

**TOWARDS INTEGRATED SUSTAINABLE RURAL
DEVELOPMENT
IN THE UGU DISTRICT,
KWAZULU/NATAL SOUTH COAST**

BY

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DEDICATION

Dedicated to my family for the moral and financial support they offered me

DECLARATION OF ORIGINALITY

I, Good-Enough Thembinkosi Ngwabi hereby declare that the thesis: *Towards Integrated sustainable rural development in the Ugu District* is the outcome of research conducted by me in Vulamehlo under the supervision of Prof. E.M. Makhanya. All sources that I have used or quoted have been indicated and acknowledged by means of references.

Signed: GT Ngwabi at Umlazi Campus this 25th day of

January 2003.

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LIST OF ACRONYMS

CBO	Community-Based Organisation
CMIP	Consolidated Municipal Infrastructure Programme
DA	Department of Agriculture
DACST	Department of Arts, Culture, Science and Technology
DAEA	Department of Agriculture and Economic Affairs
DEAT	Department of Environmental Affairs and Tourism
DFA	Development Facilitation Act
D. Labour	Department of Labour
DLA	Department of Land Affairs
DME	Department of Minerals and Energy
DoE	Department of Education
DoT	Department of Transport
DSD	Department of Social Development
DTI	Department of Trade and Industry
DWAF	Department of Water Affairs and Forestry
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
GEAR	Growth, Employment and Redistribution strategy
GEF	Global Environmental Facility
GIS	Geographical Information System
ICDP	International Conference on Population and Development
IDC	International Development Cooperation
IDP	Integrated Development Programme
ISRDP	Integrated Sustainable Rural Development Programme
IEM	Integrated Environmental Management
LUMB	Land Use Management Bill
NEMA	National Environmental Management Act
NGO	Non-Governmental Organisation
NLC	National Land Cover
NWMS	National Waste Management Strategy
PWD	Public Works Department
RDP	Reconstruction and Development Programme
SADC	Southern African Development Community
SAPS	South African Police Services
SEA	Strategic Environmental Assessment
SMME	Small, Medium and Micro Enterprises
UN	United Nations
UNCED	UN Conference on Environment and Development

SUMMARY

The Ugu District is characterised by economic duality, where poverty co-exists with affluence. This duality persists even within the rural areas. Whereas the commercial farming sector were characterised by underutilisation of agricultural land, the subsistence agricultural sector is characterised by overpopulation, land degradation, low agricultural productivity and underdevelopment. The helpless subsistence farmers have been further victimised by marginal and erratic rainfall, marginal soils, and the frequency of natural hazards such as drought, floods, hail, frost and disease that have frequently inflicted heavy losses in agricultural production over the years. They lacked infrastructure such as roads, electricity supply, clean tap water, sanitation, health facilities and training centres for skills development. The rural population is characterised by high fertility rate, high man/land ratios, high unemployment rate, high illiteracy rate, high dependency ratio, low-income levels and poverty. The abuse and mismanagement of agricultural land resources through the cutting of trees for fuel, overgrazing, and overcultivation was a common phenomenon among the poverty stricken population

The challenge facing South Africa is to find ways and means of achieving overall economic growth and reduction in the level of poverty while maintaining the ecological integrity of the resource base. South Africa has formally embarked on a national *Local Agenda 21* campaign, assisting local authorities to make the global agenda towards sustainable development part of every day activities. Agenda 21 of the Rio Earth Summit is based on the belief that unless sustainable development is placed at the top of the international

development agenda, the global environmental degradation will continue to marginalise the poor, damage human health, slow down growth and world food productivity (Johnston, 1993).

Environment is interpreted very broadly to include physical, biological, social, economic, and institutional dimensions within which a farming community lives and operates. This calls for process-based research in sustainable agricultural development, integrating social, economic, and ecological perspectives. Meeting sustainable development challenges will require new orientations away from the old practice of treating each issue or sector separately and towards dealing with the issues of poverty, food insecurity and environmental degradation, in a integrated way. This new approach to sustainable development should embrace issues of development, participation, empowerment, accountability, indigenous knowledge, poverty alleviation and environmental conservation in a holistic systems approach.

Integrated development planning (IDP) was first introduced in South African planning law by the *Development Facilitation Act*, 1995, the *Local Government Transition Act*, 1996, and more recently the *Local Government Municipal Systems Act*, 2000. Integrated development planning seeks to integrate the physical, social, economic and political aspects of planning. One of the major targets of the IDP is the eradication of poverty, as a step towards sustainable development. Poverty in South Africa is primarily a feature of the historically disadvantaged population. Dispossession and exploitation is at the root of poverty. About 72 percent of South Africa's poor live in rural areas, which are often

highly dispersed and difficult to access for support and service. About 61 percent of the rural poor are Black.

The study was carried out in Vulamehlo, a local municipality that forms part of Ugu District Municipality. As a predominantly rural municipality with severe poverty challenges, Vulamehlo was identified with other similar municipalities within Ugu District as a nodal point in terms of Integrated Sustainable Rural Development Programme (ISRDP). This thesis explores the effectiveness of the ISRDP in Vulamehlo. It was found that the organizational structure of the Vulamehlo ISRDP was sufficient for the overseeing of the implementation and monitoring of ISRDP. The Vulamehlo municipality incorporated spatial development framework in its ISRDP, which is a positive sign towards sustainability. The phasing of the ISRDP followed the prescribed procedures of development planning, including a popular participation consultation process. The shortage of locally generated development capital is one of the most serious problems to agricultural development in Vulamehlo.

CHAPTER ONE

CONCEPTUAL FRAMEWORK OF THE STUDY

1.1 INTRODUCTION

South Africa is characterised by a dual economy. Most rural areas of South Africa may be divided, according to level of economic development, into the commercialised agricultural sector and the subsistence agricultural sector. This duality in the level of economic development is a legacy of colonial and apartheid agricultural and land policies. The colonial acts of dispossessing the indigenous people of their agricultural land are well documented (Welsh, 1971; Wolpe, 1972; Bundy, 1979; Murray, 1989). The dispossessed rural communities were further marginalized by forced removals by the apartheid regime following the 1913 and the 1936 Land Acts (Lipton, 1986). This legalised territorial segregation on racial lines has left an indelible mark on the spatial distribution of agricultural wealth (Lipton, 1986).

Whereas the commercial farmers in South Africa have, prior to 1994, been subsidised by the government, the subsistence sector has not received government subsidies. Successive governments in South Africa treated the subsistence agricultural areas as labour reservoirs that were not considered in rural development planning (Nattrass, 1981). As a result of the growth of the rural population that was prevented from migrating to the urban areas by a series of influx control legislation, the land in the subsistence agricultural areas (mostly the

former Bantustan areas) has become overpopulated and degraded (Makhanya, 1997). It was only in 1948 that the Nationalist government attempted to implement remedial projects in the form of resettlement schemes. These projects were mainly concerned with crude methods of soil conservation that did little to improve the plight of the rural population (Makhanya, 1997).

The development problems of South Africa are not unique. Several attempts aiming at development initiatives in less developed countries, by developed countries, have had relatively few accomplishments. Surveyed documents demonstrate that desperately poor people "the global underclass" still live on the edge of survival, at the mercy of the apocalyptic riders - death, famine and disease (Redclift, 1987). Their living conditions namely housing, health and nutrition are an insult to notions of equity. Since the first development decade, 1960s, the proportion and intensity of poverty has deteriorated alarmingly. In consequence, the World Bank and IMF agencies have been compelled to impose stringent rules on Third World countries expenditure on health, education, welfare and public service (Adams, 1990). Multinational corporations, who are also large commercial landowners, control economic power. They have deprived indigenous people access to arable land. This continued exclusion and marginalisation of the poorest of the poor has increased their poverty. Above all, the underclasses are often politically impotent in the sense that their own government perceives them as troublesome (Chambers, 1985).

Most research on agricultural land use in the subsistence agricultural areas of South Africa appeared in the mid 1980s. The approach was more on a regional or local level. One group

of researchers tended to concentrate on the inefficiency of the indigenous farmers, while the other emphasized over population as a prohibiting factor in agricultural development. One common factor among these writers was their notion that with improvement of these two conditions, i.e., inefficiency of indigenous farmers and over population, it was possible to improve agriculture within the framework of the former Separate Development concept. Nattrass (1981), Nattrass and Nattrass (1990) and Davenport (1990) presented a detailed accounts of the imbalances created by the system of apartheid in the economic development of South Africa.

The challenge facing South Africa is to find ways and means of achieving overall economic growth and reduction in the level of poverty while maintaining the ecological integrity of the resource base. Meeting this challenge requires new orientations away from the old practice of treating each issue of poverty, food insecurity and environmental degradation in a holistic way. This thesis explores the effectiveness of rural development strategies adopted in South Africa in general, and in the Ugu municipality in particular.

1.2 THEORETICAL FRAMEWORK

1.2.1 The Concept Development

Seers (1972) defines development as the reduction of poverty, unemployment and inequality. He states that development in all societies must have at least three objectives which can be summarized as (1) to increase the distribution of basic life-sustaining goods,

(2) to raise the level of living and (3) to expand the range of economic and social choice to individual (Seers, 1972). In the early 1950's when concern with development economics first began, agricultural activities featured strongly. Development was concerned with the improvement of the living standards of the low-income population living in rural areas on a self-sustaining basis (Mabogunje, 1980). The concept development has been altered from almost exclusive preoccupation with aggregate economic growth to a much broader interpretation that encompasses questions of poverty, inequality and unemployment as well as aggregate growth.

One of the major components of the agricultural environment is land. The concept land is itself very complex, being composed of attributes such as the soil, slope, rainfall, temperature, vegetation, etc. Whereas the land is fixed in spatial terms, it can be stretched by careful use of inputs such as water, fertilizer, energy, and conservation methods (Makhanya, 1977). In short, the productivity and development of the land depends largely on the manner in which man uses it.

International concern with development was first raised in the 1960s when the different individuals and organisations noted the state of poverty and hunger in many Third World countries. The First development decade is thus 1960 to 1970. Natural physical scientists featured prominently during this decade and most of the development projects implemented during this time were structural, aimed at improving the deteriorating state of the environment in the colonies (Redcliff, 1987). International research practitioners during this period had a belief that the resulting fruits of accelerated economic growth would 'trickle

down' to the low-income population strata notable in the Third World countries (Adams, 1990). Unfortunately the trickle down approach appeared failing to alleviate global poverty in developing countries of Africa, Asia and South America (Adams, 1990).

The Second development decade ushered in at about 1970s with intention to address issues of social justice. During this development decade social scientists emerged and took their rightful place in research fields, library shelves, conferences and workshops. There was a significant paradigm shift from environmental issues to social issues involving around the concepts of justice, equity, peace, morality and cultural ethics. The focus was the equitable distribution of scarce resource (wealth). International engagement with the concept of development culminated into the United Nations Conference on Environment and Development (UNCED), or the Earth Summit, that was held in Rio de Janeiro in 1992 (UNCED, 1992).

1.2.2 Rural Development

The term 'rural' is, according to Holmes (1997), commonly defined as 'the countryside', areas composed of 'open ' fields or as areas that lie outside the urban areas. Basically, 'rural land' is 'non-urban land'. Several criteria are used to define rural areas. According to Bertrand (1958) the most commonly used criteria were those of the Bureau of Census of the United States, which were based on size, incorporation and population density. Bertrand (1958) contends that the difficulties of making a clear-cut distinction between rural and urban population groups arise, firstly, from the impossibility of using simple statistical

delineations and, secondly, that it is almost impossible to categorise rural-urban differences. Despite these difficulties, fairly satisfactory definitions of rural and urban populations have been devised.

Before 1994 the Department of Statistics in South Africa distinguished between Urban and Non-urban areas on the basis of the existence or non-existence of a Local Authority (Republic of South Africa, 1980). In the 1996 Population Census (South Africa, 1999) 'Urban Areas' are defined as areas that have been legally proclaimed as urban (i.e. towns, cities and metropolitan areas). All other areas are classified as non-urban or rural, including commercial farms, small settlements, rural villages and all other areas that are not part of proclaimed towns and cities. Areas adjoining the urban areas but which are not legally proclaimed urban were treated as non-urban for statistical purposes (South Africa, 1999). In many countries there is a continuum in population size from rural to urban areas, and urban impulses generate the dynamics of growth and change. Few rural areas remain untouched by urban influences. Owing to the close relationship between rural and urban areas, rural areas are increasingly appraised primarily through the interplay between amenity-oriented values and the potential of rural locales to satisfy these values (Holmes, 1997). The term 'rural' has various dimensions as well. It may be related to type of land uses as well as to specific economic and social livelihood patterns (Hubert and van Lier, 1996). The predominant type of land use in many rural areas throughout the world is agriculture (Hubert and van Lier, 1996).

Rural development is initiated in different countries for many reasons, the most common being the upliftment of the standard of living of the rural communities. The first priority in rural development should be agriculture¹, because it is agriculture that provides a livelihood for these rural communities. Nattrass (1981) states that the agricultural sector in any economy plays an initial role in the economic development process. In the early days of development the agricultural sector dominates the economic scene, being both the major producer and employer in the economy. Agriculture is thus fundamental to rural development. Agriculture itself constitutes the interrelationship between land resources and their management. According to Mosher (1971) agriculture consists of four functional components, of which farming with its inputs and outputs is first. Secondly there are the commercial supporting services, which supply inputs and credit; thirdly, there are the institutional agricultural support services like research, extension, training, quality control etc. Finally there is the agricultural milieu, which is a combination of factors, which affect agriculture. Strategies of agricultural development that will eventually lead to improved livelihoods are those which are relevant to the needs of the rural people such that there is a rise in agricultural productivity coupled with a rise in *per capita* productivity. Agricultural development is thus an integral part of general social and economic development involving a movement from subsistence to commercial production. Yet without certain basic requirements, agricultural development cannot take place. Rural communities must have

¹ The concept agriculture as used in this thesis refers to those activities of man that are concerned with the nurturing and exploitation of nature's flora and fauna. It therefore includes activities such as forestry, fishing, hunting, gathering, etc.

motivation to improve themselves and there must exist the necessary technology as well as institutional supporting services to accomplish the task of agricultural development.

1.2.3 Obstacles to Agricultural Development

Throughout the developing world there are diverse environmental limitations that hinder man's attempt to exploit land resources (Eden, 1978). In some instances the obstacles may be overcome by the application of modern technology, but even with effective organisation and finance, success finally depends on the quality of the human resources involved. While problems that are involved in agricultural development are varied, they all stem from or are associated with the combined effects of ecological factors, land tenure systems, capital, labour, management, attitudes and political ideologies.

1.2.3.1 Insect Pests and Diseases

The more common ecological factors that have a direct influence on agricultural productivity include climate, soil and relief. Closely related to these factors, and working against increased food production, is the annual loss of crops due to fungi, bacteria, viruses, parasites, insects and vermin. Many societies encourage the production of a staple food crop. In Asia this is mainly rice, and in Africa maize and to a lesser extent sorghum or millet (Meakins, 1971). Agricultural production is often directed to the growing of these crops over large areas. In this way the concept of monoculture has come to be understood. While the concept may seem sensible in that the land is fully utilized for the growing of the

desired crop and can be more easily mechanized and sprayed, historical evidence reveals that monoculture can be a very dangerous practice.

Monoculture provides the best conditions for the spread of soil and wind borne pathogens specific to that crop. Secondly, it removes valuable nutrients from the soil, which could be replenished by the equally old system of crop rotation, or by growing mixed crops in smaller fields. The problem of pathogens reduces the worlds' agricultural output by at least 20 percent, whilst the second destroys the bioactivity of the land leading to soil erosion and crop failure (Meakins, 1971).

The world has experienced massive food failures due to wind and soil carried pathogens. The potato famine in Ireland and Europe in 1945 was caused by a little fungus *Prytopthera infesicants*, the potato blight (Haggett, 1979; Meakins, 1971). A complete failure of the potato crop was the result of both the failure to rotate crops (monoculture) and an exceptionally warm but dry summer. In Sri Lanka (Ceylon) the introduction of coffee plant was initially so successful that in 1870 above 50 000 tonnes of coffee was exported. The coffee rust fungus *Hemeiolia vastrix*, probably established around 1875 and 1886 had destroyed about 2000 tonnes by 1889. In one plantations of *Coffee Arabica* in the Ujamaa village of Utrin, Tanzania, over half the crop was diseased. Wheat is highly susceptible to wheat rust fungi. Some examples of the disease of maize include, amongst others, the American boll worm which damage the cob, aphids which suck the sap and transmits maize streak virus; Blanch maize beetle which eats holes in the plant below the soil level and

chafes beetle which causes leaf damage. Pink stalk borer larvae burrow into the stem and the cob, stalk borer larvae bore into the growing tip and stem.

Diseases and insect pests have caused considerable damage to food production programmes of many countries. Meakins (1971) reports a locust outbreak that occurred in Niger in West Africa in July 1928, which, by September of that year, was in Mali. By 1930 it had spread throughout the countries between Liberia and the Cameroons. In 1931 it ranged from the Sudan/Ethiopian border to Zaire and Zambia. By 1932 its range included South Africa, while in 1980 they were reported in from Central and Southern Africa.

✓ 1.2.3.2 *Communal Land Tenure Systems*

Many of the problems of rural development and, more particularly, of agricultural development are blamed on the communal system of land tenure (Kotze, 1987). There are two schools of thoughts concerning the solutions to these problems. One suggests the reform of land tenure and ownership systems while the other suggests that reforms will not solve anything. The issue of land ownership is embedded in the social, political, economic and religious ethos of the rural communities.

The two forms of land ownership discernible in rural areas, particularly in South Africa, are the communal land tenure system and the quitrent system (Kotze, 1987). The communal land tenure is based on the traditional system, by which all land belong to the tribe. The King or Chief (acting on behalf of the King) exercised control over it and acted as a trustee

on behalf of the tribe. He controlled the way land was used, and settled lawsuits arising from land disputes. Members of the tribe had a right of cultivation whereby the head of the family was entitled to sufficient agricultural land. Members also had a site for grazing, drawing of water, cutting of grass and gathering of wood (Kotze, 1987).

Nattrass (1981) maintains that in rural areas farming is organized on tribal lines with no security of individual tenure. The local chief has power to allocate land and a married man seeking to set up a home in the chiefs' area applies to him for the right to settle and for a grant of land. The agricultural land is traditionally allocated on a strip basis the number of strips being largely determined by the availability of land (Nattrass, 1981 p: 112).

In Lesotho land use is allocated along the same lines as in South African rural areas. The land was traditionally granted to individuals solely for subsistence of the family group and it included a residential site with or without a garden, depending on local conditions, and three parcels of land for cultivation. There was no standard acreage laid down with regard to the size of these parcels and the right. Rural landholders enjoyed only usufruct right over the land (Makhanya, 1979, p. 30).

The communal system of land tenure has certain limitations placed on the individual's right to agricultural land. The individual did not have full rights over the land he uses because if a person failed to cultivate the land allocated to him it reverted to the chief who could then re-allocate it to another person. The fact that the right to land is only limited to usufruct, means that the farmers cannot use the land as security to obtain bank loans.

The communal system of land tenure involves practices such as communal and stubble grazing which encourage resentment to fencing and inhibit freedom of choice of the individual farmer (Makhanya, 1990). This principle of equity and subsistence that characterises land allocation to communities militated against the rise of the true farming class. This principle of equity also resulted in the plots or strips of land allocated to farmers being too small that "it would be very difficult for a villager aspiring to engage in commercial farming to acquire a viable land unit" (Makhanya, 1979 p. 30). This results in some of the most enthusiastic farmers being discouraged from farming.

1.2.3.3 Lack of Capital

The shortage of capital in developing countries is one of the most serious problems to agricultural development since agriculture is a risky enterprise that requires good financial backing (Makhanya, 1990). Farmers in many peasant societies have very low savings. There is argument that in some cases it is even zero. This situation of low savings is even aggravated by the fact that farms in most of the underdeveloped world are small and, unless a farmer is growing a high-value crop, production is mainly for family subsistence (Grigg, 1978, p. 74).

The lack of capital means that there are many activities that the rural people cannot afford e.g. clean water sources, building of boreholes or dams etc. The shortage of capital is a serious handicap for the fact that people in the rural areas do not have pipes and water to

irrigate their fields, have low education, do not have essential items like televisions, washing machines and do not have tap-water. This results in women and children having to walk long distances, even up to 1,5 km, to fetch water for their families, which water in most cases is polluted and carry related diseases like cholera and typhoid.

Many people cultivate their fields with hoes because they cannot afford to pay tractors. Using hoes is disadvantageous because vegetation cannot be ploughed under. Consequently the humus content of the soil is depleted which in turn leads to poor production. Owing to the lack of capital, farmers cannot buy hybrid seeds for their fields and instead they keep part of the harvest for use as seed during the next planting season. They cannot even buy fertilizer. The rural poor need financial support if their agriculture is to be sustained, otherwise production will remain at a subsistence level and their quality of life far will always be poor.

Since the families in developing countries are large, the family consumes most of the produce and only a small portion can possibly be marketed. Cash income fluctuates from year to year. Consequently farmers are highly exposed to risks such as droughts, floods, insect pest and epidemic diseases (Grigg, 1978, Makhanya, 1990).

According to Mabogunje (1980) the problem of capital among the Chinese peasants farmers was compounded by heavy rents, absentee landlords, use of primitive tools, lack of credit, indebtedness to moneylenders as well as oppressive taxation by warlords (Mabogunje, 1980).

It is clear that the state must play a large role in investment in agriculture in developing countries. Unfortunately many underdeveloped countries have allocated a small proportion of public funds to agriculture. In Nigeria, for instance, "Federal investment in agriculture and non-mineral resources between 1949 and 1962 ranged between 3,6 and 5,6 percent annually; though it had been increased to 13,6 percent in the 1970s" (Grigg 1970, p. 100). In Sri Lanka investment in agriculture has fallen from 42 percent of public funds in 1947-52 to 25 percent in 1961/64 (*ibid.* p 100). In South Africa, between the years 1910 and 1936 the state spent R224 million on White agriculture as opposed to just over R1,25 million on Black agriculture, a ratio of 187:1 (Makhanya 1990).

✓ 1.2.3.4 Lack of Infrastructure

Infrastructure can be regarded as part of the capital stock of a country. It is also described as the social overhead capital (Sundrum, 1983, p 98). In practice it refers to such services as transport and communications, power, water supply, irrigation and storm water drainage systems.

Since infrastructure plays an important role in the development of an area it is imperative that its provision should be the responsibility of the state. Sundrum (1983, p. 99) identified three characteristics of infrastructure that qualify it to be the function of the state. They are:-

1. Infrastructure belongs to the category of public goods, that is, goods whereby the consumption by one person will not reduce the consumption by others. If the allocation of resources between private goods and public goods were to be determined by a market in the same way as the allocation among private goods, the output of public goods will be less than optimal.

2. Infrastructure consists of large and costly installations. One consequence is that such installations may be beyond the capacity of individuals or small groups to establish.

3. Infrastructure serves as a means of promoting innovation. Infrastructure makes it possible for producers to gain access to modern technology.

The solutions to these problems vary from country to country. In some instances the problems are of a local scale, while in some instances they necessitate government intervention.

1.2.4 Some Past Rural Development Theories

While agricultural development *per se* cannot be equated to economic development, many developing countries have launched programmes aimed at improving agricultural production as a strategy to boost rural economic development. In many developing countries agriculture appears to be practised by a greater part of a country's production and is a means of subsistence. Peasant farmers cultivating rarely more than three hectares of

land dominate the production of industrial crops especially in West Africa and Uganda (Udo, 1982). During the colonial period in Sierra Leone, the British, to cultivate improved seedlings and to adopt better methods of processing their crops for export, encouraged Ghana, Nigeria and Uganda local farmers. From 1907 to 1925 the firm of Lever Brothers made several unsuccessful attempts to obtain concessions for cultivating oil palms in Southern Nigeria and were subsequently obliged to approach the then Belgian Congo administration which granted them rights to establish the large oil palm estates in Zaire. In Kenya and Zimbabwe, where the climate favoured European settlements, the British alienated large areas of African land for European settler-farmers. According to Udo (1982) large tree-crop plantations were established by private foreign firms in the Ivory Coast, Liberia, Angola and Congo Republic. The Chinese experience sets a good example of such a model of rural development in Africa since it associated with the communal ownership of land.

1.2.4.1 The socialist models of rural development

In the early 1950's, China's economic policy was largely based on the Soviet model of emphasising heavy industry and urbanisation financed by a surplus squeezed from the rural sector. But the Chinese leaders soon realised that the pattern of rapid industrial growth at the cost of agriculture was hardly suitable for a country where 80 per cent of the population lived in rural areas. By 1976 China began to evolve its own approach to socialism based on agricultural and rural development (Aziz, 1987). Initial efforts focused on traditional factors such as labour, intensive water control and management of organic manures since in this

phase the social transformation of agriculture was the primary objective of agriculture. In the early period between 1960 and 1975 the third phase of rapid mechanisation in agriculture and selective modernisation in industry had started.

The agricultural communities were organized into communes consisting of groups of families. Communes collectively used land for agricultural production. China succeeded in generating surplus labour in the traditional rural sector and keeping it there. The labour surplus was retained in the rural areas through the taxation system, which levied a fixed amount of tax expressed in monetary terms. As the agricultural production increased the total agricultural taxes decreased from about 12 percent in the 1950's to less than 5 percent in the 1970's. The agricultural pricing system which paid higher prices for grains contributed by communes over and above their basic grain quota, and the co-operative marketing arrangements for agricultural products to the exclusion of middlemen also helped to retain the surplus in the rural areas geared to bringing about rural development through the improvement of agricultural production.

1.2.4.2 Adoption of the Chinese model in Africa

The re-organization and resettlement of farming communities, similar to the communes of China, were started in many developing African countries (e.g. Kenya, Uganda, Tanzania and Ethiopia) after independence. While the strategies employed by the various countries were different, all the programmes had certain feature in common; the most important being initiating rural development through increasing agricultural productivity.

According to Udo (1982) the main objective of the Tanzanian Government after independence was the transformation of rural life. This led to its villagization policy called "ujamaa". Ujamaa is a Swahili word, which means "family-hood" (Udo, 1982, p: 125). At independence most Tanzanians lived in scattered settlements made up of the clusters of family huts. The strategy has been to establish large nucleated villages, so as to make it economical to provide rural people with basic services such as improved water supplies, schools, health centres and electricity. Over 5 000 "ujamaa" villages with an average population of 300 each were established. The general procedure in the village was that land was cleared and cultivated collectively. Thereafter individual plots are planted, weeded and harvested by heir owners in collaboration with their neighbours (Udo, 1982). Ujamaa presents an extended family system, which is characterised by sharing and communal production.

In Ethiopia the mobilisation of the rural peasantry followed along the same lines as the 'ujaama' villagisation programme, though with some exceptions. Cohen and Isakson (1987) lashed out that

"The extensive discussions that marked the drafting of the land-tenure reforms do not appear to have taken place in formulating the villagisation campaign. Apparently the government officials and party leaders based their strategy on assumptions rooted in theories of Marx and Lennin, namely that (1) man is a social animal, and the historical trend of rural people is towards village settlements; (2) that their creation is an essential step towards the formation

of non-exploitative group farms that are the basis of agrarian socialism; and (3) that revolutionary restriction of the countryside requires strong political control at the grassroots" (Cohen and Isakson, 1987, p. 436).

According to Cohen and Isakson (1987) the objectives and rationales for the villagization campaign are given in an Amharic document entitled villagization Guidelines. Prepared by the Ministry of Agriculture, and dated October 1985, the major aims of the villagisation campaign were (1) enhancing extension services aimed at increasing agricultural productivity; (2) promoting more rational land-use patterns and conserving natural resources; (3) facilitating access of rural people to schools, clinics, water supplies and service co-operatives; (4) strengthening security and self-defence; (5) using villagization to advance the revolution, and ultimately collective agriculture; and (6) giving the regime enough political control to ensure agrarian socialism and reconstruction of rural society.

According to Cohen and Isakson (1987) Phase 1 of the actual implementation of the villagization programme took place in 285 *woredas*, 48 *awrajas*, and 8 *kifle hagers*, albeit concentrated in *Shoa*, *Arsi* and *Hararge*.

This phase was primarily concerned with agricultural mobilisation since these three Regions contain 33 percent of Ethiopian farming population, produce 40 percent of the national cereals crop, and provide 55 per cent of the Agricultural Marketing Corporations grain purchase" (Cohen and Isakson, 1987, p. 437).

The programmes discussed above and many others were established and implemented in various developing countries throughout the world, with an aim of improving agricultural production. It is important to note that the implementation of these programmes was not easy. There were always problems though these were different and some unique to certain situations.

1.2.5 Poverty in Less Developed Rural Areas

There are divergent views on the concept poverty. Van der Hoeven and Anker (1994) define poverty as the inability of an individual, family or entire community to command sufficient resources to satisfy basic needs. The perception of 'basic needs', however, varies from community to community and from time to time. Iliffe states that poverty has "the inescapable connotation of physical want" (Iliffe, 1987 p.2). The World Bank has linked poverty to food insecurity (World Bank, 1986); yet the explanation of food insecurity is itself an elusive task. Any attempt to define the concept poverty tends to introduce more questions than provide answers. This is mainly because poverty is a dynamic concept that varies with time and space (Makhanya and Ngidi, 1999).

Poverty has many facets and the poor are diverse. In rural communities, where people satisfy their basic needs through tilling the soil, different factors may cause poverty. The conceptualisation of poverty is further complicated by the fact that different communities have various notions of it. There are, however, generally two forms of poverty. The first is absolute poverty, where the individual, family or community is in a real state of indigence.

The second is relative poverty, where the poverty of an individual, family or community is judged by comparison with other individuals, families or communities. The notion of poverty is thus complex, varying not only from community to community, but also from time to time (Makhanya, 1999).

When the Europeans colonised the Third World Countries they vigorously exploited the natural environment and introduced foreign economic systems and ways of living. This caused a major disturbance in the way of life of the indigenous societies. Wilkinson (1973) maintains that the indigenous cultural systems were thrown out of their equilibrium as they adapted to new and often strange ways of living.

1.2.5.1 Food Insecurity

According to Meakins (1971), the starvation, which became a reality in 1980, in the East and Central Africa, and Indo-China was an indication of the failure of the world to produce enough food for its people. He attributes this discrepancy to three major factors viz, the massive worldwide population expansion, unequal distribution of available foods and inefficient utilization of the limited land available. The population expansion is noted also by Natrass (1981, p. 113) in her assertion that, "not only did the total output of the Black agricultural sector fail to expand to any great extent, but the same period of time saw a rapid rise in the rate of population growth in the Black rural areas." In 1962 the Food and Agricultural Organisation of the United Nations estimated, that the population of the "Third World" was 1 5000 millions, excluding that of the Peoples Republic of China with another

800 million. By 1985 this was estimated to have increased to 2 500 millions. This population increase necessitated an 80 percent increase in the food supplies to maintain the food availability (Meakins, 1971, p. 81).

Of the extra animal protein required by 1985 only one quarter could be produced by domestic livestock. For the levels of cereals needed in Asia, the Near East and most of Africa importation of an additional 90 million tonnes could be theoretically required. In order to meet this requirement another one million km² of land must produce cereal crops such as maize, sorghum, wheat millet and rice.

According to Meakins (1971), such extra food requirements could be met by increasing the production of cereal grown by 3.6 percent per annum. This would involve an improvement of one percent over the rate between 1995-1965, and is generally unlikely because the rate between 1960-1965 in the "Third World" fell below 2,6 percent in all regions except South America.

The introduction of new varieties of cereals, which are independent of weather, could mean greater yields per hectare and in many cases more than one crop per year. Protein shortages could be avoided by greater diversification of protein sources. An increase in pig farming and poultry rearing inland fish farming and the planting of beans, peas and lentils would help. No single animal or plant could possibly meet our needs nor have the chemical industries much hope. We can convert oil into protein, but the farmer is now regarded as being more scarce than the latter, making any such conversion insensible.

