ambit of the NRD, it identified this division of the KPC as crucial for the success of developmental projects in the area. The personal relations that existed between NRD officers and leaders in the community were pivotal for the whole programme. Therefore care needs to be taken that the future of this remarkable programme does not totally depend upon the expertise of one or two persons. The NRD officers have spent a great deal of time and energy to ensure good terms with members of the community, but it seems that the higher organisational structures of the KPC did not fully appreciate this. For instance the director of the KPC ignored the local custom of greeting the chief or induna of an area before talking to other members

BRI-408442

ORDER NO. 97.6207

COPY NO. PB97790



Conclusion

of the community. Serious attention should be given to ensuring that senior KPC staff follow the same communication protocol as the NRD.

The permaculture project initiated by the KPC taught the women of the community how to successfully grow vegetables in their back yards with the minimum of resources and capital. It evolved directly from a KPC-driven project to a community-based project. Permaculture was so successful in this area that some gardens even yielded surplus crops during the winter months, which is an accomplishment in such an arid area.

R35-00