There are many fundamental generalisations made about the supply of food, which are based on false concepts. Most calculations concerning the World Food Shortages assumes that the major grain producers like USA, Canada and Australia, will always supply their excess production to the Third World on demand (Meakins 1971). This notion is obviously very erroneous because there is no country that is willing to give its resources to the first one who asks. Furthermore the strict control, by the United States of America (USA) and other producers, of the flow of foodstuffs out of their countries made it difficult for the needy nations to get their requirements.

The worldwide food shortages seem in the 1980 and expected in the 1990's have made it imperative that each and every country improved its agricultural technology to try to meet its own requirements. The relevant agricultural technology is the one to increase the yields from grain by 50 percent or more (Griffin, 1974). The agricultural industry needs a kind of technology that will not only produce higher yields per crops, but also permit shorter cropping cycles and thereby enable farmers to economize on resources like water and land.

1.2.5.2 Food Production Programmes in Rural Areas of Developing Countries

One of the major food production programmes ever launched was the "Green Revolution", which meant breeding plants that would bear more edible grain and thus increase yields without increasing areas of crop cultivation (George, 1977; Griffin, 1974). Traditional rice

grains tend to be tall on the stalk for reasons on natural selection. That way they can get more sunlight, grow higher than the surrounding weeds, and resist flooding when heavy rain come. If one tried to produce double kernels on these long stalks, the plants would be too heavy, keel over and lodge in the soil. The problem was to produce plants with short, tough stalks that could bear new fertilizer sensitive hybrids. The new dwarf varieties capable of producing spectacular yields under ideal conditions, that were eventually bred, go under the name of high-yielding varieties, or HYVs (George, 1974). The high yielding varieties are largely for wheat and rice, but improved varieties of other crops have also been developed, notably maize, sorghum and millet (Griffin, 1974). While these plants can be adapted to a number of environments, they present problems of disease resistance. Furthermore, they will not bear full fruit unless sufficient doses of fertilizer are applied and unless optimum is supplied.

According to George (1974), full benefit would be obtained from the 'miracle' seeds if they get plenty of water, fertilizer and chemicals for protection against weeds, pests and diseases. If one of these elements is lacking, HYVs can sometimes produce less grain than what could have been obtained with traditional varieties. In trying to provide these requirements for the production of rice, the wet paddy ecosystem was used in South Asia. This involved transforming a dry-land ecosystem into an aquatic one. Bayliss-Smith (1982) maintains that the agricultural system itself supplies nutrients, for instance, through the silt that is transported by the irrigation water. In addition to this water logging leads to three kinds of change in the soil that is physical, biological and chemical (Bayliss-Smith, 1982). All these changes prepare the ecosystem and make it possible for rice seeds to produce more grain.

The "Green Revolution" actually started in Mexico, in 1943, when four American genetics financed by the Rockefeller Foundation founded the International Wheat and Maize Improvement Center (IWMC). As soon as the new seeds were introduced on large farms yields began to increase. Between 1944 and 1967, wheat output tripled and corn doubled. Mexico began to export commercial grain surpluses. The success in Mexico led to the Rockefeller Foundation teaming up with Ford to repeat the performance in Asia - this time with rice. They founded the International Rice Research Institute (IRRI) in the Philippines in 1962. The research proved to be so successful that the HYVs were seen to be able to produce not only more grain per unit area, but they could do it with a shorter growing cycle, allowing double or even triple cropping on the same land in a single year. The period 1965/66 to 1972/73 saw the wheat planted areas in developing countries increase from 10 000 hectares to over 17 million hectares; rice surface, beginning at 49 000 hectares in 1965 reached nearly 16 million in 1973 (George, 1977).

The technology of the "Green Revolution" was essentially very modern and strange to rural communities when one considers the traditional modes of production. The idea of ensuring a sustained yield from the land over relatively long period of time is the most critical aspect of man's technological capability with regard to agricultural production. Mabogunje (1980) pointed out that for many societies it is generally recognised that yields could be maintained by the application of domestic refuse or animal droppings on the land:

"Since these materials are never enough for the total cultivated area, the tendency in most rural areas, in Africa, is to divide the farm land into two categories; one near the homestead, usually small but manured intensively and cultivated permanently, the other and larger area farther away from the homestead and alternating a period of cultivation with a period of fallow during which the land is allowed to recuperate naturally. While all known agricultural communities recognize these two categories of land use, with regard to development, it is the use of the larger field that has been critical" (Mabogunje, 1980, p. 78).

1.2.6 Poverty and the Environment

International concerns about poverty in the less developed countries were first expressed in the 1960s. During this period there was optimism and positive international cooperation towards development in these countries (FAO, 1969). Initially the assumption was that the development problems of the underdeveloped world would be solved quickly through the transfer of finance, technology and experience from the developed countries. The motivating force behind development was thought to be economic growth that had taken the developed societies through to their own position (Redclift, 1987; FAO, 1969; Adams, 1990). The environment and development were seen to be quite separate and independent issues.

During the 1970s, however, the optimism of a rapid end to underdevelopment diminished. World poverty and inequality increased. This made the nations of the world rethink their strategies on development. In 1971 the United Nations (UN) seminar on Environment and

Development held in Switzerland the international community expressed appreciation of the conception that environment and development problems were compatible, and that a lack of development was as harmful to the environment as over development (Redclift, 1987; Adams, 1990).

In 1972 the UN Conference on the Human Environment, held in Stockholm, used the term 'pollution of poverty' to refer to the environmental concerns of the poor (Adams, 1990). For example, issues such as the lack of clean water or sanitation. Lack of access to such essential supplies threatened life in many developing countries. By the late 1970s the environment and development, which were previously seen as two separate issues, were conceived as interdependent issues. As a result, the interdependence of the developed and developing worlds was also recognized (Redclift, 1987).

The International Conference held by United Nations in 1972 at Stockholm was a major break-through in the discourses of environmental conservation and development. However, *significant strides became noticeable with emergence of the World Commission on environment and development (WCED, 1987). Brundtland Report*, (named after its chairperson), stated 'Our Common Future' should be seen as one concerted effort to recapture the spirit of Stockholm in 1972. It places elements of sustainable development within the economic and political context of the international development, and puts environmental issues firmly on the political agenda. The Report also made the United National General Assembly discuss environment and development as one single issue.

Essentially, the Brundtland Report start from the premise that environmental issues cannot be separated from developmental issues.

"It is therefore futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and international inequality (Brundtland, 1987,p.3). "

During The 1980s it was apparent that for sound economic growth to take place, it was critical that the benefits of such growth did not benefit only a minority of the population. Distributional issues, such as improving the income levels of target populations, were now accepted as fundamental parts of any development strategy. International cooperation was revived and optimism was once more expressed within the literature on development (Elliott, 1994).

In the 1980s development was seen to be a multidimensional concept incorporating widespread improvements in the social as well as the material well being of all people in society. It was also realised that there was no single model for achieving development and that investment in all sectors of the economy was required. Above all, it was recognised that 'development' needed to be sustainable.

In 1980, the World Conservation Strategy (WCS) was published by the International Union for the Conservation of Nature and Natural Resources (IUCN), the United Nations Environment Programme (UNEP) and the World Wildlife Fund (World Bank, 1989). For

the first time, development was suggested as a major means of achieving conservation. No longer was development perceived as an obstruction to conservation. By 1992, the interdependent issues of environment and development were recognized to be of sufficient global concern to justify the largest assembly of heads of government in history at the UN Conference on Environment and Development (the 'Earth Summit') in Rio de Janeiro, Brazil. Agenda 21, adopted at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, underscored the important role that States play in the implementation of the Agenda at the national level. It recommended that States consider preparing national reports and communicating the information therein to the Commission on Sustainable Development (CSD) including, activities they undertake to implement Agenda 21, the obstacles and challenges they confront, and other environment and development issues they find relevant.

1.2.7 Conceptualising Sustainable Development

A review of the literature that has sprung up around the concept sustainable development indicates a lack of consistency in its interpretation. Above all the term has become a catchphrase among international aid agencies, the jargon of development planners, the theme of conferences and learned papers, and slogan for environmental activists (Lele, 1991).

1.2.7.1 Definition of Sustainable Development

The most widely quoted definition of 'sustainable development' and effectively the official one is that of Brundtland Report (Brundtland, 1987):-

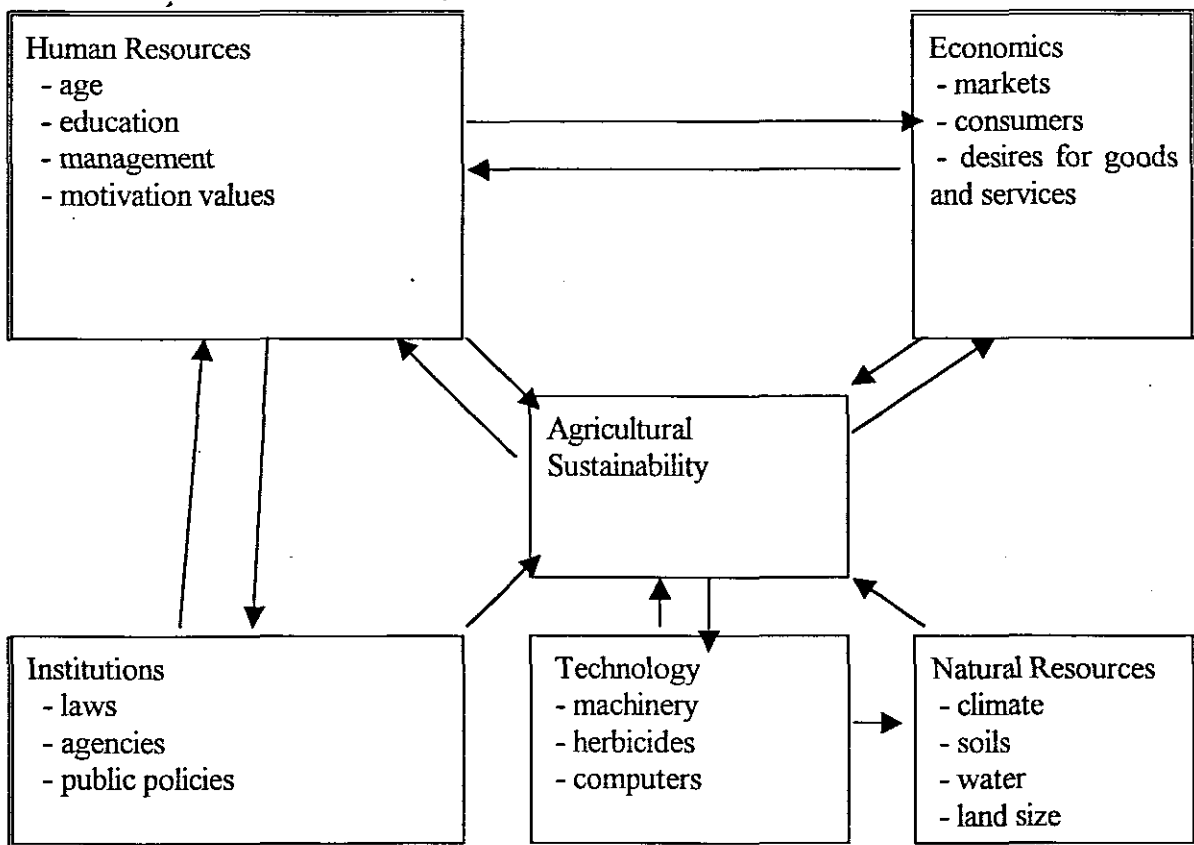
[Development that] meets the needs of the present without compromising the ability of future generations to meet their own needs.

The apparently simple and clear Brundtland definition has caused heated discussion among theoreticians and practitioners of environment and development. Many of them say the same thing at much greater length (Kirkby, *et al*, 1996).

Redcliff (1987) recognizes the fact that one of the sources of conceptual confusion surrounding the term is, that no agreement exists regarding what exactly is to be sustained. The goal of sustainability sometimes refers to the resource base itself, and sometimes to the livelihoods which are derived from it. Redcliff (1987) further argues that the concept is often used as if consensus exists concerning its desirability. Ecologists, developmentalists, environmental planners and economists all mean very different things when they use the term due to their disciplinary biases, distinctive paradigms and ideological disputes.

1.2.7.2 Dimensions of Sustainable Development

The term sustainable development appears to bring together development priorities i.e. meeting human needs and environmental priorities or controlling or limiting the harmful impacts of human activities on the environment. It therefore is clear that to attain sustainable development, simultaneous achievement of social, economic, political and ecological goals (Hardoy, *et al*, 1992).



Diag. 1.1 Forces Influencing Agricultural Sustainability (Nellis & Price, 1998)

The notion of sustainable development in the context of rural areas has evolved substantially in terms of the recognition of its key dimensions - ecological, economic, socio-cultural and political.

Greenwood (1993) confirms that 'sustainability' is a multidimensional term containing many diverse elements and goals. He argues that it is the balancing of these goals, which leads to sustainable production, and she defines a sustainable food production system as one that does the following:

- a. maintain or enhance environmental quality,
- b. provide adequate economic and social rewards to all individuals and firms in the production system and
- c. provide a sufficient and accessible food supply.

According to the above definition it would seem that there is a need to balance environment, social and economic goals with the need also to maintain an adequate food supply.

Sustainable development, as a process that constantly searches for 'compatibilities between socio-economic development and the environment, is acknowledged as being dynamic and being more a process than a fixed state or set of conditions' (*ibid*).

1.2.7.3 Sustainable Rural Systems

The notion of sustainable development in the context of rural areas has evolved substantially in the last few years in terms of the recognition of its key dimensions: ecological, economic, political, socio-cultural. Sustainable development, as a process rather than a fixed state or set of conditions, is dynamic. Given the holistic nature of the sustainable development, interrelationships are examined as whole or totality. Inclusive in the process are elements of social equity and justice. This quickly harnesses the focus on the sensitive political issues in terms of Marxist Theory or structural functionalism: naked exploitation, cash nexus, surplus cheap labour, struggles, confrontation, collective bargaining, alienation, false consciousness *vis-à-vis* true consciousness etc. Sustainable rural development invariably seeks to explore complex relationship institutional organisations and non-governmental organisations i.e. building blocks (Bryant *et al*, 1996).

According to Turner (1988) sustainable development tends to focus on 'fair' distribution of available resources between people alive now and the future generation. To take a just one illustrative example, the exploitation of the assimilative capacity of the world's terrestrial ecosystems, oceans, and atmosphere means that less of this life-saving capability is left for future generations. Again, the stocks of such assets for future generations will be reduced. The question can then be posed, is this fair? Is it right? That those of us alive now should

essentially destroy assets (and the economic opportunities that they yield), even though gaining benefits from the process, while passing on the costs to people not yet alive and who have had no say in the matter? Putting it in simple terms, both inter-generational equality (Fairness among individuals currently alive) and inter-generation equity (fairness among generations of individual concerned must be met before society can attain the goal of sustainability (Turner, 1988).

The environment has suddenly been recognised by many of the world leaders as an issue of central rather than peripheral importance. It is believed that the storm of controversy arises from things like equity and poverty between the rich and the poor. It also acknowledged by both natural and social scientists that these topics invoke powerful ideologies, strong emotions, and deep-seated prejudices (Young, 1990).

Although the term sustainable development is suggestive of a fundamental new approach to development, it remains elusive when actually dealing with environmental and developmental challenges. Sustainable development is perceived as a path of continuous economic growth with spread of material improvement to individuals and groups previously deprived of material advancement. It includes environmental awareness. Successful sustainable development has to deliver basic services to all, environmental, social economic services (Hindson and Patel, 1995).

1.2.7.4 Divergent Perceptions on Sustainable Development

Mainstream thinking perceives sustainable development as something that takes place without threatening economic growth. Mainstream thinkers reason that economic growth will provide an anecdote for environmental problems and global poverty. There appears to be a tendency to avoid the damage caused by global capitalists expansion. People centred development takes cognisance of the fact that poor people become beneficiaries of development. Radical perspective focuses on social justice and equity, and it rigorously criticizes capitalist countries for exploitation and dehumanisation of people (Adams, 1990; Amin, 1985). It further maintains that the capitalist's mode of production has catastrophic consequences.

Radical thinkers argue that reformists approach advanced by main stream thinkers tends to fail to tackle the bull by the horns i.e. to deal with controversial social issues associated with the global capitalist system. These presuppose attainment of everlasting development from present to future generation (Pearce, 1984).

Sustainable development tends to reflect a politics of identity, i.e. it provides nodal points around which citizenship and civil rights emanate. It is in such protracted struggles that marginalised countries demand the redress of inequalities across a broad spectrum of issues

issues name 'Green' issues - conserving natural environment and 'Brown' issues - improving the quality of life (Adams, 1990).

Many social scientists seem to reach consensus that sustainable development has emerged as an umbrella concept beneath which integration of a broad range of interrelated issues of environment and human development. It focuses on linkages between non-renewable and renewable resources management in terms of long-term prospects.

1.2.8 Selected Declarations and Principles of the Rio Earth Summit

At a United Nations Conference on the Environment and Development (UNCED), also called the Rio Earth Summit, held at Rio De Janeiro in 1992 participating governments, business leaders and representatives of the voluntary sectors committed themselves to certain declarations and principles concerning sustainable development (UNCED, 1992). The delegates adopted a document called 'AGENDA 21' which spelled out the agreed intentions of the participants to take account of The Hague Declaration of 1989, and establish a major new global environmental authority to protect the earth's atmosphere. Agenda 21 is based on the belief that unless sustainable development is placed at the top of the international development Agenda, the global environmental degradation will continue to marginalise the poor, damage human health, retard growth and world food productivity (Johnston, 1993).

Agenda 21 is based on the belief that unless sustainable development is placed at the top of the international development agenda, the global environmental degradation will continue to marginalise the poor, damage human health, slow down growth and world food productivity (Johnston, 1993). Of relevance to this thesis are Agenda 21 Chapters dealing with the following declarations and principles: (i) combating poverty, (ii) demographic dynamics and sustainability and (iii) Integrated approach to the planning and management of agricultural land resources.

1.2.8.1 Poverty Eradication

Having realised during the 1972 the Stockholm UN Conference on the Human Environment that environment and development were interdependent issues, and that there was an association between environmental degradation and poverty, the fifth principle of the Rio Declaration states that:

“All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.” (UNCED, 1992).

This declaration was adopted on recognition of the environmental concerns of the poor (Adams, 1990). The poor were concerned with basic issues such as the lack of clean

water, sanitation, electricity, roads, education, etc. which threatened life in many developing countries (Redclift, 1987).

Low agricultural productivity and poverty plague millions of the world's population engaged in agriculture (Raymond, 1982). The rural population of the less developed countries constituting about sixty to ninety percent of these nations account for more than half of the world's population. As a rural labour force, these people are key potential resource for greater food production. In addition, of course, these poor people are in most need of more and better food. Their low productivity is at the heart of the supply side of the world food problem.

1.2.8.2 Demographic Dynamics and Sustainability

The first principle of the Rio Declaration states that:

“Human beings are at the center of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature”(UNED, 1992).

Demography includes elements such as gender, literacy, social status, governance, etc. The Rio Declaration incorporated Principles number 20 to 25 to ensure that women, the youth, indigenous communities and the oppressed are recognized by their respective governments. It was further declared that full participation by these various population elements is essential to achieve sustainable development (UNCED, 1992). The Rio

conference noted that peace, development and environmental protection were interdependent and indivisible. Principles 24 and 25 specifically requests states to observe peace and respect for international law providing protection for the environment in times of armed conflict (UNCED, 1992).

It was found that the often-disadvantaged women and children actually played a vital role in development. They are principal producers of food, managers of household's resources and custodians of family welfare. But they are often confronted with role conflict and constraints associated with cultural norms, values and beliefs (World Bank, 1989, p.60).

Sharp (1996) maintains that the ingredient of sustainable development has been enshrined in the 'Urusha Declaration' on popular participation in development (1990) and the Manilla Declaration of people's participation (1989).

The assertion of the *right to participate reiterates a citizens entitlement as set forth in the Universal Declaration of Human Rights* adopted by the UN General Assembly in 1948. The widely upsurge of public demand for democracy in many countries and consequent demise of repressive regime signify the urgent need for sustainable development.

Conclusive evidence demonstrates that development projects designed, and implemented without the full involvement of the intended beneficiaries, have had a high rate of failure. Sometimes substantial funds of international agencies are misappropriated.

Sustainable development implies a balanced relationship between human population and the available natural resources. It is important to note that the current rate of population growth is accelerating to such an extent that it has now become a race to feed the growing population. The fact that population continues to grow in spite of the prevailing checks on imposed by war, famine and disease, is a threat to sustainability. All countries worldwide are concerned about the population problem (the population problem is the impact of rapid population growth on food, resources and economic and social development, and on individual well-being). High growth of population density creates high pressure on existing agricultural lands, resources and amenities. Population pressure on resources and their exploitation bring about poverty which in turn leads to problems such as excessive consumption of natural resources, massive discharge of pollutants which affect the human health and bring about various epidemic diseases like cholera, malaria, tuberculosis, etc,

Ironically, the population problem is related to systematic improvements in public health, which resulted in the control of many killer diseases (a desire for sustainable development). The rapid increase in population is also related to improved agricultural techniques that have secured food for many countries. Famine, however, still kills many people especially the children in the Third World countries (Campbell, nd). Apart from being of importance to the study of sustainability the population debate is a global issue that has engaged many serious scientists and others world wide in soul searching discussions.

1.2.8.3 Integrated Approach to the Planning and Management of Agricultural Land Resources.

The fourth principle of the Rio Declaration states that:

“In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it”.

The international community generally acknowledged in the 1980s that environmental degradation impacted negatively on economic growth. It was established that the resulting situation had linkages with social, economic, social, political, ecological factors (Redclift, 1987). The environment issue received widespread social interest. There was a paradigm shift towards the a more holistic and integrated interpretations of environmental issues (Pierce, 1992). Talbot (1984) stated that unless development conforms to conservation principles sustainable welfare will not be realised (Talbot, 1984).

Environment is interpreted very broadly to include physical, biological, social, economic, and institutional dimensions within which a farming community lives and operates. This calls for process-based research in sustainable agricultural development, integrating social, economic, and ecological perspectives. Meeting sustainable development challenges will require new orientations away from the old practice of treating each issue or sector separately and towards dealing with this issues of poverty, food insecurity and

environmental degradation, in a integrated way. This new approach to sustainable development should embrace issues of development, participation, empowerment, accountability, indigenous knowledge, poverty alleviation and environmental conservation in a holistic systems approach. The approach is to try to weave together an understanding of the social, economic and natural resource aspects of farming systems and the environment.

1.3 STATEMENT OF THE PROBLEM

KwaZulu/Natal agriculture may be broadly divided, according to level of economic development, into the commercialised agricultural sector and the subsistence agricultural sector. According to Wolpe (1972) and Lipton (1986) the duality in agricultural economy was exacerbated by years of neglect and marginalisation of the indigenous people by the colonial and apartheid governments.

Whereas the commercial farming sector were characterised by inefficiency and dependence on government subsidies (Lipton, 1986). The subsistence agricultural land is characterised by overpopulation, land degradation, low agricultural productivity and underdevelopment. Marginal and erratic rainfall, marginal soils, and the frequency of natural hazards such as drought, floods, hail, frost and disease have frequently inflicted heavy losses in agricultural production over the years. There is lack of infrastructure such as roads, electricity supply, clean tap water, sanitation, health facilities and training centres for skills development. The rural population is characterised by high fertility rate, high man/land ratios, high

unemployment rate, high illiteracy rate, high dependency ratio, low-income levels and poverty. The abuse and mismanagement of agricultural land resources through the cutting of trees for fuel, overgrazing, and overcultivation was a common phenomenon among the poverty stricken population. Among the commercial agricultural areas large areas of land remained underutilised (Lipton, 1986; May, 1987).

Poor management of the agricultural land resources gave rise to a variety of desertification symptoms such as soil erosion, deforestation and veld deterioration. As a result there is low agricultural productivity, especially in the subsistence agricultural areas. Poor agricultural productivity has compelled the many economically active people to seek off-farm work in the neighbouring towns. Many become migrant labourers in distant towns and cities, with serious socio-economic consequences on the rural communities and the general quality of life.

1.4 AIMS AND OBJECTIVES OF THE STUDY

In terms of the Brundtland Report, the fundamental aim of sustainable development is to deliver basic needs to all humankind - in effect the upliftment of the living conditions of the Fourth World viz. those living in absolute poverty. At the heart of the Brundtland Report is the belief (or is the hope) that equity (Brundtland, 1987), growth and environmental maintenance are simultaneously possible with each nation achieving its full economic potential and at the same time enhancing its resource base. Secondly, technological and social transformation is believed to deliver equity to all mankind.

Priority of sustainable development according to the Brundtland Commission rests on the following seven major proposals:-

- 1) Revive growth
- 2) change quality of growth
- 3) meet basic needs
- 4) stabilize population
- 5) conserve and enhance resources
- 6) reorient technology and manage risk
- 7) put environment into economics.

The Report sought to revive growth but to change the quality of that growth; it sought to meet basic needs for employment, food, energy, water, and sanitation but for a sustainable population base (Brundtland, 1987).

The aim of this thesis was to examine the extent to which poverty is eradicated in the Ugu District Municipality, and to explore the efficiency and sustainability of the Ugu District Municipality Integrated Development Planning (IDP) strategies for rural areas.

More specifically, the aim was to explore the interrelationships of socio-economic as well as ecological factors affecting the Integrated Sustainable Rural Development Programme (ISRDP) in the Vulamehlo municipality. The objective of the study was to determine the

degree of success in the implementation of the goals of the ISRDP in Vulamehlo and to evaluate the capacity of the Vulamehlo municipality to achieve the goals of the ISRDP.

1.5 HYPOTHESES

The thesis was based on the following hypotheses:

1. Vulamehlo municipal area has an ideal ecological environment for rural development
2. The ISRDP in Vulamehlo is based on a sound sustainability framework
3. The organisation of Vulamehlo municipality is well structured for the ISRDP
4. There is a Spatial Development Framework in place.
5. Correct steps were taken to plan the ISRDP
6. There is positive participation by all stakeholders in the ISRDP
7. There is popular participation in the ISRDP
8. There is successful integration of sectors and dimensions in Vulamehlo
9. Vulamehlo municipality is financially viable for the implementation of the ISRDP
10. The financial management structure of Vulamehlo is efficient
11. The Vulamehlo municipality has successfully identified development goals and projects
12. The ISRDP in Vulamehlo adequately addresses the eradication of poverty

1.6 SIGNIFICANCE OF THE STUDY

A notable feature of the 1980s and 1990s has been the permeation of environmentalism into almost every aspect of modern life (Brooks, 1992; Vogel and Drummond, 1992). The environment has come to be a 'Politically Correct' topic in the sphere ranging from popular culture to international politics and to academic. In most First World countries, environmentalism is high on the political agenda, as well as on the research programmes of a variety of disciplines. The focus has been on 'green' issues like pollution, ozone depletion, and mining of pristine areas. However, little attention has been directed towards the 'Brown' agenda associated with people: low income, overpopulation, poverty, famine, violence, civil-wars, unemployment, slum conditions, squatters sordid sanitation, corruption in public service, rampant crime wave, ethnic strife marked by coup d'Etats notable in sub-Saharan Africa. Ever since the emergence of the Brundtland Report, the ideal of sustainable development quickly became politically orthodox. International agencies like IMF and World Bank have increasingly developed profound interest in the concept of sustainable development.

The delegates at the Rio Earth Summit agreed to take account of The Hague Declaration, of March, 1989, and called for the establishment of a major new global environmental authority to protect the earth's atmosphere in which - Developed countries would provide the majority of the funding to help Third World nation states meet new commitments (Adams, 1990). The Hague Declaration, signed by forty-three nation-states, based their resolution on

Human Rights Commission and International Labour Organisation (ILO) models. It called for a new global institutional authority for protection of the atmosphere (Johnston, 1993). There are proposals for reform of the UN Trusteeship Council and Economic and Social Council (ECOSCO). The adoption of Agenda 21 was intended to place the concept, 'sustainable development' at the top of the international development agenda.

Agenda 21 is based on the belief that unless sustainable development is placed at the top of the international development Agenda, the global environmental degradation will continue to marginalise the poor, damage Human Health, slow growth and world food productivity (Johnston, 1993).

Ostensibly, the root cause of these extra-ordinary global summits, is recognition that there are certain international environmental catastrophes threatening our planet, that can be avoided by intensification of international co-operation, World Commission Reports have irrefutably demonstrated the linkages between such issues of protecting oceans, air, water energy, food, forests, people's rights, culture (Johnston, 1993).

1.6.1 Relevance to Rural Development in the Study Area

In South Africa and other developing countries rural communities accept the fact that agriculture is the cornerstone of their economy and also the key to their further economic development. Human resources can, therefore, be developed in rural areas through agricultural development. Increased productivity in agriculture should be the main

objective. Nafziger (1989) argues that governments in a wide variety of developing nations have succeeded in reducing poverty, increasing equality and meeting basic human needs for the overwhelming majority of their populations.

The adoption of the Reconstruction and Development Programme (RDP) by the new political dispensation heralded a new era of development in South Africa. The principles of development enshrined in the RDP such as democracy, popular participation, gender sensitivity, consultation and the eradication of poverty are identical with those of the Rio Declaration. This makes this study particularly relevant. Of particular importance is that the UGU district municipality, which is the study area for this thesis, was identified as one of the model municipalities to adopt the IDP in South Africa.

The productivity of crop and livestock farming in the study area is commonly affected by both physical and human factors. As a result there is a general poverty among the inhabitants of the study area. The effects therefore are related to a high rate of male migrant labour resulting in many females acting as *de facto* heads of families. It has been recognized therefore that there is a need for social systems that will provide solutions to agricultural problems in the area of study. These solutions are required because the problem experienced is not only an individual problem but also a social problem. The IDP is therefore one of the most essential programmes towards improving agricultural productivity and rural development generally.

The main reason for government intervention in rural development all over the world is the concern for the welfare of the people and the concern with environmental degradation resulting from pressure on natural resources. This pressure may be manifested in various ways such as overgrazing, huge population density and demand put on the natural environment

Reformists argue that much greater effort on the part of the state and private enterprise is necessary if a redistribution of wealth to the poor people is to be achieved. Government has to embark on what is called "a new economic offensive" to speed up the development of economically lagging Black rural communities where the present level of unemployment is high.

1.6.2 Importance to Geographical Research

Geographers are particularly well placed to provide the skills needed to address the South African environmental changes. As geographers we possess more than a passing of knowledge of both the natural and social sciences (Brooks, 1992; Vogel and Drummond, 1992). We, however, live in a corporate state where we need jobs and we have to conform to a certain extent merely to survive. According to Harvey (1974) this should not necessarily be so, because we are intelligent, and we can subvert the ethos of the corporate state from within. In fact universities provide strong base/niche for resistance. Harvey (1974, p.24) notes that:

“The corporate state has tendency to invest in manpower resulting in marketing graduates as a commodity. Research has likewise become a commodity designed to meet market demands partisan to national needs and priorities. Geographers have a moral obligation to resist co-optation of academic into corporate state structure and values. Geographers must expose contradictions in a capitalist state” (Harvey (1974, p.24).

The pluralistic nature of the discipline allows us to answer what Kates (1987) has termed 'Great Questions'. The discipline of geography has had a long tradition of interest in the complex relationship between people and the world in which they live.

Contemporary concerns about the environment, sustainability and the prospects of reconciling conservation and development strike to the very heart of the discipline (Brooks, 1992, p.168).

We will have to retrace our steps along the road of capitalist development to find a new social mix of goods and services that use less scarce resources and do less harm to the environment (Brown, 1976, p.9).

1.6.3 Gender Issues in Development

Environmental degradation and the debts crisis contribute to the poverty and consequent lack of access to resources, that tend to create "children crisis". Seven million children, particularly the street children, survive as they can with no support from adults. They are regarded as undesirable and are persecuted, even murdered by the police (Seager, 1993),.

The under classes are predominantly characterised by disadvantaged women and children. More often than not, the under class live on petty jobs with low status such as selling scrap metals and scrap cardboard, papers to earn livelihood. The households are largely female-headed. It is been observed that even if they get a paid employment, women are discriminated against and have to accept unskilled or semi-skilled low-paid jobs. Since men control most of the powerful institutions in developing world (as in the world generally) (Seager, 1993), the only hope for women to improve their conditions is through self-empowerment and action at the grass roots. There appears to be an urgent need to revisit the women's occupation, most of which is unpaid and thus disregarded. Basically, women are the main providers of child-care, education, and health services with no remuneration at all. They are also the main producers of agricultural produce and food, and the main providers of fuel and water (unpaid). This lack of payment for production, reproduction, and social reproduction, together with many limitations on their freedom of action strokes the Western mind as immoral. Nevertheless, there is general consensus that there appears to be an enormous untapped pool of female labour, though to others ridiculous.

The vital role played by women in development is increasingly recognized. They are principal producers of food, managers of households' resources and custodians of family welfare. But they are often confronted with role conflict, constraints associated with cultural norms, values and beliefs (World Bank, 1989, p.60).

1.6.4 Participatory Development Planning

The concept of popular participation in development planning is emphasised throughout the principles of the Rio Declaration (UNCED, 1992). It is widely accepted that environmental conservation projects failed dismally partly because they had been imposed from outside and were often inappropriate. It is imperative that technical planners take into cognisance the socio-economic milieu of the intended beneficiaries specifically in terms of identification, design, and implementation of sustainable development strategies. More often than not, the land-users are paid lip-service to participation i.e. either instructed or ignored rather than consulted or trained. Previous experience demonstrated that environmentalists demonstrate arrogant ignorance and insensitivity towards African potential. The inclusion of all stakeholders is essential in planning and implementation of development programmes. Collaboration between the government and non-governmental organisations (NGOs, CBOs etc.) is vital (Redclift, 1987). The indigenous technique of rehabilitating and conserving landscape also comes at the core of sustainability, primarily because it has an immense wealth rooted in traditional know-how. Conservationists had over time deliberately underestimated the potential of traditional engineering technique. Of importance to this study is that the IDP programme upholds the concept of popular participation.

1.7 SUMMARY

Chapter One was devoted to exploring the conceptual framework of the study. Chapter Two examines the policy and legal framework of the implementation of the IDP and ISRDP in the Ugu district municipality. Chapter Three gives an exposition of the ecological and socio-economic situation of the study area. Chapter Four is the explanation of the research methodology. In Chapter Five an in-depth study of a sample of the population of the district is given. Chapter Six is the examination of the capacity of the Vulamehlo municipality in implementing the ISRDP. Chapter Seven is an evaluation of the findings of the study , as well as the summary and conclusion.

CHAPTER TWO

POLICY FRAMEWORK ON THE INTEGRATED DEVELOPMENT PROGRAMME (IDP)

2.1 INTRODUCTION

Chapter Two gives an exposition of policy matters related to the *Integrated Development Programme* (IDP) so as to elucidate the discussion on Integrated Sustainable Rural Development Programme (ISRDP) in the Ugu District. It is important to realize that policies and development programmes carried out at local government level are intrinsically interrelated with those of the provincial and national governments.

One of the major targets of the IDP is the eradication of poverty, as a step towards sustainable development. Poverty in South Africa is primarily a feature of the historically disadvantaged population. Dispossession and exploitation is at the root of poverty. It starts with land and the colonial need to coerce labour. Land and labour remain key areas of struggle today. The South African economy has relied on cheap labour and cheap energy to produce massive profits (Butler, 1998). Under apartheid, mining and industry were virtually immune to environmental regulation and workers suffered the negligence of health and safety standards. Health, safety and environmental regulations were

imposed on the industry on in 1991 (Butler, 1998). Many households still have unsatisfactory access to clean water, energy, health care and education. It is estimated that 39 percent of the population is vulnerable to food insecurity. About 72 percent of South Africa's poor live in rural areas, which are often highly dispersed and difficult to access for support and service. Of the population, 61 percent Africans, 38 percent Coloureds, 5 percent Indians and 1 percent Whites can be classified as poor (Butler, 1998).

According to the South African *National Report to the Johannesburg World Summit for Sustainable Development* (WSSD), the National Departments of Environmental Affairs and Tourism, Land Affairs, Trade and Industry, Water Affairs and Forestry, Education, Health, the Youth and Gender Commissions, and others, as well as Statistics South Africa, are involved in implementing the IDP Policy. Besides Government structures at national, provincial and local levels, relevant non-governmental organisations and community-based organisations, are key stakeholders in implementing the strategies contained in the IDP policy (Republic of South Africa, 2002).

2.2 SOUTH AFRICA'S ENVIRONMENT POLICIES AND INTERNATIONAL COMMITMENT

2.2.1 The Influence of the Rio Earth Summit

During the 1992 Rio Earth Summit South Africa was in a state of transition towards a

democratic order and was given observer status at the Earth Summit. The Summit declarations were utilized in drafting the Reconstruction and Development Programme, which became government policy framework for development (African National Congress (ANC, 1994). Concepts such as 'sustainable development', 'poverty eradication', 'integrated development', 'participatory development', etc. are enshrined in the RDP document. Similar concepts are re-iterated in the South Africa's Constitution (Republic of South Africa, 1996). The policy statements in the RDP and constitution have been followed up by a series of legislation and programmes aimed at realising the ideals expressed in the policy statements.

2.2.1.1 Integrating Environment and Development in Policy Making

Colonialism and apartheid excluded most South Africans from public and policy debate. The white elite narrowly associated the environment with conservation and the preservation of nature. The environment was thus perceived as separate from people. Democracy has brought a new understanding that the environment is all around us. At home we have the domestic environment and at work, the work environment. We produce the resources that sustain our lives from the natural environment and we also return our waste to the environment (Butler, 1998). Inspired by the *Rio Earth Summit*, policy makers in South Africa have become increasingly aware that the achievement of sustainability implies a positive relationship between development and environment.

A new institutional structure has been approved by the Government to allow for the full integration of environmental and developmental issues, at all levels of decision-making. Coordination is achieved among the different levels of government through the system of cluster committees of heads of department and of cabinet members, e.g. economic, social, etc. South Africa has adopted a number of measures aimed at ensuring that environmental protection is an integral part of the development process (Republic of South Africa, 2002).

2.2.1.2 Development Facilitation

The *Development Facilitation Act*, of 1995 (Republic of South Africa, 1995) is another development-oriented legislation that explicitly requires consideration of environmental factors. Principles to encourage sustainable land development practices and processes are incorporated into this Act. The *Development Facilitation Act* (Republic of South Africa, 1995) has as its objective the introduction of extraordinary measures to facilitate and speed up the implementation of development programmes and projects in relation to land. It lays down general principles concerning land development throughout the country.

The provincial departments of Local Government and Housing are implementing the *Development Facilitation Act*, 1995. The Growth and Development Strategy is a fundamental pillar of the transformation process of spatial and development planning (Republic of South Africa, 2002).

2.2.1.3 Environment Impact Assessment

Government policies and legislation from various sectors emphasize the need to protect the South African environment, and to promote, through environmental education, the sustainable utilisation of resources for the benefit of present and future generations. Such legislation includes the *National Environmental Management Act* (NEMA) of 1998 (Republic of South Africa, 1998), which commits the South African Government to sustainable development, while emphasising the need for environmental education and capacity building in all sectors of South African society (Republic of South Africa, 2002).

The Environmental Impact Assessment regulations and the associated schedule of activities as well as the Guideline Document for the Implementation of the Environmental Impact Assessment regulations were adopted in 1997.

2.2.1.4 The Principle of Popular Participation

All of the new legislative and policy-development processes in the field of environmental management have included comprehensive public participation processes. Participatory

decision-making is covered in the national environmental management principles and is further addressed in the *National Environmental Management Act's* provisions relating to environmental impact assessments and regulatory powers. The *National Environmental Management Act*, of 1998 provides for thorough and uniform control of environmental impact management of development projects.

This Act also makes provision for the establishment of a Committee for Environmental Coordination to handle issues related to environment amongst all relevant national Government Departments. It is the Department of Environmental Affairs and Tourism's (DEAT) responsibility to facilitate the integration and coordination of environmental management in development decision-making. In addition, in terms of schedule 6 of the Constitution of the Republic of South Africa, provincial governments were given the responsibility for decision-making with regard to development (Republic of South Africa, 2002).

2.2.1.5 Policies on Environmental Education

Several policy documents emanating from the Education sector emphasise the need for environmental education (Republic of South Africa, 2002). The *White Paper on Education and Training*, (DoE, 1995) states that environmental education should be integrated into all levels and phases of the education and training system. In 1995 the Ministries of Education and Training promulgated the South African Qualifications Act, forming the South African Qualifications Authority (SAQA), which had to establish an

outcomes-based National Qualifications Framework (NQF). The Critical Outcomes, defined by SAQA, which guide all education and training programmes in South Africa, also accentuate environmental responsibility, problem solving and an understanding of the interdependence of natural and social systems. Similarly, the *Norms and Standards for Educators*, which provide policy guidelines for teacher education, include a number of environmentally oriented competencies for teachers (Republic of South Africa, 2002).

2.2.2 International Population Conferences and their Influence on Government Policies

The *Population Policy for South Africa* (1998) places population at the centre of development as its driving force and ultimate beneficiary. The new Population Policy was developed as a result of the United Nations International Conference on Population and Development (ICPD), held in September 1994 in Cairo. The South African Government endorsed the Programme of Action that emanated from the ICPD. Agenda 21 and the ICPD Programme of Action have several commonalities in terms of issues related to sustainable (human) development (Republic of South Africa, 2002).

2.2.2.1 Policies on Population and Sustainable Development

The ICPD signalled a significant international paradigm shift away from a focus on the reduction of population growth through fertility control to the recognition of the complex interrelationships between population, development and the environment, in the context

of sustainable human development.

The policy acknowledges the critical interface between population, development and the environment, and captures the sustainable development aspirations of ordinary South Africans. The goal of the policy is to bring about changes in the determinants of the country's population trends, to achieve sustainable human development. Through the new policy, the South African Government places the population at the centre of development as its driving force and ultimate beneficiary. The reciprocal relationship between population, development and the environment is therefore inherent to the approach of the population policy. Several other policies have been developed which take poverty issues into consideration: the *Water Supply and Sanitation Policy*, and the *National Water Policy*, supported by the *National Water Act* (1998). According to the national report to the Johannesburg WSSD the basic tenets of the policy concerns are multifaceted and efforts to address them should be multi-sectoral (Republic of South Africa, 2002).

2.2.2.2 Combating Poverty

The Integrated Sustainable Rural Development Strategy and the Urban Renewal Program provide a framework to address poverty. The aim is to conduct a sustained campaign against rural and urban poverty and underdevelopment, bringing in the resources of all three spheres of government in a coordinated manner. These programmes will entail investment in the economic and social infrastructure, human resource development, enterprise development, the enhancement of the development capacity of local

government, poverty alleviation and the strengthening of the criminal justice system (Republic of South Africa, 2002).

The overarching policy on Reconstruction and Development (RDP) which the Government committed itself to in 1994 sets, as its key tenets and principles, the meeting of basic needs, developing human resources, building the economy, democratising the state and civil society and implementing the RDP. This is underscored by the Growth, Employment and Redistribution Strategy (GEAR). According to the South Africa's national report to the Johannesburg *World Summit on Sustainable Development* (WSSD), the basic tenets of the GEAR policy are the maintenance of a fiscally prudent policy via a competitive and more labour intensive growth path; an accelerated economic stance compatible with lower inflation rates and ultimately lower interest rates; and accelerated creation of employment growth (Republic of South Africa, 2002). South Africa became signatory to the Millennium Declaration, which includes the target of halving poverty by 2015. All government ministries are the major bodies responsible for achieving this issue.

The SA Government distinguishes between poverty alleviation, which is a matter of welfare, and poverty eradication, which is a matter of employment creation through increased investment in the manufacturing sector, and economic empowerment in addition to financial incentives conducive to the creation of new small enterprises. Poverty alleviation projects by the Department of Education and Training (DEAT) address concerns and needs surrounding natural resource use as defined by local communities and government. Most importantly, concerns addressed in Principle 5 of

Agenda 21 can be incorporated into Government decision-making at local level through the *Integrated Development Planning* (IDP) process. Such concerns can be taken into district and provincial level integrated development planning (Republic of South Africa, 2002).

2.2.2.3 Human Rights and Sustainable Development

The right to an environment that is not detrimental to health or well-being is enshrined in the *Bill of Rights in the South African Constitution* (Republic of South Africa, 1996:10). Equality in the value of social grants, the amalgamation of the disparate pension system and the introduction of the Child Support Grant represent some of the steps taken by the Government since 1994 to ensure a sustainable livelihood for all in South Africa. In 2002 a Committee of Inquiry into Comprehensive Social Security was appointed to develop options for a comprehensive system of social security that prioritises the most vulnerable in our society (Republic of South Africa, 2002).

2.2.2.4 Gender Equity

The South African Government signed the Convention on the Elimination of All Forms of Discrimination Against Women in January 1993 (ratified in December 1995). The Commission on Gender Equality (CGE) was then set up to oversee implementation of the provision in the Constitution on gender equality. As part of their mandate, the CGE investigates and challenges laws, practices and customs that discriminate against people

on gender grounds. The CGE also monitors Government's adherence to international agreements such as the Convention on the Elimination of All Forms of Discrimination Against Women (Republic of South Africa, 2002). South Africa has established a transformation and gender unit in each national Department promoting the advancement of previously disadvantaged groups, including women. Strategies to implement policies, guidelines and plans for the achievement of equality in all aspects of society, were developed. This includes a strategy to eliminate obstacles to full participation of women in sustainable development. Mechanisms are already in place to assess the implementation and impact of development and environment policies and programmes on women (Republic of South Africa, 2002). The main legislation that guarantees the right of women to make decisions as full citizens of the country is the *Constitution of South Africa* (Republic of South Africa, 1996). On provincial level the Office of the Status of Women is situated in the Premiers' Offices.

2.2.2.5 National Population Programmes and Projects

Over 10 000 people participated in the NGO Coalition poverty hearings, March to June 1998 (Butler, 1998). The hearings indicated that the incidence of poverty spans a wide range of issues. These include insufficient employment opportunities; dispossession of land; the lack of implements, fertilisers, seeds and water to work the land; the lack of affordable housing and poor standards of houses; inadequate services in relation to water and infrastructure; the inability to afford payments for services such as water and electricity; health related problems such as HIV/AIDS and tuberculosis; education related

problems of people not attending school due to the lack of financial resources; social security problems resulting in difficulties accessing grants; environmental problems involving workplace injuries and illness leading to unemployment and death with no compensation, or holding onto unsafe jobs in desperation for survival (Republic of South Africa, 2002).

Various government departments aimed at addressing population, development and environmental challenges that hinder sustainable development have implemented various multi-sectoral programmes and projects. These programmes and projects include, *inter alia*, poverty eradication, the empowerment of women, care for children under the age of five, skills development, HIV/AIDS, Integrated Nutritional Projects, National Housing, Water Supply, Social Security and Welfare Systems (Republic of South Africa, 2002).

These programmes and projects are supported by comprehensive advocacy campaigns and population information, education and communication programmes, initiated by the National Department of Social Development and other Government Departments in collaboration with a wide range of partners in government, the private sector and civil society. The Community Public Private Partnership Programme (CPPP) is an initiative of the Government's Department of Trade and Industry to revitalise depressed rural economies through the linking of resource-rich communities with relevant state and private investors interested in the sustainable utilisation of natural assets (Republic of South Africa, 2002).

2.2.3 Sustainable Agriculture and Rural Development Programmes

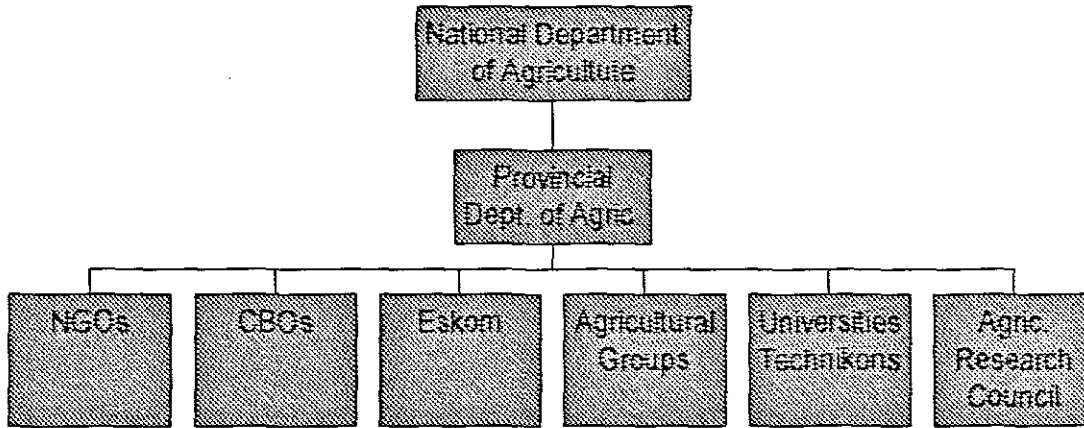
A Policy for Agriculture was developed during 1995, addressing production, marketing, sustainable use of natural resources, agricultural financing, institutional infrastructure, information and agricultural technology, research, extension and training. An in-depth policy review is in progress. Agricultural goals and strategies to support the Government's growth and development plan were developed. Provincial governments are also in the process of formulating Integrated Sustainable Rural Development Policies aimed at implementing issues in sustainable agricultural and rural development.

The national Department of Agriculture and the nine Ministries of the Provinces are responsible for decision-making related to sustainable agriculture and rural development. The Department of Provincial and Local Government coordinates rural development. Government has established an institutional framework that outlines the respective roles and responsibilities of all three spheres of government.

The major groups involved in decision making on sustainable agriculture and rural development are the organized agriculture group, universities, the Agricultural Research Council, Non-Government Organisations (NGOs), Community Based Organisations and Eskom. The Agricultural Credit Act forms the basis for action by the Agricultural Credit Board. The Board assists communal farmers, subsistence and beginner farmers, small farms, part time and commercial farmers. The provinces in terms of provincial land-use

planning legislation and ordinances handle the restriction of the transfer of productive arable land to other uses.

Diag. 2.1 Institutional Arrangement for Sustainable Agriculture



The *Conservation of Agricultural Resources Act* (1983) and the *National Water Act* (1998) deal with adverse effects of agriculture on water quality. The *Marketing of Agricultural Products Act*, 1996, is based on the view that state intervention in agricultural markets should be the exception rather than the rule. A Draft Policy on Sustainable Resource Use has been developed. The *Sustainable Utilisation of Agricultural Resources Bill* (2001) will amend the present *Conservation of Agricultural Resources Act* (1983).

In order to achieve sustainable, equitable and efficient agricultural development, the Government is reforming its agricultural policy. In 1998, the Ministry for Agriculture and Land Affairs developed an Agricultural Policy in South Africa, which addresses many of

the issues pertaining to a sustainable agriculture and rural development national policy. The South African Government has not carried out a specific national policy related to food security. Concerning the *Rome Declaration on World Food Security*, 1996, the Government is guided by implementing policies that lead to an improvement of food production and economic development.

The main activities to implement the Agricultural Policy include: a National Land Care Programme; a Farmer Support Programme, a Land Reform Programme; and the Expansion of Market Access for our exports. The nine provinces launched many activities aimed at sustainable agriculture. The National Land Care Programme for South Africa has an element that addresses the conservation and rehabilitation of degraded land. The following specific rural energy projects have been initiated: Energisation, Rural Electrification Programme (30 000 units will be installed annually for the next ten years) and the Solar Cooker Programme. Several projects managed by the Northern Cape Province empower previously disadvantaged farmers, e.g. establishment of irrigation infrastructure and the installation of goat milk equipment and processing goat milk into cheese.

2.2.4 Local Agenda 21 and Policy Framework of the Integrated Development Programme

In 1989, the first version of *Integrated Environmental Management* (IEM) framework was published. IEM is a procedure that provides an integrated framework for

environmental management and decision-making to promote sustainable development and the equitable use of resources. The fundamental principles of this framework are an open, participatory approach with interested and affected parties, the consideration of the whole project life-cycle, the pursuit of a balance between social and environmental costs and benefits of decisions, informed and accountable decision-making, a holistic consideration of the environment, the consideration of alternatives, mitigation of negative impacts and enhancement of positive outcomes and regard for the democratic rights and obligations of individuals and communities.

2.2.4.1 Government Development Policies after 1994

Integrated development planning was first introduced in South African planning law by the *Development Facilitation Act*, 1995, the *Local Government Transition Act*, 1996, and more recently the *Local Government Municipal Systems Act*, 2000. Integrated development planning seeks to integrate the physical, social, economic and political aspects of planning

The *Environmental Management Policy* (1998) calls for the effective integration of environmental considerations into all policies, plans and programmes, including the Integrated Development Plans for local government. The *White Paper on Local Government* stated that "Planning for environmental sustainability is not a separate planning process, but it is an integral part of the process of developing municipal Integrated Development Plans" (Republic of South Africa, 1998).

The *National Environmental Management Act*, 1998, makes provision for the establishment of a Committee for Environmental Coordination (CEC) to coordinate actions taken by departments on national and provincial levels, which may have an impact on the planning, protection, management or use of land resources.

The *Land Use Management Bill* (LUMB), which is the most comprehensive planning legislation drafted in the period following the first democratic elections in South Africa, is the legal enactment of the White Paper on Spatial Planning and Land Use Management. The LUMB builds on the normative and progressive principles that were central to the *Development Facilitation Act* (DFA) but goes further by legislating the importance of spatial planning, contextually and conceptually within the framework of integrated development planning as proposed by the *Municipal Systems Act*, 2000.

Many existing Land development objectives have been adapted to fit into the new *Integrated Development Planning* (IDP) process as Interim IDPs. The LUMB calls for the setting of spatial development frameworks by local and district municipalities. This is in line with the proposals in the *Municipal Systems Act*. Also, the LUMB proposes a National Spatial Plan to be developed for the country.

2.2.4.2 *Local Agenda 21*

South Africa has formally embarked on a national *Local Agenda 21* campaign assisting local authorities to make the global agenda towards sustainable development part of the every day activities. This process, in conjunction with decentralisation policies originating at the national level, is transforming and re-orientating local government towards sustainable development. The function of the national coordinating mechanism is to promote interaction and engagement between key stakeholders and raise awareness and provide support on the implementation of *Local Agenda 21*. There are about ten formal *Local Agenda 21* Initiatives in South Africa. Among these are Cape Town, Johannesburg, Pretoria, Durban, East London, Port Elizabeth, Kimberley and the Provincial *Local Agenda 21* strategy in KwaZulu/Natal.

In terms of Section 16 (4)(b) municipalities are legally required to comply with the sustainable development principles as set out in Section 2 of NEMA. The White Paper on Local Government gives municipalities a developmental mandate. Municipalities are responsible for working together with local communities to find sustainable ways to meet their needs and improve the quality of their lives. The key tool identified in the policy and legislated in the *Municipal Systems Act* (2000) is Integrated Development Planning.

It is the process whereby all municipalities in South Africa have to prepare Integrated Development Plans (IDPs), which are strategic plans that outline the key development priorities in a municipality, its vision and development objectives; development strategies, the identification of projects and its operational plan. IDPs contain environmental, socio-economic, spatial, natural resource, and institutional analysis. They also contain integrated environmental programmes. IDPs are formulated by municipalities and adopted by a municipal council as the single planning framework that guides development in the area of a municipality. The ISRDP is part of the IDP.

2.3 UGU INTEGRATED DEVELOPMENT PROGRAMME (IDP)

Broad national and provincial policy, guidelines and legislation inform the way issues are addressed through development objectives and strategies at the local level. The results of a research by the Human Sciences Research Council showed that while 27 percent of the population was satisfied with existing local facilities and services, 88 percent of the people supported the need for addressing their basic needs and 83 percent supported the need to upgrade infrastructure (HSRC, 1998). The situation regarding backlogs in basic services is considered in light of the Integrated Sustainable Rural Development Programme.

2.3.1 Objectives and Strategies of the UGU District Municipality IDP ...

In KwaZulu/Natal the Provincial Integrated Rural Development Strategy identified policy instruments and specific strategies targeted at the economic and social development of KwaZulu-Natal's rural areas. Central features include the proposed re-orientation of existing policies and programmes towards a holistic approach, and the local government system as the locus for decision-making, local service provision, and the initiation and co-ordination of local development activities (Ugu District Municipality, 2002).

The Integrated Sustainable Rural Development Programme (ISRDP) is a national development intervention that is structured to uplift certain areas that are characterised by severe social development backlogs. These areas are referred to as rural nodes and Ugu District is one of the four rural nodes in KwaZulu Natal. This Presidential programme is a district priority since it is geared towards addressing service backlogs and alleviating poverty (Ugu District Municipality, 2002).

Since development objectives and strategies need to be aligned with national and provincial legislation, policy and guidelines on the one hand and with local municipality objectives and strategies on the other hand (Ugu District Municipality, 2002). The six core dimensions, which were considered in developing localised guidelines for objectives and strategies were:

- a) Cross cutting dimensions such as sustainability,
- b) HIV/AIDS,
- c) barrier free access and gender equity
- d) Local economic development and poverty alleviation dimensions
- e) Spatial dimensions
- f) Institutional dimensions

On the basis of these core dimensions the Ugu District Municipality formulated objectives and strategies in the light of the district's vision statement and localised guidelines, which are formulated through considering the in depth, issue analysis of the previous section and provincial and national policy and legislation (Ugu District Municipality, 2002). Broad strategic guidelines were discussed at the district wide task team workshop of February 11-13, 2002. Each of the dimensions and the local district strategic guidelines was developed in more detail in light of issue analysis, legislation and policy. During the community participation process, participants did not only list issues, but also discussed factors which are "correlated with" or actually cause the "issue /problem". Once the "cause" was known or understood, the solutions was sought in the form of objectives (what needs to be done) and strategies (how to reach the objective) in the light of the vision (idea, picture) of "where" the communities/ stakeholders wanted the development emphasis to be. This strategic approach to development planning means that the key issues become the focus of efforts so that scarce public funds are not wasted and "solutions" (strategies) are designed to address the "underlying causal/correlated

factors” as issues of concern (Ugu District Municipality, 2002). This is in keeping with the *Municipal Systems Act* No 32 of 2000, which requires a district municipality to make decisions on: The Vision statement of the Ugu District Municipality is as follows:

2.3.2 Ugu District Municipality Vision

2.3.2.1 Vision Statement

“By 2009 Ugu will have developed sustainable agriculture, tourism, and commerce with balanced infrastructure and social amenities. Its people will be empowered through education, skills development, good health and safety. There will be sufficient water services and land for development, investors and settlement. The imbalances of the past, gender equity, and the needs of the youth, the elderly and people with disabilities will have been seriously addressed.” (Ugu District Municipality, 2002).

2.3.2.2 Mission Statement

“Ugu District Municipality, a local authority founded on the cherished tenets of democracy, is fully committed to the attainment of the district's vision by the year 2009. To this end, we will enhance our performance and work ethic to reach world –class standards, by always placing emphasis on customer service and total quality management of all resources at our disposal.” (Ugu District Municipality, 2002).

The vision and mission statements were realised through development objectives, which in turn were made more specific through strategies, projects and project actions with their associated budget allocations. This process was guided by localised strategic guidelines (Ugu District Municipality, 2002).

2.4 SUMMARY

Chapter Two demonstrates the interrelationships among the three tiers of government in planning and executing the integrated development programmes. It is evident from the discussions that the IDP entails a web of interrelationships among, not only the three tiers of government, but also among the different government departments, NGOs, CBOs, civil society, the private sector, etc. It is also shown how international decisions on development and the environment have influenced and shaped the South African government policies on these issues. Chapter Three examines the ecological and socio-economic factors of the Ugu district, which is the study area for this thesis, so as to understand the context under which the ISRDP is carried out in the District.

CHAPTER THREE

ECOLOGICAL AND SOCIO-ECONOMIC CHARACTERISTICS OF THE UGU DISTRICT

3.1 INTRODUCTION

Chapter Three explores the ecological and socio-economic factors related to the sustainable development. To achieve sustainable development it is imperative to adopt a holistic approach. Although the scope of this study is rural development, the urban sector will not be entirely ignored because of the intricate interrelationships between urban and rural areas. The aim of Chapter Three is to give an overview of the existing ecological and socio-economic factors that are related to the Integrated Sustainable Rural Development Plan (ISRDP).

3.2 SITE AND SITUATION OF UGU DISTRICT

The Ugu² District is one of the ten districts of KwaZulu-Natal. It is located in the southern coastal area of KwaZulu/Natal (Fig.1) between about 30 degrees S and 30 degrees 38' S; and 30 degrees 03' E and 30 degrees 37'E. It is about 58,866 km² in extent with a coastline of about 112 kilometres and about 42 estuaries. The Indian Ocean, on the north by the EThekweni District, and on the western side by the uMgungundlovu and

² 'Ugu' is a Zulu word for 'coast'.

Sisonke Districts as well as Umzimkhulu bound it on the east. The district consists of six local municipalities (Fig. 2.1).

3.2.1 Influence of Relief and Drainage on the IDP

The altitude of Ugu District ranges from sea-level to about 912 metres in the west (about 30 km) resulting in a steep east-west slope profile. The general slope of the land is between 1:5 and 1:6. Some of the rivers have cut deep valleys and canyons through the landscape and have greatly influenced the terrain of the areas through which they flow. Soil erosion occurs throughout the District where the land is not carefully managed. The hinterland rural areas of the District are particularly susceptible to soil erosion in association with roads, pathways and quarries.

3.2.1.1 Effects of Relief and Drainage on Infrastructure Development

Due to ruggedness, the drainage system of the Ugu District consists of numerous relatively short and fast flowing parallel streams that are highly erosive on the prevailing terrain. Ruggedness of the terrain is related to the difficulties experienced in the development of infrastructure. Certain geographic features are major constraints in the district's movement system. They include rivers such as the Umzimkhulu and Umkhomazi and the hilly terrain that dominates the hinterland. As a result of this geographic situation, roads poorly link certain neighbouring communities. Road linkage in the district between north and south is very limited, except via the N2 toll road and the R102. There are numerous wetland area in the district that need to be well managed in order that they can be useful in providing purified water.

Fig 2.1 District ward boundaries

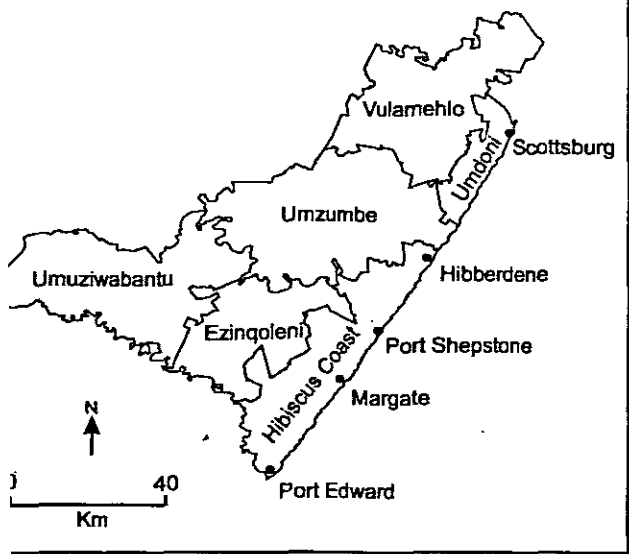


Fig 2.2 Percentage of veld

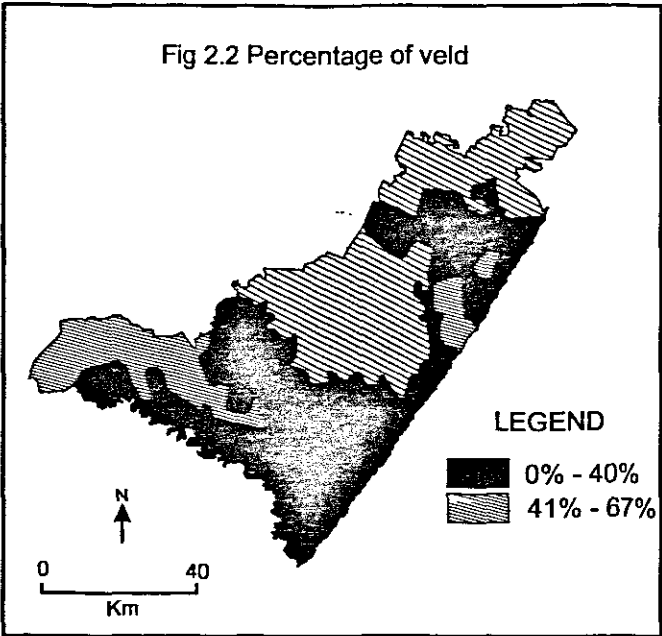


Fig 2.3 Percentage land under crops

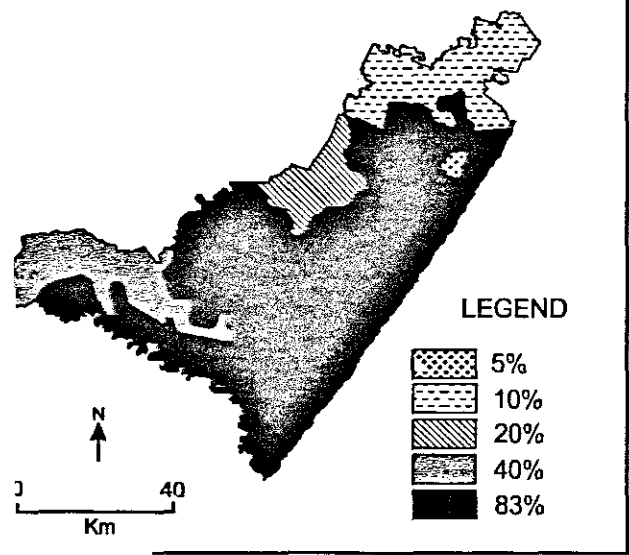


Fig 2.4 Livestock unit densities

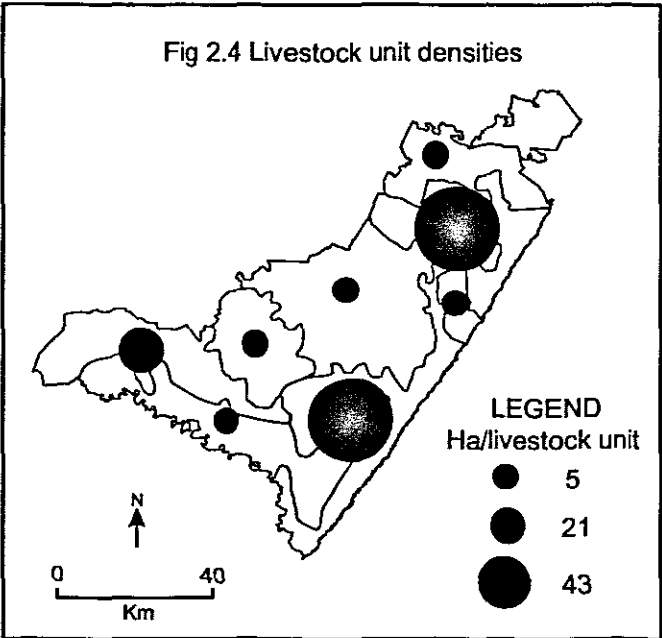


Fig 2 Agriculture in UGU District

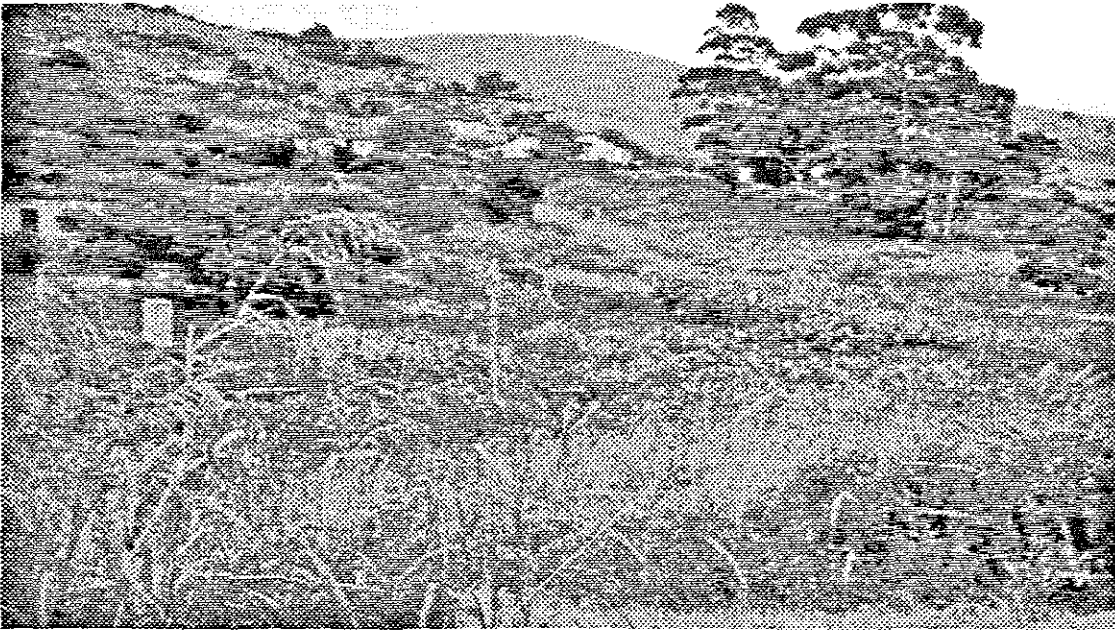


Plate 3.1 Wetland management by relocating a pit latrine in the left foreground, to protect water and food from pollution (Photograph: Ugu Planning Division)

3.2.1.2 Minerals

Mineral deposits found in the district include gold, asbestos, limestone, kaolinite, bauxite, graphite, copper and nickel. Of these, only limestone is mined on a large scale within the marble delta at the confluence of the uMzimkhulu and uMzimkhulwana rivers (DWAF, September 1994). The existence of these minerals is, however, not significant enough to inject economic development.

3.2.2 Climatic Influences

Ugu District lies within two climatic zones, namely, Natal Midlands and the Natal Coastal Belt. The climate of the Natal Midlands is characterised by great differences between day and night temperatures as well as between summer and winter temperatures. This consists

of hot summers with midday temperatures ranging from 27 degrees Celsius to 38 degrees Celsius. The winters are cold and temperatures may reach down to 10 degrees Celsius. Frost is very common in this area, occurring mainly at night. The coastal area has a subtropical maritime climate. The summers are hot with midday temperatures ranging from 27 degrees Celsius to 32 degrees Celsius. The winters are mild and frost free. The average winter temperature is about 17 degrees Celsius.

The rainfall, which is generally frontal, falls mainly in summer in drizzles. Torrential rainfall accompanied by thunderstorms occurs in some places. In winter there is very little or no rain. Good rains begin in September and spread out to March of the following year. The average annual rainfall ranges from about 845 mm to about 1170 mm, which is generally marginal for dryland agriculture.

3.2.3 Natural Vegetation

The natural vegetation of Ugu District is typically subtropical. It consists of different types of grasses with the "Ingongoni" (hard grass) distributed throughout the District. This type of grass has very hard stems and leaves and can resist decomposition.

Other types of grasses in the District include "isiqunga", "uhlongwa" and kikuyu grasses. Ingongoni grass is mainly used for making brooms, mats, and baskets and for roof thatching, especially in the southern parts. Herbs form part of the vegetation with few scattered shrubs. Natural trees and forests abound in some areas, especially areas located in the Midlands

region. The “Dada” forests at Mtwalume Mission are an example. The coastal areas are characterised by evergreen forests, deciduous trees and shrubs, ferns and wild bananas trees. The luxuriant vegetation cover of the coastal region helps prevent soil erosion.

Loss of indigenous vegetation communities and habitats is occurring due to: cultivation; poor farming practices; alien plant invasion; ribbon development; poor catchment management; informal housing and harvesting for firewood. Throughout the District, indigenous vegetation is being replaced by alien invasive species, to the detriment of the environment.

3.3 NATURAL HAZARDS RELATED TO RURAL LAND USE IN THE UGU DISTRICT.

Hazards are threats to humans and what they value (Perry, 1981). Hazards have been also defined by Gardiner (1977) as events, objects, processes and substances that are perceived to cause more damage to society than the benefit they give. The more frequent natural hazards in the Ugu District are drought, floods, hailstorms and frost.

3.3.1 Droughts

South Africa has experienced drought after every three to five years. Recent droughts occurred in 1983, 1987, and 1992. Drought is a serious problem in the Ugu District. Its effects are felt in both stock losses and a decrease in agricultural production. The rainy

season usually begins so late that it is of little value for the crops. Severe stock mortality is experienced because the grazing lands are virtually stripped bare of grass as a result of continued drought.

Sugar cane became withered during drought, and farmers who had not insured their sugar plantations suffered severe losses. As a result many commercial farmers shifted from sugar cane to timber. Drought also has an important effect on the economy in that the extended period of water shortage retards the economic progress of the area.

3.3.2 Floods and Hailstorms

Droughts are interspersed by floods. The most serious flood in KwaZulu/Natal was in 1987 whereby even graves around Durban were washed away into the streams. Floods and hailstorms also affect agricultural productivity in the study area. Heavy downpours and floods are frequently reported to have eroded the topsoil and to have devastated crops. Very poor harvest was obtained in most parts of the Ugu District in 1987 and 1994 due to floods. Almost all parts of the district experienced extraordinarily heavy rains and floods during that year.

3.3.3 Hail and Thunderstorm

Hail and thunderstorm are the most common environmental hazards. The western part of the Ugu District is sometimes affected by hail and thunderstorms. These often come in

the mid-December and early January. Hailstones and thunderstorms destroy crops and houses. The lightning associated with these thunderstorms sometimes also strikes crops, stock and houses. Hail and thunderstorms have a negative impact on the soil as they increase run off which result in soil erosion and eventually dongas. As a result some of the land in areas such as Dududu, Dumisa and Mgaye can no longer be used for agriculture.

3.3.4 Soil erosion

Rugged lands encourage run off which results in soil erosion. As a result of the combination of ruggedness, thunderstorms, scantiness of vegetation cover and floods much of the arable land in the Ugu District has been subjected to natural erosion. The resultant loss of topsoil has resulted in the depletion of soil fertility in the area, which is one of the major causes of poor harvest. Soil erosion is also causing a hazard on the road infrastructure. Many roads become impassable after heavy rains as they become eroded.

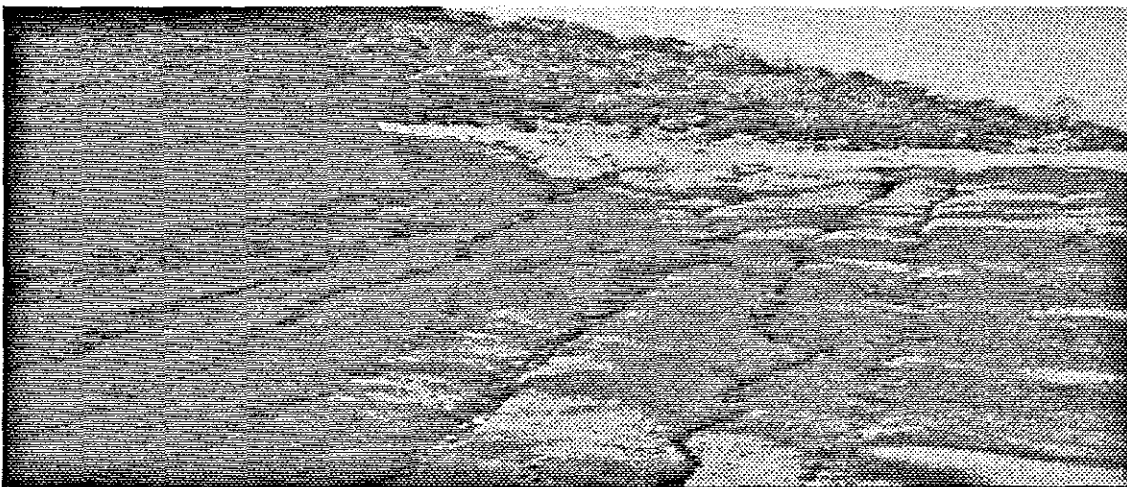


Plate 3.2 Badly eroded road, with gullies that are a hazard to road users (Photograph: Ugu Planning Division)

3.3.5 Frost

In the western Mid-lands areas frost occurs in mainly winter, but it frequently constitutes a hazard to growing crops in spring. In the area of study frost is reported to affect fields along the river valleys. Tomato gardens are also vulnerable to frost in the area.

There is a very close interrelationship among the different ecological factors in the Ugu District. The net result of this interrelationship is a lack of adequate water resources for domestic, agricultural and industrial use. Due to lack of capital, little attempt has to date been made to remedy this harsh living condition. It is thus one of the factors contributing to the low agricultural production, lack of industrial development, unemployment and general poverty in the Ugu District.

Soil erosion, rockiness and steep slopes present another major physical constraints to cropping systems in the study area. Due to the shortage of arable land, even steep slopes are used for the cultivation of crops, leading to the acceleration of the erosion process.

3.4 AGRICULTURAL LAND USE AND RURAL DEVELOPMENT

3.4.1 Land use patterns and food production

The uses to which rural land is put in the Ugu District can be basically classified into four categories, namely, cultivated land, settlements, pastures and veld.

3.4.1.1. Cultivated Land

The coastal areas are relatively even with less soil erosion and deep good soils suitable for crop raising. Consequently in large areas of the Ugu District the land under crop cultivation ranges from 40 to 83 percent (Fig. 2.3). Major field crops grown are maize and sugar cane. About 42 percent of the land owned by commercial farmers is devoted to sugar cane farming. Other popular cash crops are forest and Banana plantations.

3.4.1.2 Settlements

Settlements are either scattered or nucleated. In the North, for instance areas like Nhlanguni (including Deyi), Mhlahashana and northern part of Cele (Phungashe area) have nucleated settlements. Land in these areas has been demarcated into residential, grazing and cultivated areas. In areas like KwaMadlala, Hlongwa, Qwabe, part of Cele (Qweshula-Mehlomnyama) in the South, Mathulini and Qoloqolo in the Southeast and the mid-areas like Mabheleni and Ndelu scattered settlements are found.

The homesteads built by people of Ugu tend to reflect their interests as well as different economic levels. In the north a nucleated settlement style has been adopted. All residential houses are built apart from cultivated land and grazing land. Houses here are arranged in rows with roads in between the rows of homesteads.

The greater part of Umzumbe, especially areas like KwaBangilizo-Nyangwini, KwaHlongwa, Madlala, Qoloqolo, KwaBombo and Dweshula, has dispersed settlement. These settlements have very few roads, even the existing roads are sometimes very far from many homesteads. In some areas houses are far apart while in some places especially coastal areas like the KwaBongilizo-Nyangwini area, houses are so congested that there is no place large scale cultivation, except for small gardens.

The types of houses built vary greatly. Many households still have the traditional huts that are made of mud walls and thatched roofs. In the southern parts people use "ingongoni" grass while in the north they use "uhlongwa" grass for thatching. Some houses have walls made up of poles and mud with flat roof tops. The wealthy families have proper western style houses made of blocks with either asbestos or tiled roofs.

There have apparently not been any housing developments implemented in the district's rural areas. There is thus a housing backlog in the rural areas. Attributed to this, is the perception by rural communities that the responsibility for housing lays with them and not with the relevant government departments (Ugu District Municipality, 2002).

3.4.1.3 Veld and Pastures

Rural areas that are not used for crop cultivation or settlements are left to rough livestock grazing. These areas are usually not suitable for crop raising, consisting of rugged, stony or densely wooded terrain. They are often classified as 'veld' in South African terminology. Veld occurs naturally and usually they are open-access or communal areas. According to

Acocks (1975) and Cole (1966) there are three classes of grasses that characterise veld in KwaZulu/Natal. They are: sweet veld (providing nutritious and palatable grazing throughout the dry winter), the sourveld (occurring in the high rainfall regions and providing nutritious and palatable grazing in after the spring rains into the growing season) and mixed veld (forming a zone of transition between sweetveld and sourveld, and which could be grazed for about six months of the year). Natural woodlands and bushes often punctuate these grasses.

About 66 percent of the total land area of KwaZulu/Natal consists of veld. This is a negative sign of the agricultural potential of the province. The Ugu District has comparatively very little occurrence of veld. The coastal areas have 0-40 percent veld, while the hinterland has 41-67 percent veld (Fig. 2.2). Most of the areas with veld characteristics in the coastal areas are evidently used for human settlement in the form of urban built up areas. The rural areas of the Ugu District exhibit a true reflection of the occurrence of veld.

As opposed to veld, pastures are enclosed areas characterized by cultivated grasses, such as Lucerne, alfalfa, etc. Pastures are usually associated with commercial beef or dairy farming in the Ugu District. They are spatially insignificant, hence they are not reflected in Fig. 2.2.

3.4.2 Soil Conservation

Since the terrain of Umzumbe is generally rugged, soil erosion is an active process. Rural people in the Ugu district have various methods of preventing soil erosion. Dams have been

constructed, with the help of the former KwaZulu Government Department of Agriculture, or water-ways to prevent fast flow of water, thus preventing gully formation. Other common methods used include planting of grass strips, terraces and planting of trees. There are, however, mixed feelings about the effectiveness of the different methods soil conservation methods, and many areas are subjected to some form of land degradation.

3.4.3 Irrigation

Due to the marginal rainfall in the Ugu District, irrigation is one of the requirements for increased productivity in agriculture. Irrigation is the norm for almost all commercial farmers. Large areas of sugar cane, bean and maize fields belonging to the peasants are, however, not irrigated. This is partly due to the lack of capital. Dam building, from which water can be drawn for sprinkling, and the pipes for the actual sprinkling are very expensive. Ruggedness also prohibits irrigation. The rivers are usually too shallow while the banks are too steep for the construction of furrows for flooding the fields, which are also on steep slopes. Smaller vegetable gardens, run by communities are, however, irrigated by hand. Water is fetched from a dam, river or water hole using watering cans and tins with perforated bases.

3.4.4 Petty Commodity Production as a Means of Livelihood in the Ugu District

In winter, after the maize harvesting, milling machines that are operated by tractors can be seen alongside the road. Long queues of people with bags of maize moving slowly to the

machine where the maize is converted to maize meal mainly for domestic consumption. The owner of the machine usually charges up to R15,00 for milling 50 kg of maize.

3.4.4.1 Artefacts and Crafts

Some individual rural dwellers make a livelihood from the sale of handicrafts. This includes brooms, made from "ingongoni" grass, palm stems or date palm leaves and clay pots and vases. All these products are made mainly for home use. Very few people produce these items in bulk for sale since the manufacture of these artefacts is done by hand, it is a slow process that is both time consuming and painstaking. As a result mass production is improbable. The end result is that people engaged in manufacturing of artefacts do so for subsistence purposes. The income derived from this activity is too little for manufacturing to be regarded as of any importance in providing food security and in the general upliftment of the economy of Ugu District.

3.4.4.2 Sale of Agricultural Produce

Since the production activities of the peasants the District are mainly for subsistence purposes, there is very little trading of agricultural produce. If agricultural produce is sold, this is usually done locally and in social gathering like on pension collection days. People bring everything that could be sold to the pension payout points. Agricultural products like beans, amadumbe, bananas, oranges, apples, meat and vegetables are sold. Few individuals sell their produce to markets in Durban. Amadumbe are loaded in trucks and transported to

Durban. Many trading points are mushrooming now near local shops, on bus stops and along the main roads. The fruit are the main goods sold at these points. The market is, however, not that good because of the high unemployment rate.

3.4.5 Institutional Structure in the Rural Areas

There are 38 traditional authorities falling within the six local municipalities. The total land falling under the administration of these tribal authorities is 3450 km². Another 2415 km² of land is either privately owned or in the hands of the state. Table 3.1 shows the distribution of the traditional authorities within the Ugu district. According to Table 3.1 Umzumbe Municipality has the largest total number of such authorities.

Table 3.1 Distribution of Traditional and Regional Authorities

Municipality	Traditional Authorities		Regional Authorities
Umdoni	KwaCele	Malangeni	Vulamehlo
	Amahlongwa		
Vulamehlo	Emandleni	Mbhele	Vulamehlo
	Dumisa	Toyana	
	Isimahla	Ukuthula	
	Mbhele	Zembeni	Umbumbulu
	Cele	Nyuswa	
	Embo/Isimahla	Maphumulo	
Umzumbe	Bhekani	Kwacele K A	Umzumbe
	Dungeni	Mabheleni	
	Hlongwa	Ndelu	
	Hlubi	Nhlangwini	
	Kwacele I B	Nyavini	Umzumbe
	Shiyabanye	Qolo Qolo	
	Thulini	Qwabe N	
	Qwabe P		
Ezingolweni	Manyuswa	Vukuzithathe	Izingolweni
	Mthimude		
Hibiscus Coast	KwanNdwlane	Madlala	Izingolweni
	Kwanzimakwe	S Mavundla	
	KwaXolo	Shabeni	Umzumbe
Umuziwabantu	Bashaweni	KwaMbotho	Izingolweni
	Fodo	Nhlangano	
	Isibonda	Thokozani Dumisa	

3.5 ECONOMIC PATTERNS AND TRENDS

According to the Ugu District Municipality (2002), the Ugu district has about 235 industries supporting a consistently higher growth rate than the rest of KwaZulu-Natal. Besides government jobs, transport, commerce, and manufacturing are important economic sectors for job opportunities (Ugu District Municipality, 2002). Port Shepstone is the administrative centre of the district and it is identified as the district service centre (contributing about 44 percent of the gross geographic product). Port Shepstone is also the major employment centre within the district. Other employment centres within the district include Margate, Izingolweni, Harding, Umzinto, Scottburgh and Dududu. The main inland centres such as Dududu, Umzinto, Phungashe, St Faiths, Harding and Ezinqoleni are predominantly rural in character. They offer formal employment mainly in the administrative services (Ugu District Municipality, 2002).

3.5.1 Forest Industry

The Ugu district has an expanding forestry and timber industry, owing to the fact that South Africa's climatic conditions make trees to grow four to eight times quicker than they do in the northern hemisphere. The Ugu district produces some 195 000 tons of pine a year in addition to the 1 755 million tons of gum and wattle used by the major pulp mills. There are about 200 small sawmills operating and producing approximately 6000 tons of board a year (Ugu District Municipality, 2002). A few secondary industries

manufacture timber products, such as doors, windows and furniture. A number of businesses are successfully exporting timber products of high quality (to ISO9000 standards)

Whilst important for the economy, forestry is a threat to the natural environment if not properly managed, as it may decrease the availability of water for domestic and agricultural use.

3.5.2 Other Plantation Industries

The Ugu district has also been growing and milling much of the nation's sugar since the 1890s. One fifth of all the bananas consumed in South Africa are produced in the district and tea has grown for more than a decade. The disadvantage about these plantation industries is that there is very limited local processing of the products.

Sugar cane is the main cash crop in the region, cultivated mainly in the south. But since the growers own small land for sugar-cane production, coupled with the fact that they lack capital for maintaining the industry their average income is only about R2,700 per growing season (i.e. after 18 months).

Since income earned from the selling of agricultural crops is insufficient, the majority of the working population are migrant labourers in towns and cities. Many people are employed in

factories in the Durban-Pinetown area and in towns like Port Shepstone, Ixopo and Margate. Some work in the adjacent commercial (White-owned) farms.

3.5.3 Tourism Potential

Ugu uses the coast and sea as primary tourist attractions complemented with golfing, scuba diving, whale watching, the sardine run, etc. The bulk of tourism facilities and amenities are along the coastal corridor. The total number of beds offered by the holiday facilities above is 51000 in the Hibiscus Coast; more than 50 percent of these beds are found between Shelly Beach and Port Edward (Ugu District Municipality, 2002).

Special interest sites, forest nature reserves and other areas of environmental significance are numerous, but are more sparsely scattered, throughout the hinterland, with two major attractions - the nature reserves of Oribi Gorge and Vernon Crookes - lying off the districts' two inland Secondary Corridors (Ugu District Municipality, 2002).

The hinterland holds a wealth of tourism potential, yet it remains largely undeveloped as an adventure, eco and cultural tourism destination. These include potential attractions such as Msikazi Mountain, Execution Rock, Mfangisale, etc. Ugu is home to four of the five private commercial game farms in kwaZulu-Natal. These are the Solana Game Park, which lies off the inland N2, between Paddock and Ezinqoleni; the Mbumbazi Game Reserve just outside Margate, the Nyamazane Game Ranch at Ezinqoleni and lastly, the site of the Oribi Gorge Hotel area (Ugu District Municipality, 2002).

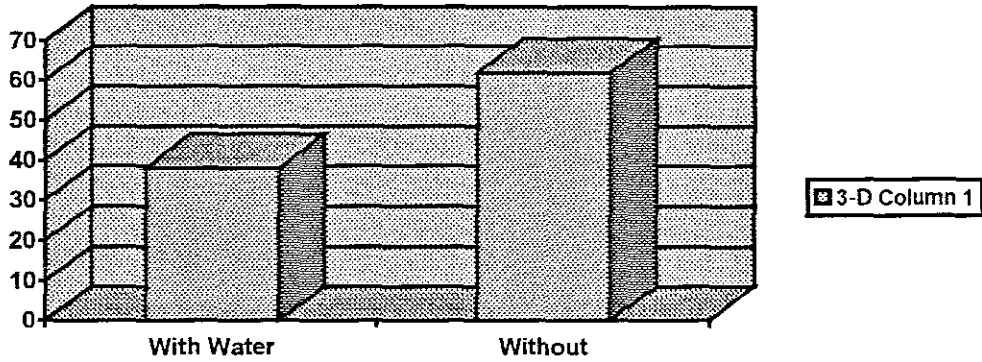
3.5.4 Energy

Whilst there have been some significant initiatives by the erstwhile Ugu Regional Council to assist in the provision of electricity, the majority of households are not electrified and are reliant upon other sources of fuel. The fact that the majority of rural households still live in a dispersed settlement format makes the provision of electricity more difficult for profit oriented para-statal such as Eskom. It has also been noted that some families cannot afford to pay for electricity that has been connected to their homesteads (Ugu District Municipality, 2002).

3.5.5 Water

Access to reticulated water in the Ugu District coincides with urban development. The coastal strip of towns, together with Harding, has the highest level of water services. The majority of the district living in the hinterland remains reliant on rivers and springs for their daily domestic water needs.

According to the Ugu District Municipality (2002) approximately 38 percent of the population has access to water services whilst 62 percent do not have access to adequate water services. The greatest need for water is within the Traditional Authority areas. The backlog, of each municipality, as a percentage of the total backlog is as shown in Table 3.2

Diag. 3.1 Percentage People with and Without Water**Table 3.2 Water Services Backlog**

Municipality	% of the Total Backlog	% Urban Backlog	% Rural Backlog
Vulamehlo Municipality	23,8	0	23,8
Umdoni Municipality	1,7	0,3	1,4
Umzumbe Municipality	35,2	0	35,2
Hibiscus Coast Municipality	12,1	0,4	11,7
Ezinqoleni Municipality	9,8	0	9,8
Umuziwabantu Municipality	17,4	0	17,4
Source: Water Services Development Plan 2002			

The greatest percentage backlog of all rural areas is in the Umzumbe. The next highest backlog is in Vulamehlo.

3.5.6 Socio-economic Infrastructure

3.5.6.1 Road Infrastructure

The district enjoys about 220 kilometres of national road (N2) and there are many east-west routes such as R68, R73, and R77 linking the coastal corridor to the rural hinterland and R75 which links to the R612. The spatial pattern of development is constituted of three main development corridors. The primary corridor is the coastal spine of transport infrastructure. There are two secondary inland corridors - one following the national road from Port Shepstone through Harding and the other one starting from Scottburgh through Jolivet to the southern Drakensberg. These corridors inform the space economy of the district. Tertiary corridors include the St Faiths route, which transcends Umzumbe municipality, and the route linking Scottsburgh, Dududu, Mkhunya and Sisonke District.

Port Shepstone is the administrative centre of the district and other main activity nodes are located within the primary corridor and they include towns like, Scottburgh, Hibberdene, Shelly Beach, Margate and Port Edward. The main inland centres are predominantly administrative as they are the service satellites of the erstwhile KwaZulu Government and the House of Delegates Government. Such centres include Dududu, Umzinto, Phungashe, St Faiths, Harding and Ezinqoleni (Ugu District Municipality, 2002).

The district has a significant share of small-scale cane growers that rely on road infrastructure to transport their produce to the mills. The problems noted from these cane

growers are that poor road infrastructure often impedes their operations and there are roads, which need to be upgraded to district level roads.

There is an ever-increasing backlog in community access roads and general rural mobility problems due to the continued expansion of rural settlements. These problems are more prevalent in Umzumbe and Vulamehlo Municipalities. There is therefore a

need to contain the expansion of settlements within the present road networks of various hierarchies (Ugu District Municipality, 2002).

This situation has resulted into ever increasing backlog in community access roads and general rural mobility problems. These problems are more prevalent in Umzumbe and Vulamehlo Municipalities. There is therefore a great need to contain the expansion of settlements within the present road networks of various hierarchies.

3.5.6.2 Rail Transportation

The main line runs alongside the N2 from Durban to Oslo Beach, south of Port Shepstone. The two narrow gauge inland lines follow the N2 through Harding and the R612 through Highflats. The latter line was closed in the 1980's prior to the leasing of the Port Shepstone-Harding line to Alfred County Rail. The Port Shepstone – Harding line is the longest narrow gauge railway line in the country. The rail operations on the Alfred line have suffered severe financial pressure and have thus abandoned the freight transportation; it is also of serious concern that the Banana Express (a tourist attraction) is on the verge of closure.

3.5.6.3 Health Services

The Ugu District claims to be in the lead regarding health service facilities in the province. In terms of thresholds, the number of fixed health facilities provides sufficient coverage for the district population (Table 3.3; Fig. 5.3).

TABLE 3.3 Health Facilities in the Ugu District

Type of Health Facility	Number
Provincial Hospitals	4
Provincial Fixed Clinics	34
Local Authority Fixed Clinics	10
Mobile Clinic	5
Private Hospital	2
Hospice	1
T.B. (Santa) Centre	1

Source: Ugu District Municipality (2002)

A common problem for all municipalities is, however, the equitable distribution of facilities, accessibility to these facilities as well as the unsatisfactory level of services offered: The clinics are often understaffed and lack necessary equipment and medication. There are several mobile clinic points, but the service is irregular. Community health

workers currently lack supervision and support and additional health care training programmes are required (Ugu District Municipality, 2002).

3.5.6.4 Education and Skills Development

There are 455 schools in the district giving a ratio of approximately 1500 pupils per school (Fig. 5.4). Just over one third (34.73 percent) of these schools fall beyond twenty kilometres of the coastline. 23.3 percent of schools fall within the 10-20 kilometres distance from the sea and 12.9 percent between 5 and 10 kilometres from the coastline. Facts from community consultation meeting suggested that poor roads and traveller unfriendly terrain made communities desire the construction of more schools. Other factors associated with the ill distribution of schools in rural areas include the jurisdiction of traditional authorities and the lack of involvement by the Education Department when communities were establishing schools as their own initiative (Ugu District Municipality, 2002).

The district has three formal tertiary institutions, which are the Gamalakhe College of Education, Enyenyenzi Technical College as well as the Port Shepstone Technical College. Due to the decreasing demand for qualified teachers, the Gamalakhe College has been converted to the Natal Technikon satellite campus. This conversion will assist the local matriculants who do not want to move to other centres situated outside the district (Ugu District Municipality, 2002).

There is uneven spread of education facilities in the district as all the above-mentioned institutions are located south of the Umzimkhulu river. Enyenyenzi Technical College is broadening its spectrum of skills by merging with a number of local training centres such as Gcinangempi, Sizanani, Nqamuza and Ezulwini skills centres. The purpose of this merger is to improve administration and utilisation of staff and finance. Both the Enyenyenzi and Port Shepstone technical colleges have an enrolment figure of over 700 students. They offer a number of technical and business skills courses such as bricklaying, sewing, motor mechanics, business information systems, and secretarial services. Courses at Port Shepstone technical college are offered up to the N6 level whilst few courses exceed N5 at Enyenyenzi (Ugu District Municipality, 2002).

3.6 DEMOGRAPHIC DYNAMICS AND SUSTAINABLE RURAL DEVELOPMENT

3.6.1 Population Distribution

The District had a population of approximately 667000 people in 1966 (Republic of South Africa, 1966), Living in about 102 237 households. About 16 percent of the population lives in the urban coastal strip and approximately 84 percent is located in the rural areas (DWAF, September 1994).

The distribution of this population throughout the Ugu District is influenced by different factors, some of which are terrain, distance from the sea, accessibility to the means of transport, availability of land for grazing and crop raising.

3.6.2 Population Densities

There is spatial distribution of population densities within the Ugu District ranging from about 10 people/ha in Umuziwabantu to more than 200 people/ha in areas such as Ezingoleni, Hibiscus Coast and Umdoni (Fig 4.1). The high concentration of people in the latter two coastal areas is associated with the major developments that have taken place in a 4 to 10 km strip along the coast. The rural areas are characterised by comparatively low population densities and dispersed settlement pattern

The uneven population concentrations are related to the uneven development within the District. This coastal strip generally has well developed infrastructure and services and forms the economic base of the district. Limited infrastructure development has taken place within the inland regions, which were former the KwaZulu districts. It is this distribution of natural and economic resources that informs the present population densities. On the one hand, this has resulted in noticeably high-density settlements in coastal areas, mission stations, industrial and commercial centres, on the other hand, the majority of the district's people reside in rural/traditional settlements varying from 10 to 200 persons per square kilometre as illustrated on the Fig. 4.1.

3.6.3 Population Growth Rate (Projected)

Population in the Ugu district is, according to records, growing at a rate below one percent. The average growth rate for KwaZulu/Natal is, however, about 1.9 percent (Republic of South Africa, 1966). The low growth rate for Ugu is attributed, according to the Ugu District Municipality, to a number of factors such as emigration and the impact of HIV/AIDS (Ugu Municipality, 2002). According to Table 3.4 projections are that this slow growth rate will characterise the district until 2010.

The high population densities of Thulini and Madlala Wards are evidence of rapid population growth in these areas. While the fertility rate is much higher than the mortality rate in these areas the population parameter responsible for most recruits is immigration. People are moving away from war-torn areas and inland wards such as Mabheleni, Ndelu, Qwabe, Nhlangwini, Nyawini (Dungeni) to the Thulini and Madlala Wards. The latter are also famous for their sea-view and high potential for economic development. While the

Table 3.4		Population Growth Rate	
Local municipality name		Growth Rate	
	2001-2010	1996-2001	
Hibiscus coast	0.9784	0.9792	
Ezinqoleni	0.9752	0.9759	
Umzumbe	0.951	0.9517	
Umdoni	1.0218	1.0225	
Umuziwabantu	1.0048	1.0056	
Vulamehlo	0.9808	0.9815	

population of these areas is growing, that of others such as Dungani is decreasing because of emigration. The young generation, more especially the newly married couples, tend to leave rural areas for urban areas along the coast.

The implications of population dynamics are varied. Population growth may mean more economically active people being introduced in an area. Hence more chances for rapid economic growth and development. On the other hand more people and houses mean less land left for food production. More people also imply more demands on the environment. Emigration leaves more land for use by the remaining individuals for agricultural purposes, while it reduces the labour force at the same time.

3.7 POVERTY AND SUSTAINABLE RURAL DEVELOPMENT

3.7.1 Employment Status of the Population

There are limited employment opportunities in the Ugu District. The employment rate ranges from about 17 percent in the rural areas to about 85 percent in some of the coastal towns (Fig. 3.1). Formal employment is offered mainly by the primary sector, i.e. agriculture and forestry. Many people who are employed locally work in farms (mainly White farms) and forest plantations (especially in the north). The main employer in the primary sector is the sugar industry. Many young men and women are involved in the planting, weeding and cutting of cane.

Fig 3.1 Percentage of employed people

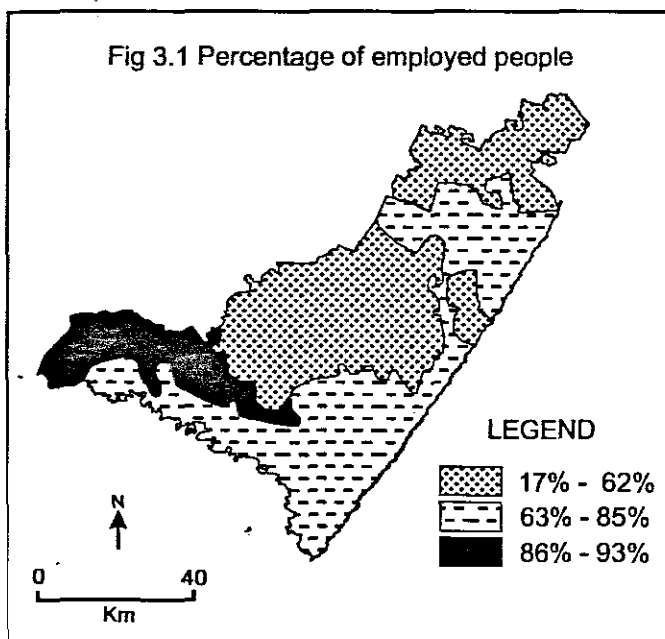


Fig 3.2 Percentage people earning

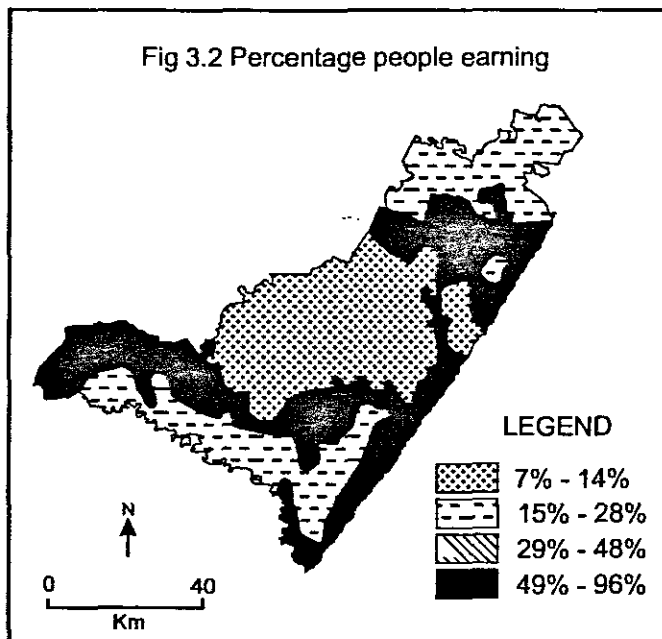


Fig 3.3 Percentage people earning > R1500

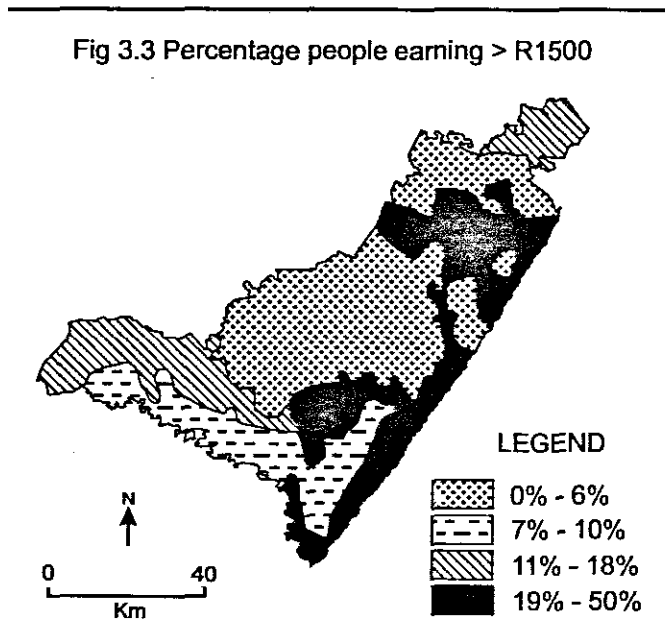


Fig 3.4 Per capita income

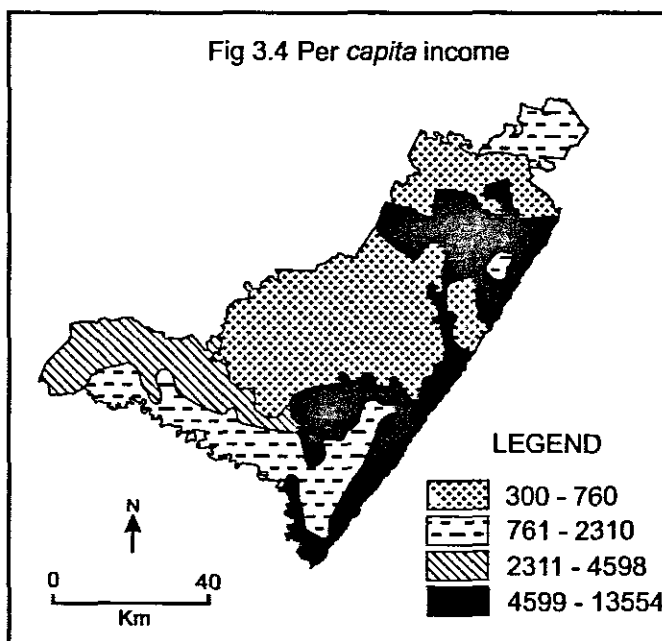


Fig 3 Income Levels of Population of the UGU District

Fig 4.1 Population density

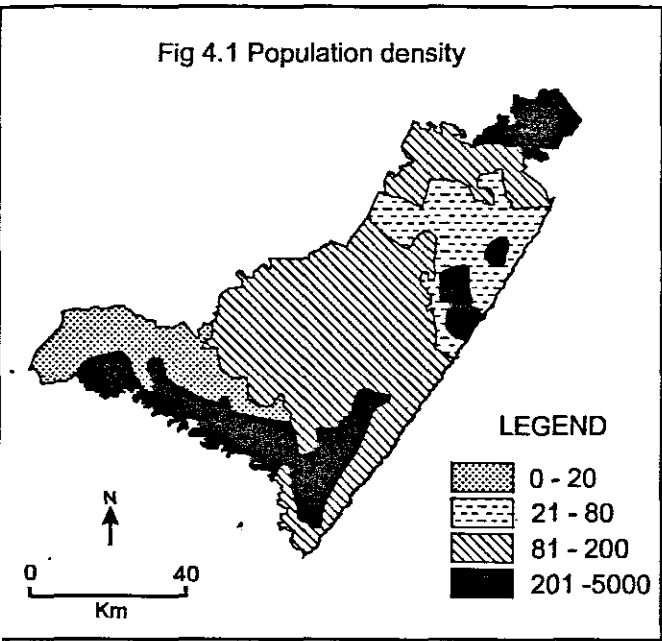


Fig 4.2 Dependency ratios

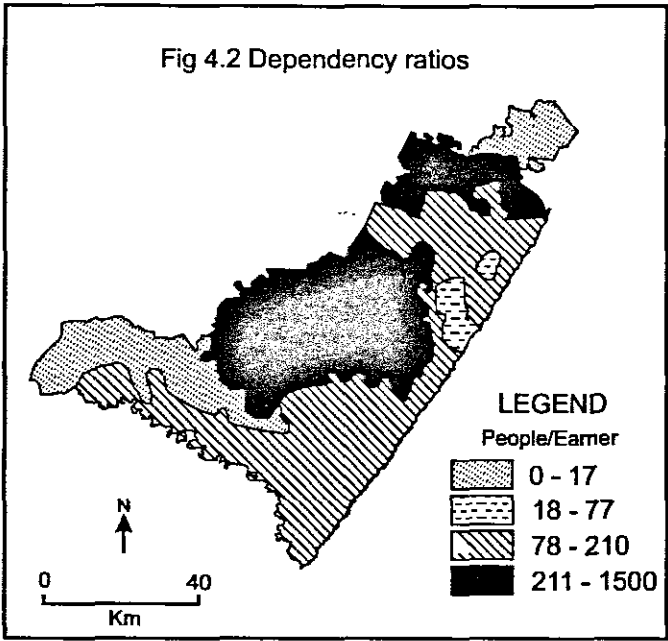


Fig 4.3 Household Expenditure

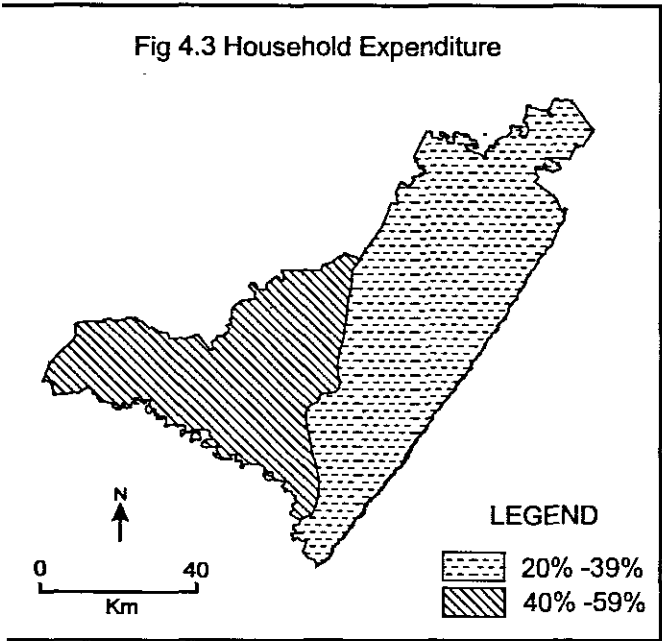


Fig 4.4 Average household income

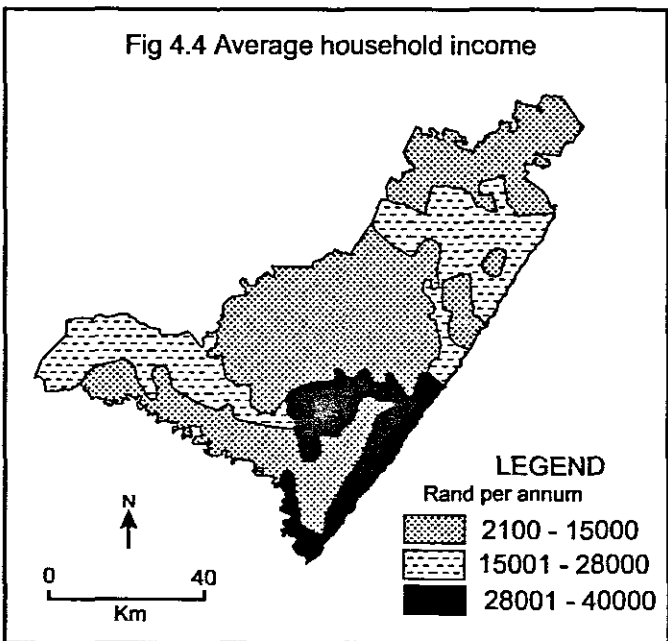


Fig 4 Poverty Indicators in the UGU District

The main employer of the skilled labour force of Ugu District is the Department of Education. Many members of the community serve as teachers, school superintendents and clerks. Some are employed by the Government Departments, working as administrators, officers, policemen, etc. Fewer people are employed in the secondary sector (manufacturing) as well as the tertiary sector. A few individuals are self-employed as building contractors, taxi owners and shopkeepers or petty commodity production. The taxi industry is developing to provide employment for many young boys who drop out of school.

Many employed people in the Ugu District region are migrant workers, working in factories, shops and offices in cities like Durban, Port Shepstone, Pietermaritzburg and some in Johannesburg.

3.7.1.1 Earning capacity

Besides formally employed people, a number of people earn an income from diverse sources such as business, pensions, welfare, petty commodity production, etc. The percentage of people earning an income reaches 94 percent in some areas, especially those along the coastal resorts and along the N2 main road through Ezingolweni to Harding (Fig. 3.2). Fewer people earn income in the rural hinterland. A similar distribution pattern obtains for people earning income greater than R15 000 (Fig. 3.3) and, for the per capita income. This distribution pattern is related to earnings from tourism. Figs 3.1 to Fig. 3.4 demonstrate that the earnings of many rural households are far below the breadline, which is a negative factor for sustainability.

3.7.1.2 Poverty Situation and Gender-Specific Issues

Based on the age breakdown of the population, approximately 50 percent of the population within the District falls between the age group 15 to 64 years. The majority of the district population is under 20 years of age. Population composition by gender shows that 54 percent of the population is female whilst 46 percent is male (Republic of South Africa, 1996).

According to the Ugu District Municipality (2002) there are about 66,000 households living below the minimum level. These households rely on direct and indirect grants to survive. According to the 1996 population census, the number of women-headed households is the same as the number of households living below the minimum living level. Many of women headed household are below minimum living level (Ugu Municipality, 2002).

The District has an average dependency ratio of 1:3 (Table 3.5). Both the Umzinto and Alfred magisterial districts have high dependency ratios. The dependency situation has deteriorated in Alfred magisterial district over the past ten years. It is also these the Umzinto and Alfred districts which are experiencing serious poverty gap indices (Ugu Municipality, 2002).

Table 3.5 Dependency Ratio by Magisterial District

Magisterial District ³	Ugu District Dependency ratio		
	2000	1996	1990
Alfred	5.31	5.38	2.86
Port Shepstone	2.11	2.16	2.57
Umbumbulu	2.28	2.33	0.92
Source: Pims.Net			

Generally, whilst the majority of the district workforce is male there are negligible differences in the informal sector.

Table 3.6 Employment by Gender in Magisterial Districts

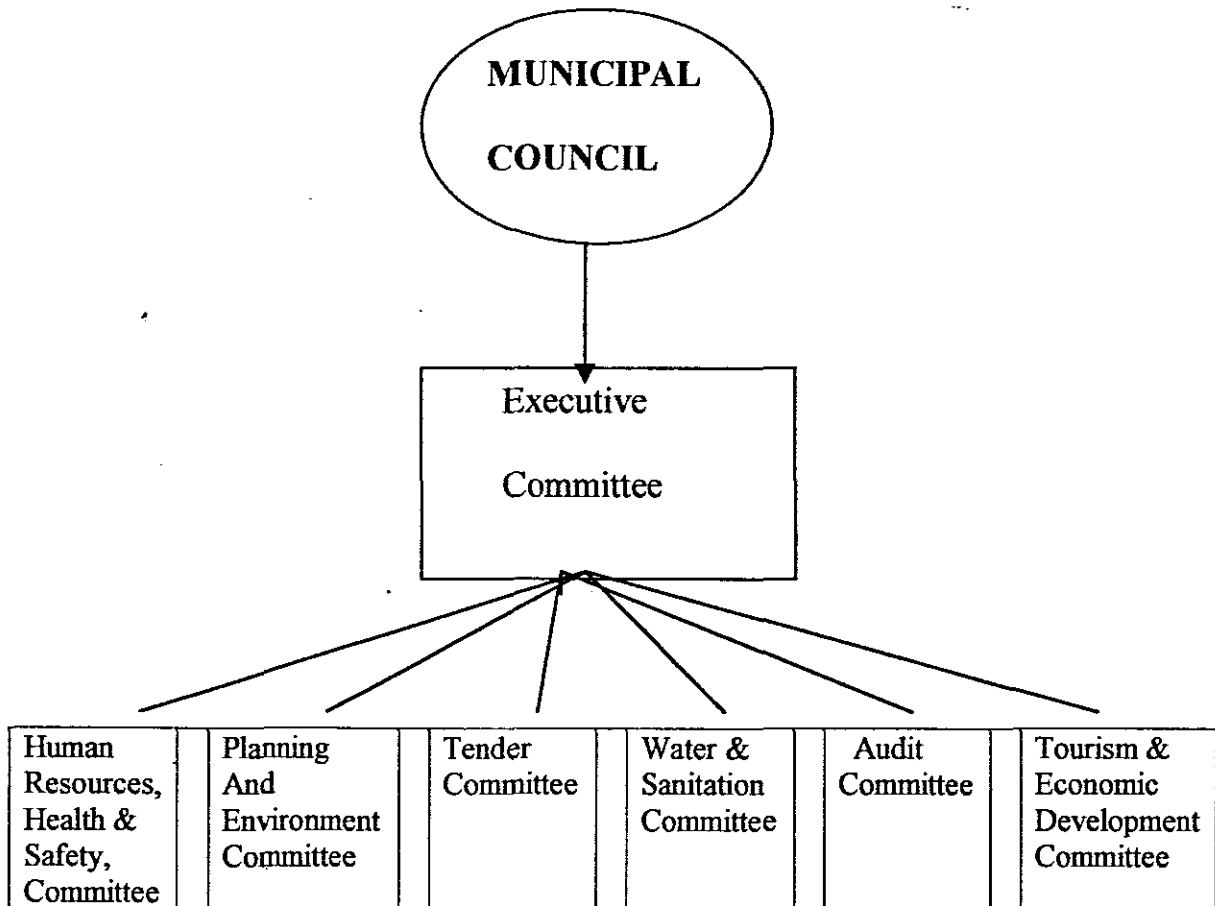
Magisterial District	Ugu District Employment By Gender Year 2000				
		Informal Sector		Formal Sector	
	Econ. Active Pop	Males	Females	Males	Females
Alfred	21040	845	983	1384	1858
Port Shepstone	80876	7735	6357	14804	11204
Umbumbulu	64501	543	259	2209	1767
Umzinto	59167	4377	4163	12966	4318
TOTAL	225584	5.98%	5.21%	13.90%	8.48%
Source: Adapted from Pims.Net					

It is evident from Figs. 3.1 to Fig. 3.4 that very few people contribute to the economic development of the district. These statistics indicate that the population of Ugu District is generally poor and consequently cannot generate sufficient capital to improve their

³ Alfred Magisterial District covers the entire Umuziwabantu Municipality, and some portions of Ezingoleni. Umzinto Magisterial District Covers the entire Umdoni and some sections of Umzumbe and Vulamehlo Municipalities. Umbumbulu Magisterial district covers a portion of Vulamehlo Municipality. Port Shepstone MD covers the entire Hibiscus Coast and portions of Umzumbe and Ezingoleni.

livelihoods. With an average *per capita* income of R551 high food production levels cannot be attained. People of the Ugu District need financial support to jerk up their livelihoods.

3.8 INSTITUTIONAL STRUCTURE



Diag. 3.2 Political Structure of the Ugu District Municipality

3.8.1 Political Profile

A full-time Executive Committee (EXCO) governs Ugu District Municipality. All members of the EXCO preside over specific portfolio committees, which ensures active participation by councillors. Diag. 3.2 Shows the organogram of the political structure in Ugu District (Ugu District Municipality, 2002).

Six subsidiary development forums augment the political structure, namely:

- a) The Labour Forum
- b) Management Forum
- c) Skills Development Committee
- d) HIV/Aids Committee
- e) Ugu Tourism Marketing Association and
- f) The IDP Representative Forum (Ugu District Municipality, 2002).

3.8.2 ISRDP Priority Issues from the Perspective of the District

The Integrated Sustainable Rural Development Programme (ISRDP) is a national development intervention that is structured to uplift certain areas that are characterised by severe social development (Ugu District Municipality, 2002). These areas are referred to as rural nodes and Ugu District is one of the four rural nodes in KwaZulu Natal.

At the local ward level of analysis, the six municipalities have been assessed on the criterion of high poverty levels and “most needy”⁴ through the ISRDP. The 81 wards in the district were accorded a priority rating ranging on a scale from 1-4. A rating of 1

⁴ The ISRDS poverty profile per ward was based on levels of electricity, sanitation and water provision.

Fig 5.1 Priority areas for service delivery

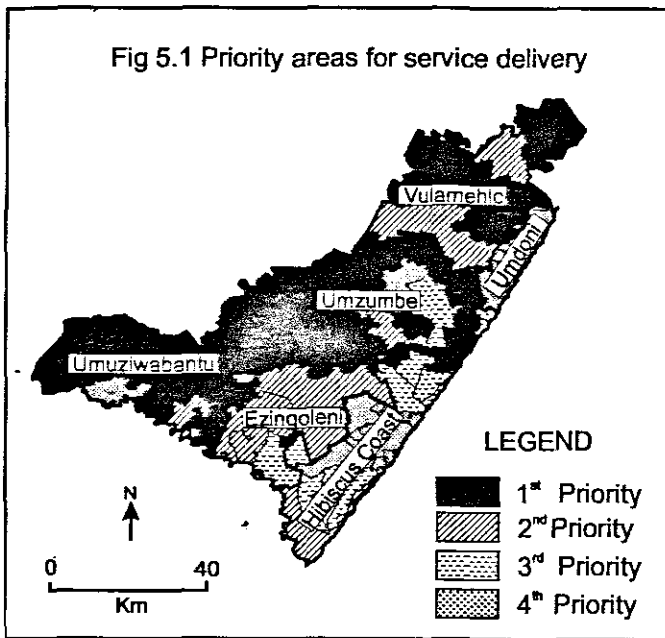


Fig 5.2 Land reform projects

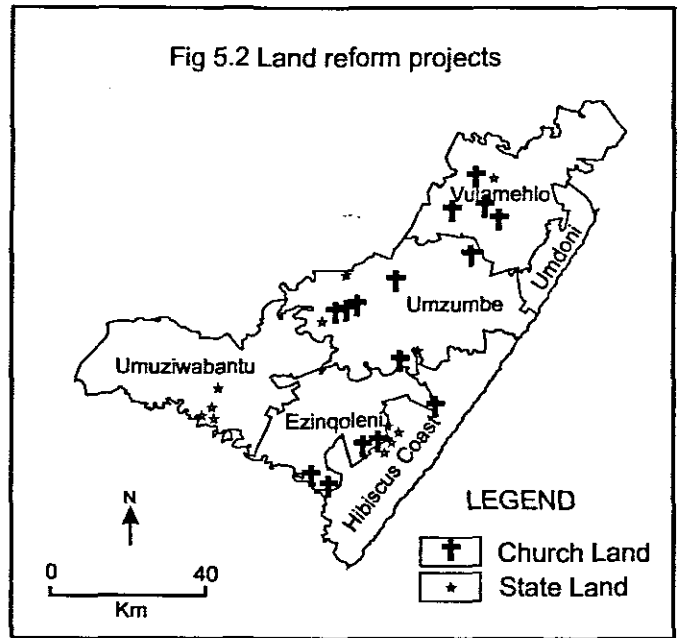


Fig 5.3 Social Facilities

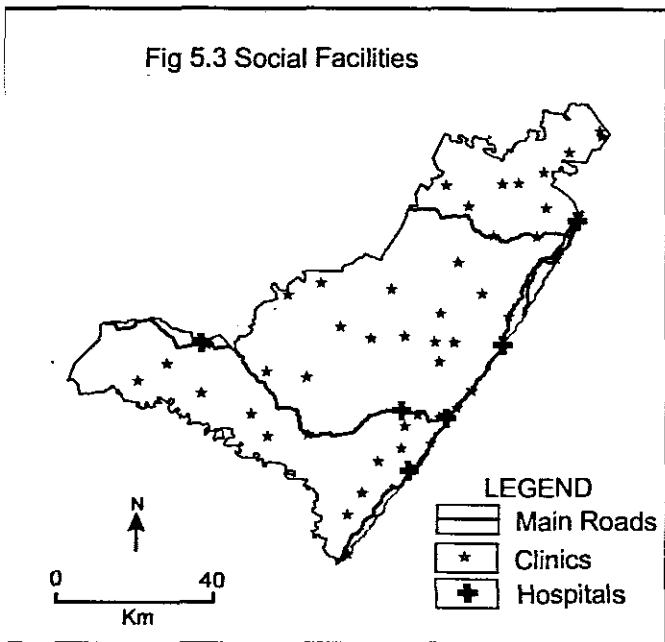


Fig 5.4 Educational institutions

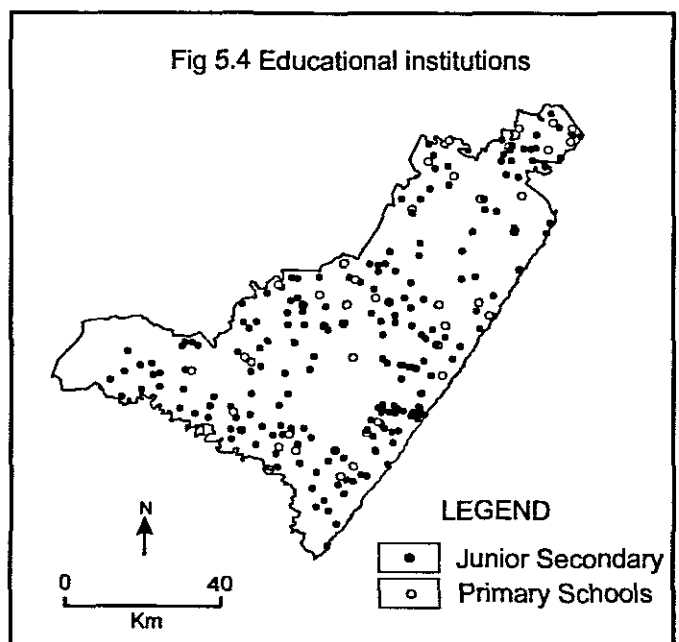


Fig 5 UGU District Municipality Service Delivery

meant that the people in the ward were in dire need of development intervention and a rating of 4 meant that the ward has the lowest level of demand for development intervention in the district (Ugu District Municipality, 2002). Fig. 3 shows the spatial distribution of potential ward priority intervention ratings across the district. Most of the rural areas at the periphery of the district were accorded the highest priority development intervention rating of 1 (Ugu District Municipality, 2002). The Presidential programme is a district priority since it is geared towards addressing service backlogs and alleviating poverty (Ugu District Municipality, 2002).

This programme complements the KZN Provincial Rural Development Strategy and other related sectoral strategies. Ugu District is advancing this provincial strategy through a Rural Service System pilot programme in the Vulamehlo Municipality poverty (Ugu District Municipality, 2002).

3.9 SUMMARY

The aim of Chapter Three was to give an overview of the existing ecological and socio-economic factors that are related to the Integrated Sustainable Rural Development Plan (ISRDP). The analysis of these ecological and socio-economic factors in this Chapter was done systematically for the sake of clarity. It should be remembered, however, that integrated development is a holistic approach where interrelationships among the various factors were more important than the individual factors). In general there were serious financial, technological and ecological factors affecting rural development in Vulamehlo.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.2 INTRODUCTION

Rural sustainability as a concept cannot be measured directly. There are numerous interrelated factors that influence the sustainability of a rural area. There are ecological, socio-economic and political factors, which are inextricably interrelated to consider in assessing the sustainability of a rural area. Agriculture is one of the main economic bases of rural areas. It is, in fact, one of the most important determinants of the sustainability of rural areas. Agriculture is itself a complexity of processes taking place within biophysical, socio-economic and political constraints, which control the sustainability of the farming activities (Yunlong and Smit, 1994). The concept of sustainable agriculture combines characteristics such as long-term maintenance of natural systems, optimal production with minimum input, adequate income per farming unit, fulfilment of basic food needs, and provision for the demands and necessities of rural families and communities (Brown *et al.*, 1987). All definitions of sustainable agriculture promote environmental, economic and social harmony in an effort to attain the meaning of sustainability. The most relevant issue today is to design suitable technologies, as well as compatible strategies from the social, economic and ecological viewpoints that will bring about the necessary behavioural changes to achieve the objectives of sustainable agriculture (Smit, 1994).

4.2 INDICATORS OF RURAL SUSTAINABILITY

At the Rio Earth Summit (1992) participating governments, business leaders and representatives of the voluntary sector committed themselves to Agenda 21. The United Nations Commission on Sustainable Development (CSD) was established. The objective of the CSD was to promote and monitor the activities of Agenda 21. The CSD introduced the idea of using indicators as tools to gain insight into the progress made in achieving sustainable development.

At its Third meeting in April 1995, the CSD adopted a work programme on indicators of sustainable development (ISDs). The CSD developed a working list of 134 indicators and related methodology sheets. The aim of the CSD is to have an agreed set of indicators available for all countries to use by the year 2001. Indicators are instruments that help to assess or monitor whether the researchers are on the path towards or away from sustainable land use systems. According to Zinck and Farshad (1995) the indicators are intended for use at the national level by countries in their decision-making processes. An indicator of sustainability is a variable that allows for describing and monitoring the processes, states and tendencies of systems at the farm, regional, national or worldwide levels. An indicator of sustainability must be sensitive to temporal and spatial changes, predictable, measurable and interactive (Liverman et al., 1988). Glave and Escobal (1995) proposed a set of verifiable and replicable indicators to assess the natural resources, the ecological and economic structure, and the ecological, economic and social benefits. In this study use was made of some of these indicators as a measures for sustainability in the Ugu District.

4.2.1 Criteria For Measuring Sustainability

Agricultural systems can be analysed at various levels of hierarchy. For land evaluation and farming systems analysis, FAO (1992) distinguishes the following:

- (a) Cropping systems,
- (b) farm systems,
- (c) sub-regional systems,
- (d) regional systems and
- (e) national systems

The concept of sustainable land management (SLM), like the concept of sustainable development on which it is founded, is gaining momentum in rural as well as in urban constituencies (Dumanski, 1997). Sustainable land management requires the integration of technologies, policies and activities in the rural sector, particularly agriculture, in such a way as to enhance economic performance while maintaining the quality and environmental functions of the natural resource base (Dumanski, 1997).

Five criteria were identified to evaluate progress towards SLM (Dumanski, 1997) viz,

- (a) productivity,
- (b) Security,

- (c) protection,
- (d) viability and
- (e) acceptability.

According to Dumanski (1997) the five criteria above are the pillars on which the SLM is founded. Through this process the concepts of land use resilience and social equity have been added.

4.2.2 Assessment of Indicators for Rural Sustainability

Appropriate indicators must be selected to determine levels and duration of sustainability (Zinck and Farshad, 1995). Munasinghe and McNeely (1995) maintain that the index of biophysical sustainability, soil and water conservation, efficiency of fertilizer use, efficiency of energy use, and productive permanence of the forest are important indicators. Indicators are selected on the basis of diagnostic criteria that permit the discrimination of factors, causes and effects controlling a system. Environmental indicators such as deforestation, soil erosion, crop yield, soil quality, water quality, declining fodder supply are only one of several useful instruments for monitoring and assessment of sustainable land management.

Sustainable development analysis is a supportive tool that can be potentially used to achieve participatory land management solutions at community level. It is preferably carried out by interdisciplinary teams working with local and external stakeholders in a trans-disciplinary

manner, i.e., using both scientific and local knowledge to arrive at shared views on needs, options and constraints for sustainable development.

4.3 RESEARCH METHODS TO ASSESS RURAL SUSTAINABILITY IN UGU.

Sustainable land management in agriculture is very complex, hard to assess in practice, requiring the understanding and integration of information from diverse sources; a challenging concept that encompasses biophysical, socio-economic and environmental concerns that must be viewed in an integrated manner (Smyth and Dumanski, 1993).

4.3.1 Assessment of Sustainable Land Management

The framework for evaluation of sustainable land management (FESLM) is the study to determine the environmental, economic and social sustainability of major farming systems in use (Smyth and Dumanski, 1993)

Appropriate methodologies that encompass biophysical and socio-economic criteria for evaluating sustainable land management are still in the developmental stage (Smyth and Dumanski, 1993). Data and information, required for sustainability assessment, are generally unavailable, sparse and/or incomplete.

A complementary blend of a scientific assessment together with qualitative methodologies was used in this study to measure the different criteria for sustainable development in

Kwazulu/Natal. Among the methods used was a complementary use of maps, aerial photo interpretation, fieldwork, Geographic Information Systems, structured interviews, unstructured interviews, participatory rural appraisal (PRA) and discussions. The reports of the Ugu District Municipality (2002) and South Africa's National Report to the Johannesburg WSSD (2002) were very useful reference material for the assessment of the sustainability of Vulamehlo.

4.3.2 Maps and Aerial photo interpretation

The technological advances in Remote Sensing, Geographic Information System (GIS), Computer Simulation and Decision-making have made it possible to support models in formulating strategies to plan resource management.

The population maps were generated by the Atlas GIS system from the population census data obtained from the Human Sciences Research Council (HSRC) GIS unit. Extensive calculations were made to convert the raw data into comparable ratios and percentages.

Maps of Ugu District depicting different ecological and socio-economic features such as agricultural systems, soils, relief, rainfall, land use etc., obtained from the Ugu District Municipality (2002) and the Department of Geography and Environmental Studies at the Durban-Umlazi campus of the University of Zululand, were used to examine and analyse the spatial distribution of these phenomena. These maps were useful in getting a spatial overview of the relevant indicators for sustainable development and to correlate them with

other variables. Environmental indicators such as deforestation, soil erosion, crop yield, soil quality, and water quality were thereby studied and incorporated in the analysis of sustainability. Population density maps were useful indicators of the interaction between population and over-cultivation, water pollution, deforestation, massive soil erosion, and loss of soil quality.

4.3.3 Field Surveys

A number of field trips were undertaken to observe the methods used by the farmers in ploughing and soil preparation, planting, weeding, harvesting and general management of the cultivation processes. Field surveys were carried out after the photo-interpretation to check the accuracy of the mapping units. Fieldwork trips were undertaken after mapping of each feature, which means that there were as many field trips undertaken as there are mapped features. To be specific there were about four periods of field trips each lasting an average of four days at Vulamehlo. In the rest of the Ugu District tourist type field trips were undertaken to confirm information published in the primary and secondary literature.

4.3.4 The Use of Primary and Secondary Sources of Information

Much information on this study was gathered from other published sources such as textbooks, journal articles, official statistics and the media. Official publications of the Vulamehlo Local Municipality, the Ugu District Municipality, the Provincial and National governments were very useful in providing policy and strategic information about the IDP

and the ISRDP. The Population censuses of 1991 and 1996 obtained from Statistics South Africa were particularly useful in correlating demographic with environmental factors.

4.3.5 The Structured Interviews

Sustainable land management indicators can be identified through questionnaire responses and in-depth interviews (Smyth and Dumanski, 1993). A structured questionnaire survey (Appendix A) was conducted personally among the villagers in Vulamehlo. About 50 homesteads were selected for the interviews by stratified random sampling. The questionnaire interviews were carried out orally on a face-to-face basis over a period of about three months. This presented the interviewer with an opportunity of clarifying difficult questions; at the same time it afforded an opportunity of probing into other non-structured questions through informal discussions with the respondents.

4.3.6 Unstructured Interviews and Discussions

Informal discussions were held with the agricultural officers, the local *Amakhosi* (Chiefs), NGOs, community leaders, leaders of youth and women's organisations, churches and school teachers and officials of the Ugu District Municipality and Vulamehlo Local Municipality. Local knowledge as obtained from questionnaires and interviews were valuable for addressing gaps in information requirements for sustainability assessment. The questionnaire was designed into user-friendly questions that were aimed at assessing the

criteria for sustainable development in as provided by the Framework for evaluation of sustainable land management

4.3.7 Participant Observation

Being resident in the area, I spent many days observing the delivery of different RDP projects in the study area. I also observed how the residents utilized these projects, and I also participated in the utilization of the projects. This gave me an insight into the use-value of the different aspects of the delivered projects, as well as the perception of the residents towards them. It also gave me insight into the planning objectives of the ISRDP at Vulamehlo. Observations were also made of the actor typology (use groups, wealth strata, institutions, etc), and of interactions between and among units and actors.

4.3.8 Analyses of Socio-economic Data

The socio-economic data gathered from structured interviews was captured into the Statistical Package for Social Sciences (SPSS) system and analysed accordingly. Complementary spreadsheets (Excel) and the Harvard Graphics package were used to draw the graphs and diagrams supporting the data.

4.3.9 Limitations

The questionnaire was carried out early in the year 2002 before the presentation of the Ugu IDP. Many of the respondents were unaware of the IDP and its implications. The responses they gave would probably be much different had the interviews taken place after the presentation of the IDP. Since the IDP is still at its infancy stages, it is also not possible to comment on the success or failure of the programme at this stage.

4.4 SUMMARY

Notwithstanding the limitations to this study, the use of a variety of research methods compensated for the shortcomings.

CHAPTER FIVE

COMMUNITY PERCEPTIONS ON SERVICE DELIVERY

5.1. INTRODUCTION

Chapter Five is an analysis of the results of a questionnaire survey carried out among the residents to examine their perceptions and attitudes on existing socio-economic infrastructure and service delivery in the Local Municipality of Vulamehlo.

5.2 CHARACTERISTICS OF THE RESPONDENTS

Since the questionnaire was aimed at soliciting informed perceptions and attitudes about the existing infrastructure and service delivery, the selection of respondents was targeted at the elite. Random selection was carried out among educators and learners, among business groups and among administrators of various establishments in Vulamehlo. Owing to the randomness of the selection of respondents, some respondents were included by chance as they did not fall within the category of the elite. Among these odd cases were unemployed and/or illiterate people who happened to be on the spot at the time of the interviews. The views of these respondents threw light on some of the important aspect of rural people's perception on service delivery at Vulamehlo.

5.3 CHARACTERISTICS OF THE RESPONDENTS

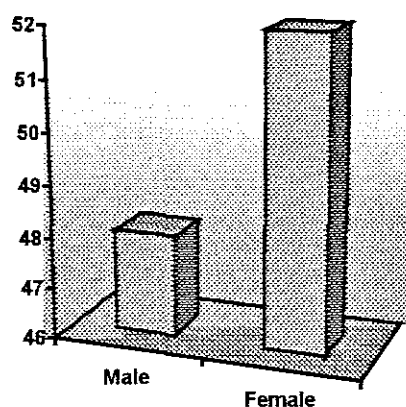
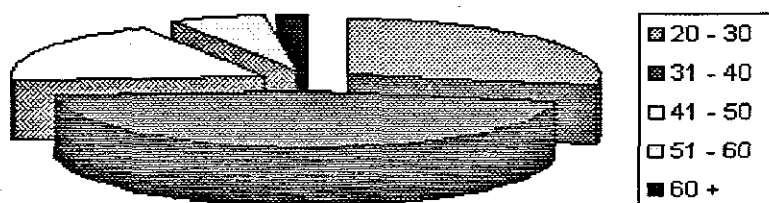
5.3.1 Age and Sex Structure of the Respondents

During the interview there were more female respondents (52.0 percent) than male respondents. This is related to migrant labour in which most males are engaged in, which made them absent from home at the time of the interviews. This is also related to the fact that the mortality rate of males is higher due to the fact that they get exposed to hazardous conditions at work e.g., in the mines where disasters frequently occur.

The 52.0 percent majority of females suggested that more females should be involved in rural development programmes. Women are already engaged in different clubs through which they generate financial assistance for members. These clubs are useful in augmenting the meagre salaries the men get as migrants in the fight against poverty. The implication of this is that the majority of the females become responsible for their households in the absence of their partners, which places more responsibility on them for the rural development projects.

Table 5.1 Gender of Respondents

Sex Status	Frequency	Percentage
Male	24	48.0
Female	26	52.0
Total	50	100.0

Diag. 5.1 Sex Structure of the Respondents**Fig. 6.2 Age of Respondents**

A high percentage (i.e. 64 percent) of the respondents was between 31 to 50 age groups. This is the group most affected by development, and who were thus more interested in current issues of development in their areas. The youth (20 to 30 years of age) constituted about 28 percent. The elderly respondents of about six percent remained in rural areas to continue helping the women in agriculture or looking after the grandchildren while their parents continue working in far away places. These pensioners also contribute with money

from pension to help educate the grandchildren and to feed the family if there is no other source of income.

Table 5.2 Residential Areas of Respondents

Area	Number of response	Percentage
Dududu	5	10.0
Dumisa	4	8.0
Amahlongwa	2	4.0
Amandawe	8	16.0
Other	31	62.0
Total	50	100.0

The largest number of respondents came from Amandawe, an area close to Scottsburg and Umkhomazi. These places offer employment to quite a number of people. There are nucleated informal settlements in these areas occupied by workers from many other different parts of Vulamehlo and the surrounding other areas. Residents of the mentioned areas are of varied skills, including teachers in different schools, clerks, etc.

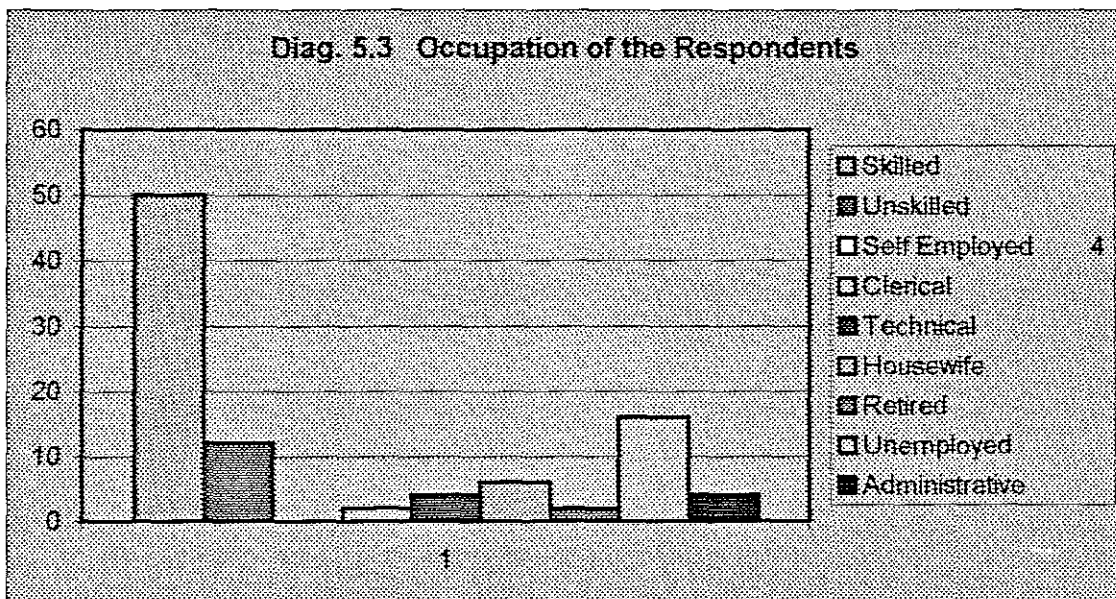
Table 5.3: Marital Status of Respondents

Status	Frequency	Percentage
Married	23	46.0
Single	23	46.0
Divorced	3	6.0
Widowed	1	2.0
Total	50	100.0

Of the respondents about 46.0 were married and an equal percentage were single. The low rate of divorce (of 6.0 percent) is related to the conservative traditional laws and the culture

of the rural people in the study area. The low occurrence of widows is associated with improved health services in the area, which has improved the longevity of the residents.

In the study area integrated rural development is encouraged by the Department of Social Welfare and the Department of Health who work together to improve the quality of life of the community; the field workers visit families in the study area with social problems and the people who are sick receive guidance and medication in their homes.



5.2.2 Employment Structure of the Respondents

About 42.0 percent of the respondents had managed to obtain a university degree. Some 30.0 percent were matriculated. A highest percentage of respondents were skilled people engaged in different occupations. Most of them were somehow involved in development programmes. Among them were those engaged in carpentry, pottery, sewing, etc. The

unemployed made up the second highest percentage of 16.0 percent. The 12.0 percent of respondents said that they were unskilled and were doing manual labour. The rest of the respondents totalling 32.0 percent, scattered between two to six percent, were either self-employed, doing clerical, technical, or housework. The educational level and occupations of the respondents were such that they provided intelligent and useful answers to the questions asked.

The improvement in education since 1994 is quite noticeable. The government helped by organizing workshops for youth who had passed higher grades, the workshops enlightened the youth and they became interested in learning skills so that they could be employable. The study area however is still very rural and there are many people without employment as the table shows. Self-employment is still at a young stage, but there are signs that with time many people would be self-employed and probably helping to create employment for other members of the community.

Table 5.4 Place of Employment of Respondents

Area of Employment	Frequency	Percentage
Unemployed	5	10.0
Amanzimtoti	3	6.0
Springvale	1	2.0
Umzinto	4	8.0
Amahlongwa	1	2.0
Umkomazi	2	4.0
Scottsburg	6	12.0
Other	27	54.0
Total	50	100.0

The great number of respondents (about 54.0 percent) were employed elsewhere in areas outside of their own regional area. This is a common trend among the able-bodied people in rural areas. Only about 12 percent of the respondents had work in nearby Scottsburg. Ten percent of the respondents, largely because they lacked skills, were unemployed. The rest of the remaining 24.0 percent of the respondents were working in different areas in the study area. Lack of industry in neighbouring towns is the reason many respondents gave for the low percentage of people employed locally.

5.4 PERCEPTIONS OF THE RESPONDENTS

5.4.1 Perceptions about Development Project in Vulamehlo

Table 5.5 Knowledge of Development Projects in Vulamehlo

Name of Project	Frequency	Percentage
Schools	12	24.0
Creches	18	36.0
Roads	15	30.0
Community Activities	19	36.0
Electricity	17	34.0
Water Supply	14	28.0
Farm Activities	19	36.0
Not Sure	9	18.0

Since the inception of Independence (1994), there have been quite a number of developments in rural areas as shown in Table 8. The respondents were asked if they knew of these development projects. About 36 percent indicated that they knew about creches, An equal number of responses was registered for community and farm activities. Other

projects were also known to exist, but the percentage declined from 36.0 percent to 34.0 percent for the electricity, 30.0 percent for road constructions, 28.0 percent for clean water supply, 24.0 percent for schools. About 18 percent were not sure of the existence of development projects.

The responses are a reflection of the interest served by the projects. The majority of the respondents in the study area practise farming. Farming is also encouraged and subsidized by the government in order to alleviate poverty and hunger. This is associated with the high percentage of respondents that were aware of developmental activities in farming. Similarly, crèches, community activities and electricity touch the hearts and minds of many residents. The respondents who were not sure, either did not want to commit themselves or they did not understand the questions.

Table 5.6 Level of Satisfaction with the Projects

level	Frequency	Percentage
Satisfied	8	16.0
No Satisfaction	32	64.0
Not Sure	10	20.0
Total	50	100.0

The great number (64.0 percent) of respondents expressed dissatisfaction with the delivery of projects. On further questioning, they were especially dissatisfied with the shortage of schools in the area, and with the fact that these schools had very few class-rooms. Some schools were said to be far away from residential areas. There complaints about the long distances travelled by many-school children, and that these children actually had to walk these long distances as

there were no adequate modes of transport. Only about 16 percent of the respondents expressed satisfaction with the projects.

Most development problems in the Vulamehlo area were never addressed by the previous government. When the New Government of National Unity came into being, people had great expectations in the delivery and improvement of the quality of life. The dissatisfaction came because of the slow change from the old system of living, to the new system. In short, the promised basic human rights such as equality, housing, rights to life, etc., were not implemented quick enough according to their expectations.

Table 5.7 Sponsors of the Projects

Sponsor	Frequency	percentage
Government	7	14.0
Commercial Farmers	4	8.0
Non-Governmental Organisations	27	54.0
Commercial Business Organisations	12	24.0
Government+Non Govern. Organ. (NGO)	16	32.0
Business(NBO) + NGO	25	50.0
Not Sure	7	14.0

About 54.0 percent of the respondents stated that projects were sponsored by Non-Governmental Organisations (NGOs). About 50.0 percent state that the projects were sponsored by National Business Organisations (NBSs) together with the NGOs. Some 32.0 percent respondents cited the Government plus NGOs while 24.0 percent said the projects were sponsored by Commercial Business Organisations (CBOs). Those who

perceived government to be the sponsor of projects amounted to a mere 14 percent. This low perception of government as the sponsor of development projects is associated with Government's frequent call to NGOs and Business to assist in the development of South Africa as a whole. It is also true that Non-Governmental Organisations and the Business Sector play an important role in the development of the rural communities and together with the government they encourage the sustainability of the projects and speeding up of the delivery.

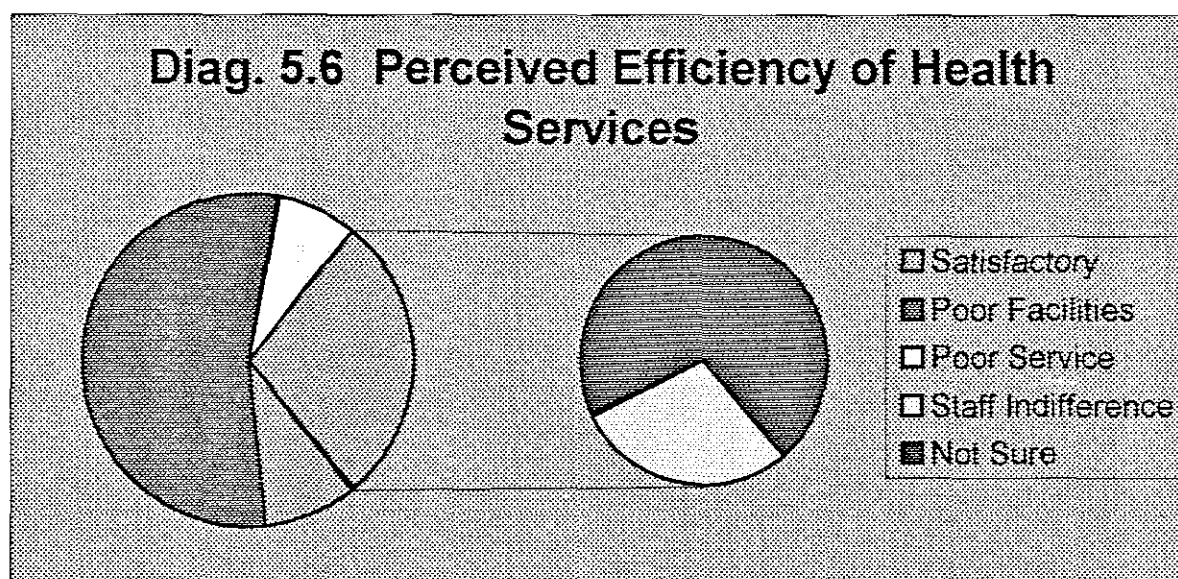
Education is one of the important projects in development. More schools are being built by the government in Vulamehlo to accommodate the number of youths who have shown keen interest to advance their education. There has also been an increased number of junior and higher primary schools as well as creches in Vulamehlo. A number of creches have been upgraded to higher primary schools to relieve the overcrowding caused by an increase in the number of children in creches. About 64 percent of the respondents confirmed the increase in the number of both junior and primary schools. About 66 percent of the respondents said that they knew of one to two secondary schools. Thirty-four percent of the respondents knew three to more than four secondary schools. It is again clear that the number of schools and developments in the area were not fully developed and remained few.

Tables 5.8 Primary Schools in the Study Area

No of schools	Frequency	Percentage
Creches	18	36.0
Junior and higher Primary	32	64.0
Total	50	100.0

5.3.2.4 Perception on the Roads

There were no tarred roads in the rural areas. Only gravel roads, which were in a poor state, connected different parts of the rural areas. When asked about the state of the roads, about 50.0 percent of respondents were not happy with the condition of the roads. The respondents who stated that the roads were fair constituted 28.0 percent. They added that these roads become better only after they had been graded. A further 12.0 percent of the respondents stated that the roads were good.



5.3.2.5 Perceptions of the Respondents on Health Facilities

About 64.0 percent of the respondents complained about the closure of hospitals and clinics in Vulamehlo. The remaining clinics, according to 54.0 percent of the respondents were in a

The prevalence of poverty in the study area is reason for great concern. Transport is crucial, especially for the school children. Some children had to walk very long distances to school, which affected their school performance adversely. Asked about the existence of transport facilities, about 58.0 percent of the respondents stated that primary/secondary school learners had to walk to and from schools every day because of lack of transport. Some 50.0 percent stated that they sometimes paid taxis and buses to ferry their children to school, and twenty-four percent of the respondents used vans to ferry their children to school. One percent of the respondents said that bicycles were used.

5.4.2.2 Perceptions on the Availability of Water

On the question of the availability of water, about 36.0 percent of the respondents stated that they used tap water, and that this had been made possible by the change of government in 1994. Many more respondents (about 34.0 percent) continued to use unsuitable water from polluted rivers, streams and dams with dire health consequences, e.g. cholera which was endemic in the region. Boreholes, which were put in place before the Independence of 1994, still played an important part as 20.0 percent of the respondents stated that they used them. Some 18.0 percent of the respondents used tank water after rains, otherwise they relied on rivers, dams and wells. The fountains and wells still played a part in the communities. Ten percent of the respondents stated they did not have any other means of water supply yet, and they continued to use the spring water. With keen interest in the government to develop a better life for all in South Africa, there is hope that even these rural people who were patiently waiting for their turn would also welcome development amenities.

Table 5.11 Electricity services in Vulamehlo

Method used	Frequency	Percentage
Meter	9	18.0
Card	29	58.0
Solar	6	12.0
Use of all methods	1	2.0
Do not have any electricity	5	10.0
Total	50	100.0

5.4.2.3 On Electricity Supply

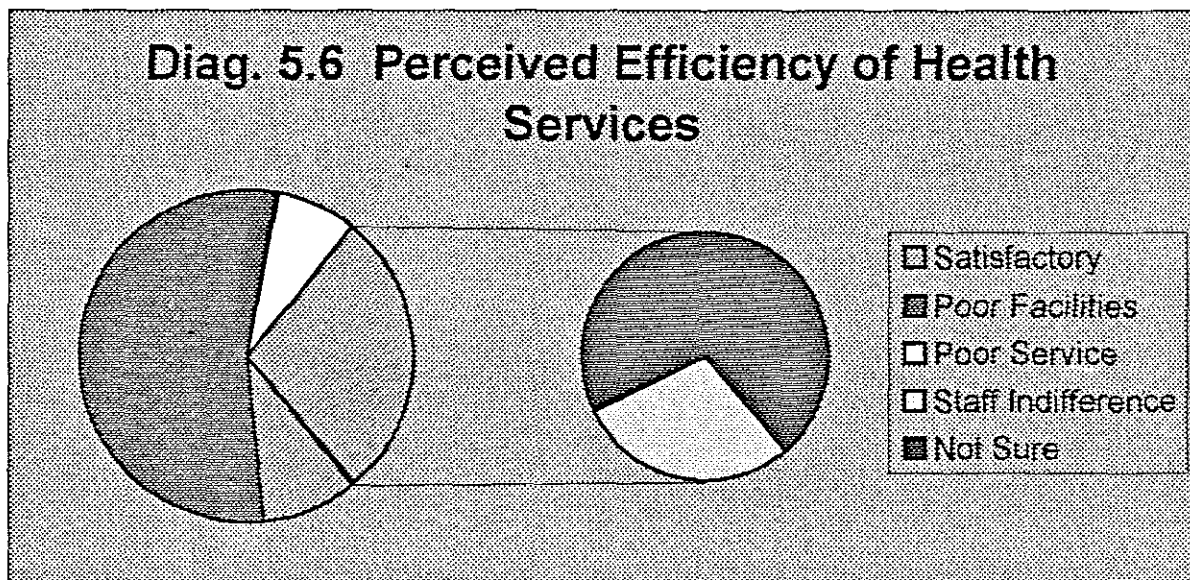
The RDP made it possible, via ESKOM, for the installation of electricity in rural areas. About 70.0 percent of the respondents used electricity in their homes, about 58.0 percent of them received it by the card system of meters. The Meter system, which is relatively expensive, was only used by 18.0 percent of the respondents. The solar system was very expensive for the rural communities to install. About 12.0 percent of the respondents who used this method were already in possession of these solar systems even before the 1994 political dispensation. Ten percent of the respondents did not have any electricity at all.

Table 5.12 The Condition of Roads in Vulamehlo

State of Roads	Frequency	Percentage
Good	6	12.0
Fair	14	28.0
Poor	25	50.0
Total	50	100.0

5.3.2.4 Perception on the Roads

There were no tarred roads in the rural areas. Only gravel roads, which were in a poor state, connected different parts of the rural areas. When asked about the state of the roads, about 50.0 percent of respondents were not happy with the condition of the roads. The respondents who stated that the roads were fair constituted 28.0 percent. They added that these roads become better only after they had been graded. A further 12.0 percent of the respondents stated that the roads were good.



5.3.2.5 Perceptions of the Respondents on Health Facilities

About 64.0 percent of the respondents complained about the closure of hospitals and clinics in Vulamehlo. The remaining clinics, according to 54.0 percent of the respondents were in a

very bad state and lacked facilities suitable for the health of the communities. About 20.0 percent of respondents did not have any knowledge of the clinics, probably because they lived in rural areas where the tendency was to consult traditional herbalists. Ten percent of respondents stated that the clinics were satisfactory though they needed upgrading. Those who complained about the poor service and the indifference of staff towards the patients constituted only 8.0 percent of the respondents.

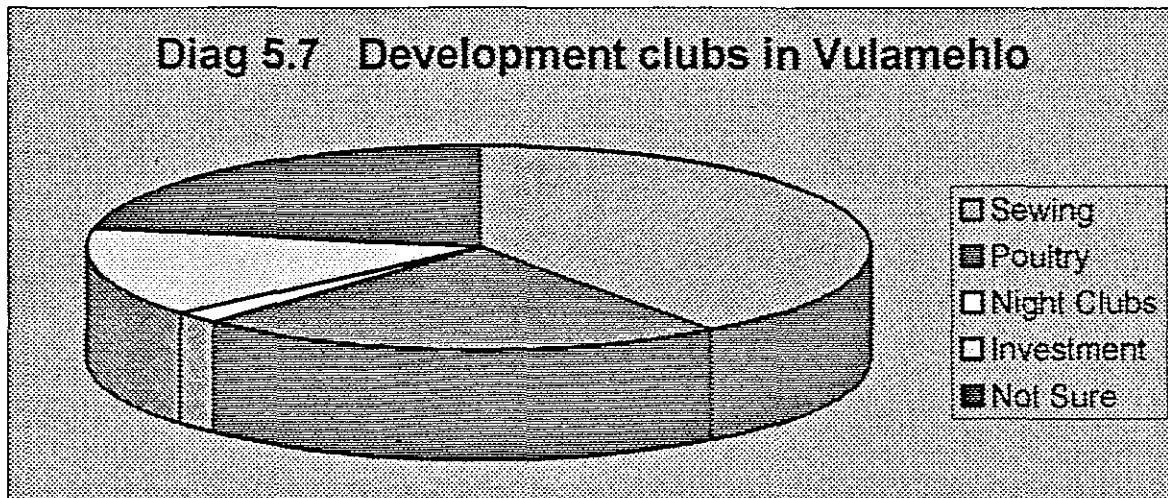
Table 5.13 Community Halls and Services in Vulamehlo

Condition and Services	Frequency	Percentage
Satisfactory	18	36.0
Poor Standard	10	20.0
Meetings	27	54.0
Funerals	22	44.0
Weddings	24	48.0
Cultural Activities	21	42.0

5.3.2.6 Perceptions on Community Halls

Prior to 1994, there were no community halls in Vulamehlo. Community halls were first introduced after the establishment of the RDP. When asked what they thought of the services of these community halls, some 36.0 percent of the respondents stated that the halls were in a satisfactory condition whilst 20.0 percent stated they were in poor condition. The halls are used for a variety of activities. About 54.0 percent of the respondents perceived them useful for meetings, 48.0 percent thought they were useful for weddings, 44.0 percent stated that they used the halls for funerals and 42.0 percent of the respondents stated that the

halls were used for cultural activities. Many of the activities cited traditionally took place in the home setting, but the halls have since become the place where members of the community come together for a common purpose. These community halls have been sponsored by Provincial, Central and Local Governments, Business Co-orporatives, Tribal Authorities and Regional Authorities.



5.3.2.7 On Development Clubs

With the RDP, there had been development of clubs. Sewing had, according to 40.0 percent of the respondents, become the most popular of the clubs in Vulamehlo. The respondents stated that they sew school uniforms for different schools, and that they also bought materials in bulk with a substantial discount from the factories. Poultry was the second highest in popularity, with 22.0 percent of the respondents stating that this project helped them feed and educate their children. Fourteen percent of the respondents were aware of investment clubs in the study area. These projects helped the community to learn to stand on

their own, learn new skills so that they could be self-employed, and teach the rest of the community about the importance of sustaining themselves. There were a substantial number (about 22.0 percent) of the respondents who claimed that they did not know anything about these development projects in Vulamehlo.

Table 5.14 Community Gardens in Vulamehlo

Community Gardens	Frequency	Percentage
In Community Gardens	26	52.0
No Community Gardens	19	38.0
In Both	5	10.0
Total	50	100.0

5.4.2.8 Perceptions on Community Vegetable Gardens

More than half of the respondents were involved in community gardens. These community gardens were the first rural development projects that were initiated during the apartheid regime. The new government continues to help and encourage the sustainability of these community gardens, which are of great help even to those people who are landless. About 38.0 percent of the respondents stated that they had not joined community gardens. Ten percent of the respondents had shares in both community and private gardens.

Table 5.15 The Produce enough for the family

Enough Produce	Frequency	Percentage
Just enough	17	34.0
Not enough	33	66.0
Total	50	100.0

The majority of the respondents (about 66.0 percent) did not produce enough for their families as the allocated plots were very small. Though they were beginning to learn new methods of productivity there was still a lot of ignorance and poverty in the study area. The 34.0 percent of the respondents were those with larger plots or those who were actively engaged in community gardens.

Commercial farming is non-existent among the peasant producers. The respondents stated that they were not aware that the government had enormous amounts of money to subsidise and/or give as loans to emerging farmers. As a result they continued with subsistence farming. Few respondents sold their surplus produce in small quantities to their neighbours, shops or to private individuals according to their needs.

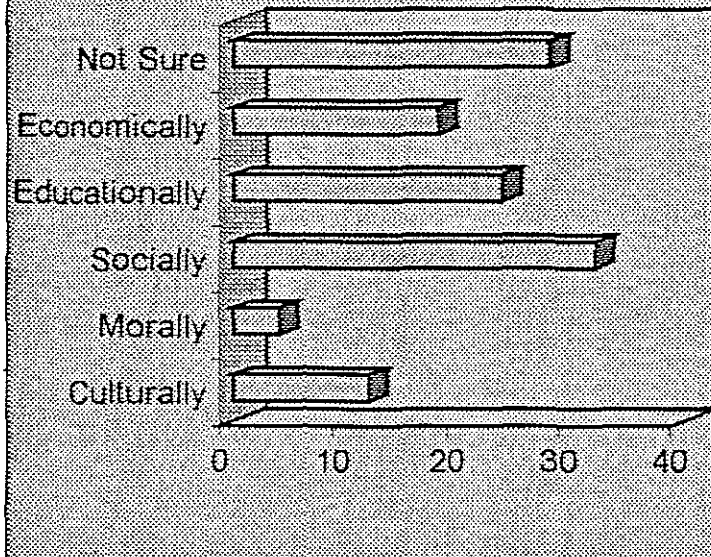
Table 5.16 Maintenance of the Completed Projects

Maintenance of Projects	Frequency	Percentage
Pay for services	20	40.0
Voluntary Services	11	22.0
Local Council	14	28.0
Tribal Authority	16	32.0
Hiring - Functions/rallies etc.	42	84.0
Not Sure	19	38.0

5.4.2.9 On the Maintenance of the Project Facilities

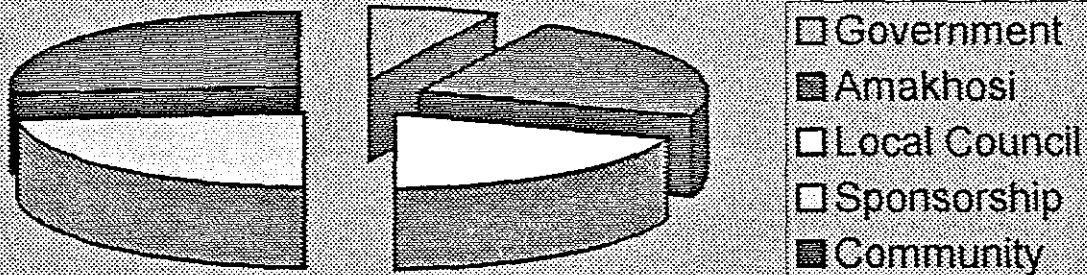
The majority of the respondents (84.0 percent) cited hiring of facilities such as halls to be the best means for the maintenance of the completed projects. The halls were used for cultural activities e.g., political, religious, weddings, workshops, etc., for the benefit of all members of the communities. They helped to bring people together, make decisions together which affect their community developments for now and for their future. Some 40.0 percent of the respondents stated that they maintained the projects by paying for the services. About 38.0 percent of the respondents did not know anything or were not acquainted with the projects. The Local Council, Tribal Authority and Voluntary Services together were cited by 22.0; 28.0 and 32.0 percent of the respondents respectively as responsible for the maintenance of the projects.

Diag. 5.7 Transformation of the Rural Communities of Vulamehlo



It is ascertained that black communities were by nature sociable. About 32.0 percent of the respondents stated that the projects helped them to come together, plan together and decide together for social activities. The projects according to 18.0 percent of the respondents, helped them economically. The communities formed clubs to generate money for the implementation of new techniques for the improvement of productivity. Moral, cultural and educational transformations have not yet begun to bear tangible results. This was confirmed by 28.0 percent of the respondents. The supply of water, electricity and roads together with poor mode of transport continued to be impediments to rural development.

Diag 5.8 Perceived Hindrances to Development



Some respondents (about 14 percent) viewed the government as a hindrance to the rural development. They complained that the government did not involve the rural community with regard to their needs and further more that community representatives were chosen by the government and not by the community, this they complained did not maintain peace and stability in the rural areas.

As stated in Chapter Three this situation has been addressed by the ISRDP. Not only were communities consulted in the planning stages, but the implementation of the projects is vested partially in communities.

Amakhosi were cited by 26.0 percent of the respondents as part of the hindrance in the rural development. The Amakhosi believed that they should and could initiate the development themselves, yet they did not know how. They did not, moreover, involve their communities in their development plans, as they felt that the communities had to depend on their

traditional leaders. The chiefs did not encourage rural activities such as sports, school facilities, HIV/Aids awareness campaigns, and clean water. They were, in fact, responsible for misleading people on political issues.

The Local Council was cited by 22.0 percent as a hindrance in development. These respondents complained that the Local Council tended to personalise the development projects. The Council, they alleged, embarked upon projects without any research and without informing and encouraging the community to be involved so as to encourage them to appreciate whatever was being done. This information would have encouraged the respondents to play an active part in participation in activities of their developments because they would have known and taken part in their implementation.

The respondents, who complained about the non-sponsorship of the development projects, formed 26.0 percent. The rural communities are very poor and in most cases know nothing about sponsors and how they work. The banks were reluctant to finance poor people, as they could not be able to repay their debts. The respondents stated that the projects that were being sponsored were those in townships and not in rural areas.

About 30.0 percent of the respondents stated that there was no co-ordination of government departments, the chiefs and the communities. They felt strongly that this should be encouraged in order that the communities could be involved. The communities felt that without knowledge, consultation and non-utilisation for their own ideas and

concerns in the orientation of their development, there could be no lasting solutions to rural development.

5.5 SUMMARY

It is important to note that the questionnaire survey for this study was carried out among the residents before the participatory consultative workshops for the ISRDP. Of importance to this study is the general perceptions of the respondents on development obstacles in Vulamehlo. A substantial number of respondents felt that the traditional leaders were hindering development and that they had dictatorial tendencies. Some perceived the local councillors and government to be the obstacles to development.

CHAPTER SIX

POTENTIAL CAPACITY FOR THE IMPLEMENTATION OF THE ISRDP IN THE VULAMEHLO MUNICIPALITY

6.1 INTRODUCTION

Planning at the local government level has evolved over a long time. Prior to 1991, local government structures failed to integrate development (Vulamehlo Municipality, 2002). Since 1994 there have been gradual improvement in local government development planning. The new municipal boundary demarcation ensured that all identifiable communities or settlements were part of some local government jurisdiction. The concept of IDP has been promoted to ensure that municipalities focused attention on the challenges facing their communities.

Vulamehlo is a local municipality which forms part of Ugu District Municipality. As a predominantly rural municipality with severe poverty challenges, Vulamehlo was identified with other similar municipalities within Ugu District as a Nodal point in terms of ISRDP (Ugu District Municipality, 2002). Vulamehlo municipality largely comprises of traditional rural areas which are more or less in line with the Vulamehlo regional authority (regional structure for traditional leaders). However there are three traditional authorities which form part of Umbumbulu Regional authority namely thoyana, Maphumulo and Isimahla. It consists of a total area of approximately 966 ^{km²}.

As discussed in Chapter Two, the present Integrated Development Plan (IDP) of the Vulamehlo Municipality is interrelated with the National, Provincial and the Ugu District IDPs. A new institutional structure has been approved by the National Government to allow for the full integration of environmental and developmental issues, at all levels of decision-making. Coordination is achieved among the different levels of government through the system of cluster committees of heads of department and of cabinet members, e.g. economic, social, etc. South Africa had adopted a number of measures aimed at ensuring that environmental protection is an integral part of the development process. Municipal Council adopted the Ugu District IDP on 2 May 2002. In the Ugu IDP, the sustainability framework is the localized context for cross-sectoral programmes.

6.2 SUSTAINABILITY FRAMEWORK

The Integrated Development Plan (IDP) of Vulamehlo Local Municipality is based on the master plan of the Ugu District Municipality IDP. The major principles of this integrated development approach is the Local Agenda 21 (A21) principle of sustainability. The sustainability framework forms the foundation to the IDP. Sectors in relation to dimensions and the sustainability framework are as illustrated in diagram 6.1.

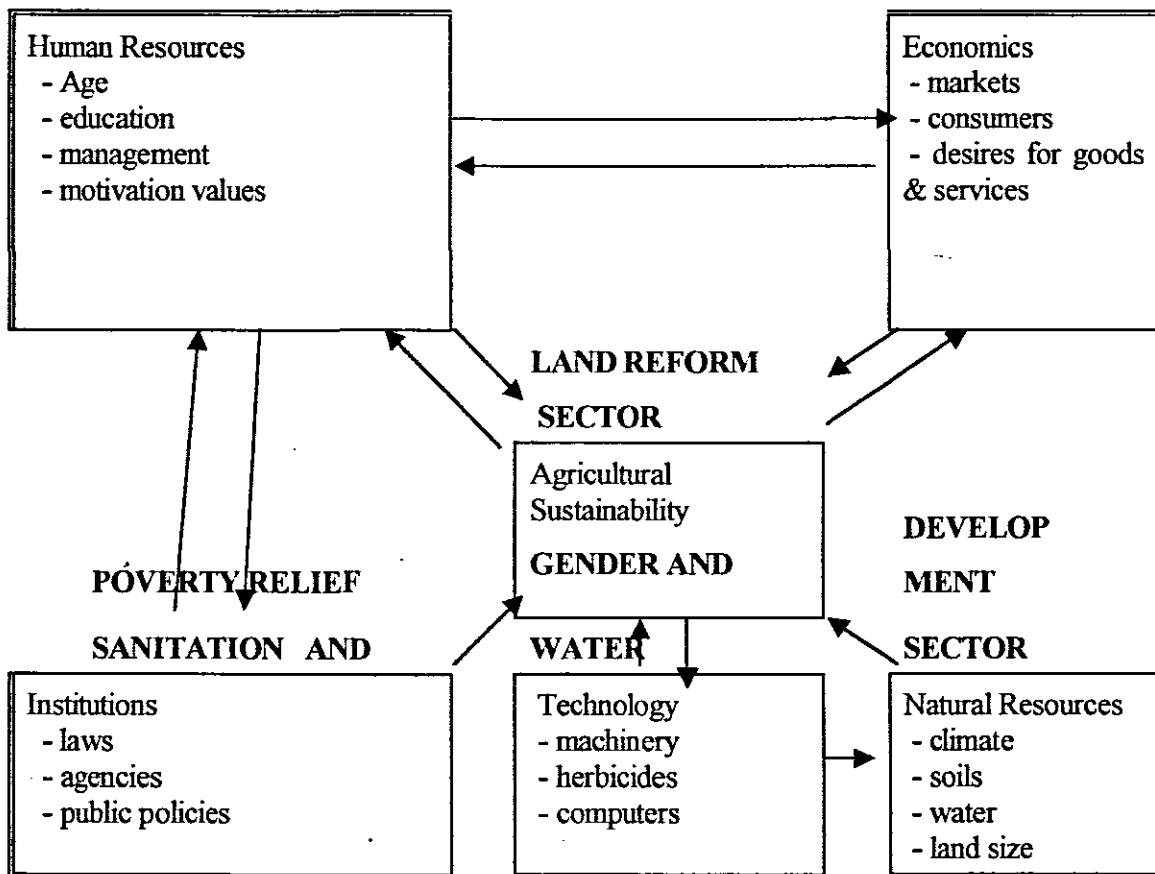
6.2.1 Integration of Sectors

The IDP focuses on the integration of sectors (e.g. water, sanitation, tourism, land reform, agriculture, education, health) and development dimensions (e.g. social, spatial,

economic, institutional, political). According to the Ugu District Municipality (2002) the purpose of focusing on the integration of sectors and development dimensions is to ensure that development projects and programmes are in line with:

- a) The localized strategic guidelines
- b) The sector specific legislative and policy requirements in general
- c) The strategic objectives of Ugu District Municipality
- d) The priorities and issues expressed by communities during the community consultation phases
- e) An approach which integrates the efforts of sector agencies

The sustainability framework stresses that the developmental task of the IDP as that of changing the direction of local development towards sustainability so that poverty and social justice can genuinely be addressed while the economic base of the district is strengthened. The framework is an explicit outcome of the planning process since communities, councillors, management and business all stress sustainability as the local agenda. In keeping with national legislation, sustainable development is the "integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure that development serves the present and future generations" (*National Environmental Management Act No 107 of 1998*).



Diag.6.1 Sustainability Framework – designed from Fig.1.1 and sustainability notes.

6.2.2 Phases of the IDP

The Ugu IDP was phased so that there is, not only logical sequence, but such that the results were comparable. Principally there are four distinct phases of the IDP, namely:

- Analysis of the existing situation in the municipal area and the identification of issues that are key challenges.
- Formulation of strategies and identification of projects
- Integration - ensuring vertical and horizontal linkages

- d) Approval. At this level all organs of the municipality including stakeholders and councilors must adopt a completed plan which they must forward to the MEC.

6.2.3 The Vision of Vulamehlo Municipality

The stated vision of the Vulamehlo Municipality is as follows:

“Vulamehlo municipality area will use its God given strength in culture and environmental beauty to attract local and external tourist. This will contribute to the municipal’s revenue thereby assisting in the provision of basic services which must have been adequately dealt with in the next 5 to 10 years. By year 2021 the entire municipal area must be crime free, economically sound and self-sustaining. The municipality will facilitate the empowerment of its residents through skills development, awareness and training” (Vulamehlo Municipality, 2002).

Given this vision, the objectives of the Vulamehlo municipality is become economically viable in the next 15 to 20 years.

6.2.3 Identified Issues that are Key Challenges

With regard to the identification of issues that are key challenges the Vulamehlo Municipality started well. With the assistance of the Ugu District Municipality, an all

stakeholder participatory consultative programme was carried out in 2001. The initial workshops were arranged at inter-municipal level by Ugu District Municipality to assist the local municipalities in the development of their development objectives and strategies. This process also ensured that local municipalities' development objectives and strategies were in line with those of the District Municipalities. Municipal councilors and officials, service providers and the District Technical Team attended these workshops. The workshops ensured that the councilors provided their input in the formulation of development objectives and strategies. Service providers provided guidance on technical issues mainly on policy issues and trends. The development objectives and strategies responded problems identified during the analysis phase.

During the ensuing in depth issue analysis, issues were grouped into broad inter-sectoral categories to which they are related. Seven broad development goals were developed in Vulamehlo in the light of the localised guidelines. They are:

- a) Sustainable agriculture, poverty alleviation, tourism, and economic development
- b) Combating poverty by enabling the poor to achieve sustainable livelihoods
- c) Sustainable infrastructure development
- d) Sustainable financial and institutional development
- e) Sustainable social services, health, water and sanitation provision
- f) Sustainable gender equity and barrier free access across all sectors
- g) Sustainable land reform and human settlement development

- h) Sustainable conservation and harnessing of natural assets (Ugu District Municipality (2002)

The broad development goals inform the more specific objectives developed to address each issue in turn.

6.3 THE ROLE OF AGRICULTURE IN THE ECONOMY OF VULAMEHLO

Livelihoods in Vulamehlo are usually associated with agriculture because of the fact that farming is a basis of rural life. With an elevation ranging from sea level in the east to about 1000m above sea level in the west, approximately 30 percent of the Vulamehlo Municipality area is estimated to contain slopes of 1:3 and steeper. The topography consists of a series of major river systems flowing roughly parallel to one another in an easterly direction. They include the Mkomazi, Mpambanyoni, Mzinto, Mtwalume, Ifafa, Makhosi and Mzumbe River systems. As a result there are severely fragmented conditions in the west and a rolling countryside in the east.

The Bio-climatic regions within the Vulamehlo include:

- a) Valley thicket, located in the major river valleys,
- b) Coastal hinterland/bushveld, making up the majority of the municipality. In particular in the severely fragmented conditions.
- c) Short mistbelt grassland, minor areas in the higher elevations.

- d) Afromontane forest, located in accessible areas throughout the municipality.

Much of the land area in Vulamehlo Municipality area is thus not suitable for crop raising. This is a negative factor towards sustainability.

6.3.1 Land Tenure and Landholding

Vulamehlo Municipality area is predominantly tribal with common tribal land use patterns. There are however few pockets of privately owned patches of land. Four forms of land tenure exist in Vulamehlo. The first is freehold tenure held mainly by commercial farmers and urban residents in the district; the second is state owned land; This is mainly land that was acquired by the state from missionaries and individual White settlers under the 1936 Native Trust and Land Act; the third is tribal tenure whereby the land belongs communally to a tribe; finally, there is labour tenancy on White commercial farms.

6.3.1.1. Disparities in Agricultural Production

Whereas commercial farms and state owned land are vast in area, the *per capita* landholding under labour tenancy and tribal tenure are very small. This disparity in the size of landholdings is, according to UNCED, a negative factor to sustainability (UNCED, 1992).

Along the coastal region sugar cane is the main cash crop raised commercially. Maize is the dominant crop raised mainly for subsistence in the inland areas. Due to the small size of their landholdings most peasant farmers produce for subsistence. Considering that much of the land in the tribal areas is rugged with poor soil fertility, the production level in these areas low. Livestock in the form of cattle, goats and sheep are kept mainly for social reasons by the peasants. They also operate at subsistence level.

6.3.1.2 Irrigation

Since the Rivers of Vulamehlo are seasonal, flowing mainly in during the summer months, the potential for the development and distribution of water resources for agriculture in the area has still not been fully explored. The supply of water for agriculture remains one of the biggest obstacles to rural land use and development in the district and is a negative factor on agricultural production. There are four small-scale irrigation schemes along some rivers as follows:

Table 6.1 Irrigation Schemes in Vulamehlo

Name of Scheme	Hectorage	Membership
1. Sekusile	8,0 ha	28
2. Thuthuka-Lenube	7,5 ha	30
3. Zamani	4,2 ha	10
4. Senzokuhle	7,0 ha	36

Although there are a few strong boreholes in the area, ground water conditions are somewhat unreliable in Vulamehlo. The water is generally of moderate quality in the high lying areas but is poorer in the drier low-lying areas, especially those in the west.

6.4 STRATEGIES FOR SUSTAINABLE AGRICULTURE AND ECONOMIC DEVELOPMENT.

6.4.1 Spatial Framework for Development

The spatial development framework is important in shaping and guiding development of the area. It is further used to show hierarchy of different development elements, in particular development corridors and development nodes. Vulamehlo municipality identified these development nodes and corridors in the municipal area. It is planned that the development nodes and corridors will serve as essential promotion points for such initiatives as, e.g. craft/art work, various agriculture products, tourism related local initiatives, shops, etc (Vulamehlo Municipality, 2002). Based on the development strategies the spatial development framework further shows the following critical spatial areas: local economic development, agriculture development, tourism development, settlement development, conservation.

6.4.1.1 Development Corridors

Whilst development corridors are strongly influenced by access and key roads, they can be defined as areas of greatest activity that should be managed in a particular way. According to the municipality there are two levels of development corridors that can be defined, namely, primary development corridors and secondary development corridors. In

identifying the primary corridor what the spatial framework immediately raises to developers, municipality and service providers is:

- a) The type of development that should be encouraged in these areas
- b) The municipality's objective in promoting a particular development corridor
- c) What the municipality should do to encourage growth and protection of this corridor in order that the objectives clarified above are met
- d) Whether the existing community members within a particular development corridor can afford challenges posed by measures to protect those particular areas.

6.4.1.2 Development Nodes

The development nodes are largely main centres that are being fed by development corridors in terms of people and physical thresholds. The importance of nodes is that:

- a) Nodes provide concentration of different activities.
- b) They have a potential to expand in size based on different uses.
- c) They can be used to concentrate specific activities that could have a multiplier effect to a broader municipal area. Apart from this it can be far cost effective to put certain land uses together for both the supplier and the user in that other associated services could be found within a short radius.

The Vulamehlo municipality identified three tiers of nodes, viz. primary, secondary and tertiary nodes as follows:

- a) Dududu was identified as a primary development node.
- b) Kenterton and Umfume as secondary nodes
- c) Odidini and Breamer as tertiary nodes:

6.4.2 Agricultural development

Agriculture in the study area has been discussed extensively in Chapter Three. Based on agricultural land potential the spatial framework of agricultural land in Vulamehlo can be categorized into:

- a) Non-arable land
- b) Moderate agricultural limitations
- c) Good agricultural potential

The Vulamehlo municipality hopes that the combination of various development potentials can trigger a number of locally driven initiatives (Vulamehlo Municipality, 2002). In the context of Vulamehlo municipality (2002) the assessment of land use/cover demonstrated that the municipality is largely utilized for productive purposes mainly in timber and general forestry. The strategic overview has, however, shown that this sector needs to transform in a number of radical ways, namely:

- a) Diversification of crops
- b) Giving more access to land by emerging farmers
- c) Encouraging of local processing

At a spatial level it is being suggested that land need to be retained so that agriculture continues to play an important role in the economy of the municipality (Vulamehlo Municipality, 2002).

6.4.3 Tourism development

According to the Vulamehlo municipality vision tourism plays a major role in the development of Vulamehlo. It is therefore equally important to ensure the conservation and marketing of various tourism products. The construction and improvement of the road network (described under 6.4.6 below) and the identification and development of tourist resorts are aimed at encouraging inland tourism, especially in the rural areas. A sum of R15 000 has been earmarked for the development of the Qiko Execution Rock site for tourism.

6.4.4 Settlement Development

As stated earlier, Vulamehlo is predominantly rural in nature and largely made up of dispersed settlement patterns. There is, however, evidence of gradual growth and

relatively higher concentration of structures within the main centres like Dududu, Imfume, and Kenterton. There is also a tendency of relatively higher concentration of settlements along access roads. Housing and settlement development will play a major role in the overall service upgrade in Vulamehlo. An approach was agreed to, at council level, which seeks to encourage pilot rural housing projects at every ward (Vulamehlo Municipality, 2002)

6.4.5 Roads Infrastructure for Spatial Framework

The spatial framework for development discussed under 6.4.1 above can only be effective if there is a road network connecting the different nodes and corridors. An effective road network is also needed for agricultural, tourism and settlement development. The existing road network is as follows:

6.4.5.1 Roads network linking to the Dududu node

The Dududu node is relatively well served with key social services, mainly in the form of offices and government departments. It plays a primary role in the municipal area based on the service it offers. Access from outside this area is generally gained through Road P77. The plan is to have the municipal offices based at this area, and to develop access roads so that all areas within the municipal boundary can link fairly easily to the centre of Dududu.

6.4.5.2 Roads network linking to the Mfume node

The Mfume node is made up of relatively dense residential areas and limited agricultural land mainly used for forestry and vegetable gardens. Areas within this function area rely on Mfume node for basic services. The Umkomaas River system that is a major physical barrier between Mfume and the rest of Vulamehlo. The Municipality plans to build bridges over this river to link the node with the areas it services. Road P728 is an important link with other areas falling within the Thekwini Unicity area of jurisdiction

6.4.5.3 Roads network linking to the Kenterton node

The significant land use in this section is timber plantations as well as residential components. The existing Umzinto/Highflats road system has a major impact on this functional area, facilitating connection between Highflats and Umzinto.

6.4.5.4 Roads network linking to the Qiko/Mkhunya node

The strength of this area is in the provision of a scenic view. Access and river crossing are almost non-existent, and there is severe development backlogs in this area. The development of an effective road network would provide enormous tourism opportunities.

6.4.6 Road Development Projects

The following road projects have been identified for fulfilling the network connections in Vulamehlo:

Improvement of R102 linking Sezela and Scottsburg.

Improvement of R612 linking Umzinto and Jolivet

Improvement of R78 linking Dududu and Kweletsheni

Improvement of D686 – D150 linking Melville, Madlala and Umzinto

Construction of the Mfume to Embo road

Improvement of D971 – D982 linking Dududu, Kenterton and Jolivet

Umkhomazi Bridge (Vulamehlo)

Upgrading of roads serving the small farmers

6.5 MAJOR DEMOGRAPHIC CHARACTERISTICS OF VULAMEHLO AND THEIR IMPLICATIONS FOR DEVELOPMENT

Development is for people. It is also people who bring about development. It is therefore important to give a brief overview of the demographic characteristics of Vulamehlo area in order to fully understand its role in development.

6.5.1 Development Implications of Age and Sex Structure of the Population

The population of Vulamehlo is predominantly rural. According to the 1996 census Vulamehlo has a total population of 102 232 people, of which 52 percent were male and 48 female. About 55 percent of the population consisted of children below the age of 15 years, 20 percent consisted of the youth (20-35 years old). About 20 percent were middle aged (i.e. 36-65 years) and 5 percent were above 65 years old.

The fact that about 55 percent of the population consists of children below 15 years implies a great demand for youth facilities such as schools, crèches, recreational facilities, etc. It also implies a high dependency ratio, which placed a high pressure on households to provide income-generating strategies.

The distribution of this population throughout the Vulamehlo area is influenced by different factors, some of which are terrain, distance from the sea, accessibility to the means of transport, availability of land for grazing and crop raising.

6.5.2 Literacy Level and Development Implications for Vulamehlo

A crippling factor in the development of the economy in the Vulamehlo region is the low level of education among adult members of the community. Only 9,4 percent of the adult

population (18-64 years) have attained secondary school. There is a discrepancy in education achievement between the males and females due to the fact that many young men drop out of school at an early age as a result of family indigence. Alleviation of poverty is thus one of the essential conditions for retaining young men from dropping out of school.

6.5.3 Employment Status of the Population of Vulamehlo

Vulamehlo is predominantly rural in character, and there is a dearth of manufacturing industries. Unemployment is rife, with only about 6.8 percent of the total population in local paid employment. This means that of the 40 892 people in their productive years (20-65 years) only 7500 or 15,6 percent of the total population were in paid employment in Vulamehlo. The only significant industrial plant is SAICLO at Umzinto where some residents are employed. Many people who are employed locally work mainly in neighbouring White farms and forest plantations such as Sappi and Mondi plantations. In the southern and southeastern parts of Vulamehlo the main employer in the primary sector is the sugar plantations. Many young men and women are involved in the planting, weeding and cutting of cane for small wages. The majority of the unskilled or semi-skilled work force of Vulamehlo district is migrant workers in cities like Durban, Port Shepstone, Pietermaritzburg and Johannesburg.

The main employer of the skilled labour force of Vulamehlo is the Government in departments such as municipality, Education (as teachers and school administrators) and

Justice (as policemen and court clerks). A few individuals are self-employed as building contractors, taxi owners and shopkeepers or petty commodity production. The taxi industry is developing to provide employment for many young boys who drop-out of school.

Some of the local centres of employment include the towns such as Umkhomazi and Scottsburg. For instance, Umkhomazi has a big industrial plant (SAICLO) where a large number of the residents are employed.

6.6 PROVISION OF INFRASTRUCTURE, COMBATING POVERTY TO ACHIEVE SUSTAINABLE LIVELIHOOD

Various needs articulated by the communities during the analysis phase assisted in the preliminary identification of projects, which served as the basis for projects phase. Different stakeholders attended the consultative forums. Municipal councilors and the IDP Representative Forum also contributed during the phase of project identification (Vulamehlo municipality, 2002). The Department of Provincial and Local Government, through the Consolidated Municipal Infrastructure Programme (CMIP), largely sponsored the projects.

6.6.1 The Consolidated Municipal Infrastructure Programme

The Consolidated Municipal Infrastructure Programme (CMIP) constituted the major infrastructure grant for municipalities, which represented recognition on the part of the government that local governments found it difficult to achieve major redistribution at local level, due to the relatively limited revenues at their disposal. CMIPs objective was a formidable effort by government to provide basic levels of water, sanitation, solid waste, roads and storm water to uplift the quality of life of the poor people (Department of Provincial and Local Government, 2002).

The program aims to enhance the developmental impact of the delivery process by focusing on the transfer of skills and promotion of small, medium and micro-sized enterprises (SMMEs) using labour-intensive construction processes and maximising job-creation opportunities. CMIP also aims to enhance long-term sustainability and rapid improvement of delivery through capacity-building program that will strengthen the institutional ability of municipalities, including their local government management and operation and maintenance capacities (Dept of Provincial and Local Government, 2002).

6.6.2 Financial Allocation to the CMIP

Table 6.2 shows the funds allocated by the Department of Provincial and Local Government and to the municipalities since the inception of CMIP.

Table 6.2 Funds Allocated to Municipalities towards CMIP

Year	Allocation (Million Rand)	Actual Expenditure (Million Rand)
1997/1998	91.43	91.43
1998/1999	703.00	703.00
1999/2000	696.50	696.50
2000/2001	883.00	851.07
2001/2002	1025.90	1009.64
2002/2003	1758.94	

Source: Dept of Provincial and Local Government, 2002.

The aim of these grants was to ensure that there was capacity building and training and to bridge the employment gap between men and women, and between adults and youth. One of the objectives of the CMIP was to ensure community participation in project identification, project implementation and in sustaining the project after completion. It was also the intention of the CMIP to create partnerships with private & public sector counter-funding and to forge linkages between infrastructure delivery and local economic development

6.6.3 Achievements of the CMIP

Since the inception of CMIP a total of 1 497 projects to the value of R4, 3 billion has been completed (Dept of Provincial and Local Government, 2002). Approximately 3 million households that had previously no access to a basic level of service were already benefiting from the different project categories provided by CMIP, viz, water, sanitation, roads, storm water, solid waste, community lighting and community facilities. Greater support has been given to rural development as 56 percent of CMIP funds were allocated to projects implemented in rural areas. To date water projects were allocated the biggest portion of funds, more than 50 percent of the funds were allocated to water projects particularly in the rural Provinces, targeting mainly the rural women who were the most vulnerable group (Dept of Provincial and Local Government, 2002).

6.6.4 Community Participation

Chapter 111 of the *Municipal Systems Act* states that 'a municipality must seek to develop a culture of public participation, and must for this purpose encourage and create conditions for communities to participate in local affairs'.

Majority of implemented projects have displayed a high degree and meaningful community participation. In order to ensure that projects remained fully community based, local communities are encouraged to execute the majority of the tasks themselves. Project steering committees have received non-accredited training mainly on basic

project management skills, life skills, conflict management skills to ensure community empowerment and decision-making processes that assign a clear role and responsibilities for such groups (Dept of Provincial and Local Government, 2002).

Both local newspapers and Ukhozi FM (a radio station that enjoys a listenership of more than 5 million people) were used to advance the IDP communication. The radio station was used on three occasions: During October 2001, for a period of four weeks, the IDP community meetings were announced every Tuesday. During December 2001, the IDP meetings in conjunction with the role of the municipality, was communicated daily for a week.

6.6.5 Job Creation

Labour-intensive construction methods, which include hand excavations, brick making, pipe laying and backfilling, were encouraged to ensure maximum job creation and utilisation of local resources. Promotion of participatory decision-making involving women in local development initiatives ensures long-term sustainability. Gender sensitivity and the role of women in development were recognised on CMIP projects (Dept of Provincial and Local Government, 2002).

Women, especially from the single-headed households were targeted and suitable tasks were created for this group to promote social inclusion. About 14-million person days of temporal and permanent employment were created for the skilled, semi-skilled and local

labourers during the construction phase of the projects. Permanent employment was, however, mainly created through operation and maintenance jobs, for example, people employed to operate engine pumps for rural water schemes (Dept of Provincial and Local Government, 2002).

6.6.6 Capacity Building

The Dept of Provincial and Local Government provides a capacity building grant to support provinces in managing the CMIP effectively and to build the capacity of municipalities to ensure sustainability of the projects. During the 2001/2002 financial year approximately R70 million capacity building funds have been made available to all the municipalities that benefit from CMIP to ensure sustainability of infrastructure provided. Capacity building initiatives are different in all the Provinces, depending on the capacity gaps identified. However, these include provision of technical and managerial human provision of technical and managerial human resources, administration facilities, enhancing the operation and maintenance capacities of municipalities, financial administration, SMME development and community empowerment (Dept of Provincial and Local Government, 2002).

The following measurable outputs have been achieved:

a) More than 780 SMMEs have received accredited training on tendering and targeted procurement procedures, administrative, financial and project management for SMMEs and business skills.

b) A total of 548 459, person days of on- the- job training has been provided to men, women and youth employed on CMIP projects. This training included pipe laying, plumbing, brick making road works, concreting, excavation etc.

c) Operation and maintenance capacity of the municipalities have been enhanced through various training programmes that were provided to 1 099 municipal employees involved in water and wastewater, electricity and road maintenance.

d) Municipal officials and councilors have benefited from international training on planning and management of infrastructure programmes and local economic development. The Harvard University Graduate School of Design presented these training sessions (Dept of Provincial and Local Government, 2002).

6.7 INSTITUTIONAL AND FINANCIAL STRUCTURE

In order to ensure ownership of the process, the municipality opted to use the existing institutions as much as possible. The roles and responsibilities were thoroughly defined in the adoption of the Council Process Plan as shown in Table 6.3.

Table 6.3 Institutional Arrangements

Entity	Responsibility
Municipal Council	As the ultimate political decision-making body of the municipality, the Municipal Council had to:
	<ul style="list-style-type: none"> Consider and adopt a Process Plan Consider, adopt and approve the IDP
Executive Committee	<p>As the executive authority of the municipality, they had to:</p> <ul style="list-style-type: none"> Delegate the overall management, co-ordination and monitoring of the process and drafting of the IDP, to the Municipal Manager Approve nominated persons to be in charge of the different roles, activities and responsibilities of the process and drafting
IDP Steering Committee	<ul style="list-style-type: none"> Consisted of the Planning and Environment Portfolio Committee of Council together with the IDP Manager and Heads of Department, the committee had to: Undertake the overall management and co-ordination of the planning process Ensure that all relevant actors were appropriately involved Ensure that the planning process was participatory strategic and implementation orientated and was aligned with and satisfied sector planning requirements
IDP Forum	<ul style="list-style-type: none"> Consisted of representatives from all local municipalities and service providers, the forum had to: Perform all the project reference group functions Link the Steering Committee with interested and affected stakeholders Provide a public and private sector input to the IDP
IDP Manager	<ul style="list-style-type: none"> The Ugu Municipal Manager as the IDP Manager had to manage and co-ordinate the IDP process. This entailed: Being responsible for the day- to-day management of the drafting process Responding to comments on the draft IDP from the public, horizontal alignment and other spheres of government to the satisfaction of the Municipal Council Ensuring proper documentation of the results of the planning of the IDP document.
Heads of Department and Officials	<ul style="list-style-type: none"> As the persons in charge of implementing IDPs, the technical and sectional officers had to be fully involved in the planning process to: Provide relevant technical, sector and financial information for priority issue analysis. Contribute technical expertise in the consideration and finalisation of strategies and identification of projects Provide departmental operational and capital budgetary information; Be responsible for the preparation of project proposals, the integration of projects and sector programmes

Source: Ugu District Municipality, 2002.

There were various players involved or who can potentially play an important role in the future development of Vulamehlo. These included: Government departments, ward development structures, non-government organizations (NGOs), community based organizations (CBOs), organized formal and informal business, service providers and farmers. Whilst Vulamehlo municipality commands ultimate responsibility in the development of areas within its boundaries, the participation of the different role players is critical.

6.7.1 The Municipal Structure

The Municipal Manager heads the administration of Vulamehlo municipality. As head of the municipality's administration and accounting officer, the Municipal Manager is responsible and accountable to the municipality, to ensure, *inter alia* that the Municipality implements plans to progress towards the social and economic upliftment of local communities and ensure essential services that were affordable (Vulamehlo Municipality, 2002). Other core responsibilities of the Municipal Manager are:

- a) To prepare and implement the Integrated Development Plan and monitor the progress of implementation.
- b) The management of the municipality's administration in accordance with the Municipality Systems Act 2000 and other legislation applicable to the municipality.

The Municipal Manager is further assigned as the accounting officer of the municipality and is therefore responsible for all income and expenditure of the municipality, all assets and liabilities as well as compliance with all municipal finance and other applicable legislation (Vulamehlo Municipality, 2002).

Being an emerging municipality, Vulamehlo has a very basic structure due to lack of revenue income. The Vulamehlo Municipality (2002) does, however, receive development grants from Provincial and National Government. As indicated in sections 6.6.2 and 6.8.4 grants were allocated for infrastructure development and for water and sanitation development respectively. In terms of its vision, the municipality hopes to become viable in the course of the medium and long-term process (Vulamehlo Municipality, 2002).

6.7.2 Tribal Structures

The issue of representation of traditional leaders at local government was still being negotiated at national government level. At local level, however, they continue to play powerful roles and their status in rural areas is likely to remain in force. It therefore becomes important that whilst a solution is being sought, municipalities with a large rural population component (like Vulamehlo) should find locally negotiated means for open communication with traditional leaders so that there is co-operation in development delivery (Vulamehlo Municipality, 2002). Within Vulamehlo Municipality, there are two relevant distinct Regional Authorities (Amakhosi umbrella structures), namely

Umbumbulu and Vulamehlo regional Authorities. Altogether these constitute about 14 tribal authorities that are part of this municipality.

6.7.3 Financial Plan

The Municipal Systems Act No. 32 of 2000 stipulates that all municipalities prepare an Integrated Development Plan (IDP) for their areas of jurisdiction. In compliance with the Act, the Ugu District Council took a resolution on the 11th of July 2001 to embark on the process of preparing a strategic Integrated Development Plan. A dedicated team, led by the Municipal Manager and consisting of the municipality's heads of department, together with the Planning and GIS Unit was assigned the task of preparing the Integrated Development Plan with the communities concerned. The planning process was supported by Uddi Development Planning Consultants who prepared the IDP's Strategic Environmental Assessment (SEA) and Stewart Scott who prepared the Water Services Development Plan (WSDP). The Water Services Development Plan and the SEA data was fed directly into the IDP as it unfolded. The consultants preparing these plans participated in the Task Team and Representative Forum Workshops during the planning process. A five-year development plan for the district was prepared as in Table 6.4

Table 6.4 Five-year Development Plan for the Ugu District Municipality

Sector	Total Budget (Rand)	Contributors
Sustainability framework	15,975,800	DEAT/DAEA/Ugu
Water & sanitation	37,690,000	DWAF/CMIP/Ugu
Safety & security	5,825,000	SAPS/Ugu/DLTA/DEAT/PWD
Education & skills	5,245,000	DEAT/DoEd/Dlabour/DEAT
Land reform & Human Settlement	2,747,800	DLA/DAE/TLG/Ugu
Finance & Institutional Development	2,280,000	Econ. Affairs/Private/DOA/DLA
Cemetries & burial patterns	1,025,100	SWAF/CMIP/Ugu
Roads & transportation	207,000,000	DoT/LM/Ugu/DPW
Waste Management	1,500,000	DWAF/CMIP/
Tourism, agriculture & economic development	48,822,425	KZNTA/Private/Ugu
Health, waste removal, water & sanitation	37,690,000	Health/ DWAF/
Health	10, 000,000	Health/Private
Electricity & energy	65,690,000	DME/CMIP/NER
HIV/AIDS programmes	6,470,000	Health/
Mayoress care programmes	3,120,000	
ISRDP programmes	278,600,000	DAEA/DLA/DEAT/Ugu
Community based public works programmes	8,515,148	PWD/NGO

Source: Ugu District Municipality, 2002

The Ugu District financial plan shown in Table 6.4 is only a generalized plan. Details show allocation per local municipality and per project/programme. The ISRDP allocation for Vulamehlo is, for instance, about R49 million. Which is about 18 percent of the total allocation for the district. This includes R32 million for water development, R15 million for Umkhomazi bridge and R2 million for the development of Qiko execution rock site for tourism.

6.8 PROVISION OF SOCIAL SERVICES, WATER AND SANITATION

6.8.1 Provision of Sustainable Social Services

Among the important programmes for social development is the establishment of community halls, which will facilitate community organization. A number of these Halls have been planned throughout the Ugu District. The Dududu community Hall was recently completed. It is serving the community as a meeting point on a number of occasions, such as community meetings, workshops, funerals, weddings, and many other social gatherings. Also planned are the building of more schools and the improvement of existing schools. Activities such as skills development, education and training will be introduced and conducted in the schools and community halls. Also planned is the siting of graveyards, cultural areas, etc.

6.8.2 Health Services

The Ugu District municipality has planned to establish an appropriate health systems, and to take over all district health matters from the province (Ugu District Municipality, 2002). The health system will include a district-wide 24 hour emergency service, HIV/AIDS programmes, programmes for street children and street traders, and care programmes. Vulamehlo area will benefit from these programmes.

6.8.3 Electricity and Telecommunications

An electricity master plan was designed by the Ugu District Municipality and was aligned to the spatial framework & ISRDP. According to the Ugu Interim Integrated Development Plan 25.75 percent of the district's rural households are further than 10 kilometers away from fixed telephone facilities (Ugu District Municipality, 2002). The Vulamehlo municipality area is one of the rural areas that were in most need of improved telecommunication facilities. About 32.7 percent of this area is beyond 10 km from a phone. Based on these backlogs, the Ugu District has been identified as one of the severely under serviced areas in the South Africa. Telkom has implemented a number of rural programmes in the past five years to address this backlog (Ugu District Municipality, 2002).

Vandalism is a major problem in the provision of telecommunication facilities. As a result of the problem of public phones being vandalized, there has been a change to satellite telephone systems. Due to the problem of vandalism the actual improvements in the provision of telecommunications since 1996 have been minimal. There has, however, been an increase in the establishment of SMME operations through containers at the points where economic forces are favourable. Both Telkom and mobile network companies support these enterprises.

6.8.4 Provision of Water and Sanitation

Research conducted by the Department of Water Affairs and Forestry (DWAF) shows that approximately 38 percent of the population in the Ugu District has access to water services whilst 62 percent do not have access to adequate water services (DWAF, 2002). Access to reticulated water is largely confined to urban areas, especially those along the coastal strip. Most people living in the hinterland remain reliant on rivers and springs for their daily domestic water needs (DWAF, 2002). The method of supplying bulk water to certain rural communities, who in turn sell water to their respective communities, has proved to be unsustainable. As part of the Interim IDP implementation plan, the District Municipality has initiated the process of taking over the schemes from the water committees.

Given the hilly topography and dispersed nature of rural settlement, the development of ground water resources emerged as a viable option and it is believed that surface water resources will be adequate to meet the needs of the population until the year 2025. The outbreak of cholera has also brought the need for alternative supplies to the fore. Programmes such as spring protection and rainwater harvesting have been implemented as preventative measures (Ugu District Municipality, 2002).

Of a total amount of R278,6 million allocated for the ISRD programme in the Ugu District, about R32 million (or 11,4 percent) was earmarked for water provision in the Vulamehlo municipality area. Isimahla, Maphumulo and Thoyane were each allocated an initial amount of R100,000 for the development of water and sanitation (Ugu District

Municipality, 2002). Other areas identified for water and sanitation provision and development are: Dududu, KwaQiko and Braemar.

6.9 SUSTAINABLE GENDER EQUITY

One of the aims of the Ugu IDP is gender equity and equality between men and women. The local guidelines therefore stressed the importance of a fair and just distribution of opportunities and resources between women and men. This is in line with the provisions of the Constitution of South Africa (Republic of South Africa, 1996). In terms of the gender and development approach, it was necessary to identify the underlying causes of discrimination in order to accord men and women equal opportunities in all sectors of development (e.g. economically, socially, culturally, institutionally, politically). This meant that the existing sexist and subordination processes within development needed to be clearly identified and countered in the strategies, projects and action plans. Objectives and strategies in the IDP were focused on the existing gender inequalities relating to access to land, housing, jobs, and poverty alleviation particularly in the rural areas where women are in the majority.

Almost 60 percent of the population within the rural areas are women. There is also a marked pattern of gender-differentiated poverty in Ugu. In Vulamehlo more than 73 percent of the female population are poverty-stricken heads of households. In addition, sanitation deficits in these households are as high as 91 percent (Ugu District Municipality, 2002). Specific, gender-sensitive poverty alleviating strategies are required

in addition to access to productive opportunities...In the context of the HIV/AIDS pandemic, the poverty situation is deepening as young girls abandon schooling and skills development opportunities in order to take care of siblings and "head households". Poverty alleviation in wake of the HIV/AIDS pandemic calls for creative, rapid and unfettered solutions to access land, food security and healthcare (Ugu District Municipality, 2002). Rural women were usually unaware of their rights in this regard. There was thus a need for information transfer, capacity building and sustainable development based on strengthening existing women's organisations so that their capacity to take up opportunities is enhanced (Ugu District Municipality, 2002).

6.10 LAND REFORM FOR SUSTAINABLE DEVELOPMENT

The land reform project that constituted part of the RDP was viewed as a viable project in Vulamehlo because most of the land in Vulamehlo was owned by the state. A significant portion of land is missionary reserves. Considerable cost could be saved on land acquisition for redistribution. The land reform programme could begin without hitches ad it not been for the conflicting interests between the Ingonyama Trust and the Department of Land Affairs in the transfer of land to beneficiaries. For this reason there has been slow progress in the land redistribution process. Also difficult to obtain is the transfer of land from individual owners to beneficiaries. Here it is the logistics behind group ownership of land that tends to delay decisions on land transfers.

6.11 CONSERVATION FOR SUSTAINABLE DEVELOPMENT

6.11.1 Soil Conservation

It was indicated in Chapter Three that, as a result of the combination of ruggedness, thunderstorms, scantiness of vegetation cover and floods much of the arable land in the Ugu District has been subjected to natural erosion. In order to prevent the resultant loss of topsoil and the depletion of soil fertility, soil conservation has been practised extensively in Vulamehlo. Various methods of preventing soil erosion have been employed. Including the construction of dams or waterways to slow down the flow of water; thus preventing gully formation. Other common methods used include planting of grass strips, terraces and the planting of trees. There were, however, mixed feelings about the effectiveness of the different soil conservation methods, and many areas continued to be subjected to some form of land degradation.

While the major objectives of soil conservation were to improve agricultural harvest for sustainable development, it is also carried out to prevent or to protect the road infrastructure. Many roads became impassable after heavy rains as they become eroded.

6.11.2 Water Conservation

Marginal rainfall in Vulamehlo necessitates the conservation of water. Irrigation, which was the norm for almost all commercial farmers, is one of the requirements for increased productivity in agriculture. The major constraint of irrigation is lack of capital. Dam building, and the pipes for sprinkling are very expensive. Ruggedness also prohibits irrigation. The rivers are usually too shallow while the banks are too steep for the construction of furrows for flooding the fields, which are also on steep slopes. The preservation of wetland areas is one way of overcoming the shortage of water supply in the area.

6.11.3 Nature Conservation

The preservation of wetland areas also serves to preserve some plant and animal species. The preservation of natural plant and animal species is important for tourism as well as for biological purposes. It was pointed out in Chapter Three that loss of indigenous vegetation communities and habitats was occurring in Vulamehlo due to poor farming practices; alien plant invasion; ribbon development; poor catchment management; informal housing and harvesting for firewood. Indigenous vegetation was being replaced by alien invasive species, to the detriment of the environment.

6.11.4 Management of Environmental Hazards

In Chapter Three hazards were defined as threats to humans and what they value (Perry, 1981). They were further defined as events, objects, processes and substances that were perceived to cause more damage to society than the benefit they give (Gardiner, 1977). Nature conservation would be meaningless without the management of hazards. Hazards often lead to disasters. A disaster is defined as:

“A natural or human caused event, occurring with or without warning, causing or threatening death, injury or disease, damage to property, infrastructure or the environment, which exceeds the ability of the affected society to cope using only its own resources “ (*White Paper on Disaster Management 1999: 71*)

As part of the IDP, the Ugu District municipality established a district level disaster management task team. It was indicated in Chapter Three that South Africa experienced drought after every three to five years, recent droughts having occurred in 1983, 1987, and 1992. The seriousness of the problem of drought in the Ugu District is that it caused losses to both livestock crop production. Floods resulted in very poor harvest in the Ugu District in 1987 and 1994.

Examples of disaster management costs are as given on Table 6.5.

Table 6.5 South African Examples of Disaster Management Costs

Place	Disaster	Cost
Ladysmith	Floods 1994	400 families were evacuated, R50million in damages
Merriespruit	Slimes Dam 1994	17 lives lost, R45million
Pietermaritzburg	Floods 1995	173 lives lost, 5,500 people needed shelter
Ladysmith	Floods 1996	Infrastructure R25 million
Northern province	Floods 1996	R105 million damages
Mpumalanga	Floods 1996	R500 million damages
Source: White Paper on Disaster Management 1999: 22		

Such losses highlight the urgency in addressing the issue of disasters and their management in an appropriate manner.

Central to national policy on disaster management is an approach, which seeks to:

“Reduce the vulnerability of communities most at risk through improved access to services, developmental opportunities, information, education and empowerment”.
(*White Paper on Disaster Management 1999: 19*).

This approach stems from the fact that potential development resources were currently spent on relief for those affected by house and veld fires, floods, droughts, pollution and recovery efforts. The new developmental approach to disaster management highlights the

importance of focusing on risk reduction in light of relevant development opportunities and information management. The new approach stresses prevention and seeks to address the risks that vulnerable communities were exposed to. Instead of reacting in an “ad hoc” manner to incidents, the new approach stresses that disaster management is based on communication and information management in a manner that obviates disasters wherever possible. The approach calls for a detailed disaster management plan.

6.11.5 Disaster Management Framework Plan

As a result of the cholera epidemic of February 2001, consultation and communication was done with representatives of Ugu local municipalities, traditional leaders and communities. Consequently a district level disaster management task team has been established. The task team meets on a regular basis to address disaster management issues and policy considerations. The Task Team now needs a focused and strategic disaster management plan in order to streamline their activities and build on the enthusiasm and dedication, which has already been established.

In keeping with the guidelines outlined in the *Disaster Management Bill* of 2002 and the Provincial Disaster Management Directorate, the framework plan for disaster management is proposed in the IDP. The framework entails seven phases. They are:

- a) The development phase
- b) The Prevention Phase

- c) The Preparedness Phase
- d) Incident Management Phase
- e) Response Phase
- f) Rehabilitation Phase
- g) Mitigation Phase (Ugu District Municipality, 2002)

The seven areas of strategy development in the framework plan are set within the context of the integrated development planning process. This means that disaster management dimension needs to be considered as a core-planning dimension like gender, poverty, HIV/AIDS and barrier free access.

Central to the development phase, is risk analysis with an emphasis on vulnerable communities. The major risk areas of focus in the Ugu District are: floods, fire, environmental hazards, epidemics and civil unrest.

Central to disasters related to floods, are the risks communities are exposed to when they settle in flood plains, along riverbanks and in areas with unstable soil conditions. This is particularly relevant in the Ugu district given that there are 42 rivers in the district and the founding conditions of settlements are problematic. Associated with this risk is the high incidence of poverty. Poor communities often do not have the necessary resources to acquire suitable, safe land for settlement and hence expose themselves to the risks of flood damage as a consequence of poverty.

At Vulamehlo fire related disasters are closely tied to the prevalent forestry industry. Environmental/ Epidemic risks in the district are cholera, water borne diseases and various forms of ground and water pollution. Civil unrest is a risk that could occur again, given the history of unrest in the district. The detailed risk profiles of the five major risk categories need to be developed so that the profiles will provide important information for the prevention phase.

6.12 SUMMARY

The present Integrated Sustainable Rural Development Programme (ISRDP) of the Vulamehlo Municipality is interrelated with the National, Provincial and the Ugu District IDPs. A new institutional structure has been approved by the National Government to allow for the full integration of environmental and developmental issues, at all levels of decision-making. This ISRDP is based on the master plan of the Ugu District Municipality IDP. The major principles of this integrated development approach is the Local Agenda 21 (A21) principle of sustainability. The sustainability framework forms the foundation to the IDP.

The IDP focuses on the integration of sectors (e.g. water, sanitation, tourism, land reform, agriculture, education, health) and development dimensions (e.g. social, spatial, economic, institutional, political). According to the Ugu District Municipality (2002) the purpose of focusing on the integration of sectors and development dimensions is to

ensure that development projects and programmes are in line with the sustainability framework.

CHAPTER SEVEN

EVALUATION, SUMMARY, RECOMMENDATIONS AND CONCLUSION

7.1 INTRODUCTION

Chapter Seven is the evaluation of the findings of this thesis. A summary will be given of the main findings followed by recommendations.

7.2 EVALUATION

The aim of this thesis was to examine the extent to which the IDP alleviated or eradicated poverty in the Ugu District Municipality in general. More specifically, the aim was to explore the interrelationships of socio-economic as well as ecological factors affecting the ISRDP in the Vulamehlo municipality. The objective of the study was to determine the degree of success in the implementation of the goals of the ISRDP in Vulamehlo and to evaluate the capacity of the Vulamehlo municipality to achieve the goals of the ISRDP.

The thesis was based on the following hypotheses:

7.2.1 Vulamehlo municipal area has an ideal ecological environment for rural development

7.2.2 The ISRDP in Vulamehlo is based on a sound sustainability framework

7.2.3 The organisation of Vulamehlo municipality is well structured for the ISRDP

7.2.4 There is a Spatial Development Framework in place.

7.2.5 Correct steps were taken to plan the ISRDP

7.2.6 There is positive participation by all stakeholders in the ISRDP

7.2.7 There is popular participation in the ISRDP

7.2.8 There is successful integration of sectors and dimensions in Vulamehlo

7.2.9 Vulamehlo municipality is financially viable for the implementation of the ISRDP

7.2.10 The financial management structure of Vulamehlo is efficient

7.2.11 The Vulamehlo municipality has successfully identified development goals and projects

7.2.12 The ISRDP in Vulamehlo adequately addresses the eradication of poverty

7.2.1 The Suitability of the Ecological Environment of Vulamehlo for Rural Development

The sustainability of a rural economy is normally dependent on the level of viability and sustainability of its agricultural resource base. In Chapter One it was indicated that there were a number of ecological factors that affect agriculture. Eden (1978) discussed a number of environmental limitations to agricultural development in the developing world. It was

stated in Chapter One that, while problems that are involved in agricultural development are varied, they all stem from or are associated with the combined effects of ecological factors, land tenure systems, capital, labour, management, attitudes and political ideologies. The systematic discussions of these factors should therefore not be misconstrued as isolated agents affecting agricultural production.

7.2.1.1 *Ruggedness*

One of the most conspicuous ecological factors affecting agricultural development in the Vulamehlo is the ruggedness of the land that is related to the difficulties experienced in the development of infrastructure. The drainage system of the Ugu District consists of numerous relatively short and fast flowing parallel streams that are highly erosive on the prevailing terrain. Ruggedness of the terrain and certain geographic features are major constraints in the district's movement system. One of the most immediate constraints to agriculture resulting from ruggedness is that it encourages run-off that results in soil erosion. Although ruggedness may be overcome by the application of modern technology, it places a strain on the financial and human resources of Vulamehlo and is a negative factor to the successful implementation of the ISRDP.

7.2.1.2 *Drought, Floods and Thunderstorms*

Other negative factors to agricultural development in Vulamehlo include drought, floods and hailstorms and thunderstorms. As a result of the combination of ruggedness,

thunderstorms, scantiness of vegetation cover and floods much of the arable land in the Vulamehlo has been subjected to natural loss of topsoil and in the depletion of soil fertility, which is one of the major causes of poor harvest. It was demonstrated in Chapter Three how soil erosion caused many roads to become impassable after heavy rains.

Sugar cane became withered during drought, and farmers who had not insured their sugar plantations suffered severe losses. As a result many commercial farmers shifted from sugar cane to timber. Drought also has an important effect on the economy in that the extended period of water shortage retards the economic progress of the area.

7.2.1.3 Insect Pests and Diseases

One of the weaknesses of agricultural practice in Vulamehlo is the lack of crop diversity. The subsistence farmers in the area tend to concentrate on the production of the staple food crop maize. Among the commercial farmers it is sugar cane that is widely grown. Although not much mention is made of this problem in Vulamehlo, monoculture provides the best conditions for the spread of soil and wind borne pathogens specific to that crop. Secondly, it removes valuable nutrients from the soil, which could be replenished by the equally old system of crop rotation, or by growing mixed crops in smaller fields. As stated by Meakins (1981), the problem of pathogens reduces the world's agricultural output by at least 20 percent and is an obstacle to the sustainability of agriculture.

7.2.1.4 Agricultural Land Use

As a result of its rugged terrain, the agricultural activities of Vulamehlo are limited. It was indicated in Chapter Three that although about 66 percent of the total land area of KwaZulu/Natal consists of veld, the Ugu District has comparatively very little occurrence of veld. This is mainly because the coastal areas can be put to a variety of uses, mainly human settlement in the form of urban built up areas. It was, however, shown that about 41-67 percent of the land in the hinterland was veld (Fig. 2.2). The occurrence of a large percentage of veld and forests in the rather densely populated Vulamehlo rural areas indicates a lack of suitable agricultural land. This is negative to sustainable agricultural development in the area.

7.2.1.5 Other Economic Activities

It was mentioned in Chapter Three that the Ugu district had a total of about 235 industries, mostly associated with the forest and sugar plantations. It was also mentioned that there were few paid jobs offered by the government, transport and commerce (Ugu District Municipality, 2002). Most jobs were offered in the adjacent towns of Port Shepstone, Margate, Izingolweni, Harding, Umzinto, Scottburgh and Dududu. This scarcity of paid jobs has resulted in the prevailing high unemployment rate, high dependency rate and widespread poverty in Vulamehlo. Poverty is, according to the UNCED (1992) the main factor negating sustainable development throughout the world. As Brudtland states "It is therefore futile to attempt to deal with environmental problems

without a broader perspective that encompasses the factors underlying world poverty and international inequality “ (Brundtland, 1987, p.3).

7.2.1.6 Tourism Potential

The Ugu District Municipality (2002) hopes to use the coast and sea as primary tourist attractions because tourists are currently attracted to the district's coastal resorts. These resorts could be complemented more effectively by prevailing complementary activities such as golf, scuba diving, whale watching, the sardine run, inland historical and cultural sites, etc. The hinterland also holds a wealth of tourism potential, yet it remains largely undeveloped as an adventure, eco and cultural tourism destination. With improvements of tourist facilities, access roads, and safety and security tourism can be a viable option for the ISRDP.

7.2.2 The Soundness of the Vulamehlo ISRDP sustainability framework

There is no cause to doubt the soundness of the Vulamehlo sustainability framework. The Vulamehlo area was one of the 13 identified nodes nationally for piloting the ISRDP (Dept of Provincial and Local Government, 2002). It was indicated in Chapter Six that the Integrated Development Plan (IDP) of Vulamehlo Local municipality was based on the master plan of the Ugu District Municipality IDP. The Ugu District Municipality was also one of the model areas for the implementation of the IDP based on the major principles of Local Agenda 21 (A21) principle of sustainability. Care has been taken at national, provincial and local government level to ensure that the sustainability

framework of the Vulamehlo ISRDP conformed to specifications. It was inclusive of the various sectors and dimensions as illustrated in diagram 6.1.

7.2.3 The Organisational Structure of Vulamehlo municipality ISRDP

An organizational structure was created in Vulamehlo to specifically facilitate the co-ordination of activities and to control the actions of various operatives of the ISRDP. The structural arrangement emphasizes the inter-relationship between a strategic leadership team, normally referred to as top management, and the programme managers responsible for planning and implementation of various programmes (normally referred to as General Managers). There are four departments in the municipality, namely:

- a) Planning and Environment: Dealing with the implementation of most physical infrastructure programmes, the entire section being adopted as a nodal delivery team in terms of the ISRDP.
- b) Water Services Provision: Dealing with the provision and maintenance of water services and sanitation services to the end user throughout the districts.
- c) Corporate Services: Undertaking the administrative functions of the organization including Personnel, Registry, IT, Secretariat, Auxiliary services etc.

d) Financial Services: Responsible for all integrated financial management system including:

The Municipal Manager's Office was responsible for driving the ISRDP process. A committee comprising of council top management met once a week and a portfolio committee of councillors met twice a month. This arrangement was sufficient for the overseeing of the implementation and monitoring of ISRDP.

7.2.4 The ISRDP Spatial Development Framework in Vulamehlo

The Vulamehlo ISRDP had a spatial framework that outlined a set of objectives reflecting the desired spatial form of the municipality. The spatial framework was also used to set out some basic guidelines for land use management systems and capital investment framework for the municipality's development programmes. It contained a strategic assessment of the environmental impact of spatial development framework and identified programmes for the development of land, indicating areas where priority spending was required. This is consistent with legislation passed in South Africa after 1994. The *National Environmental Management Act*, 1998, makes provision for the establishment of a Committee for Environmental Coordination (CEC) to coordinate actions taken by departments on national and provincial levels, which may have an impact on the planning, protection, management or use of land resources. The most comprehensive planning legislation drafted in the period following the first democratic elections in South Africa, is the legal enactment of the White Paper on Spatial Planning

Management. The *Land Use Management Bill* (LUMB), builds on the normative and progressive principles that were central to the *Development Facilitation Act* (DFA) but goes further by legislating the importance of spatial planning, contextually and conceptually within the framework of integrated development planning as proposed by the *Municipal Systems Act*, 2000. That the Vulamehlo municipality has incorporated spatial development framework in its ISRDP is a positive sign towards sustainability.

7.2.5 The Phasing of the ISRDP in Vulamehlo

The Ugu IDP was phased so that there was, not only logical sequence, but such that the results were comparable. Four distinct phases of the IDP were identified, namely:

- a) Analysis of the existing situation in the municipal area and the identification of issues that are key challenges.
- b) Formulation of strategies and identification of projects
- c) Integration - ensuring vertical and horizontal linkages
- d) Approval. At this level all organs of the municipality including stakeholders and councilors must adopt a completed plan that they must forward to the MEC.

These were appropriately recognized phases of development planning. The ISRDP was therefore on the right path.

7.2.6 Participation by all Stakeholders in the Vulamehlo ISRDP

It was stated in Chapters Two and Six that the Ugu District was identified by the national government as one of the pilot IDP projects. The project enjoyed, thus, the support of government structures at national and provincial level. All the relevant ministries were therefore involved in the logistical and financial support for the Vulamehlo ISRDP (Table 6.4). In Chapter Two it was indicated that the major groups involved in decision making on sustainable agriculture and rural development were the organized agriculture group, universities, the Agricultural Research Council, Non-Government Organisations (NGOs), Community Based Organisations (CBOs) and Eskom. It was indicated that the Agricultural Credit Act formed the basis for action by the Agricultural Credit Board. According to the municipality report, the financial and technical support offered by the KZN – DTLGA throughout the process was sufficient and highly appreciated (Ugu District municipality, 2002). A PIMS - Centre was established in the Ugu District after the process had started and its input into the process was very valuable

It was indicated in Chapter One that the inclusion of all stakeholders was essential in planning and implementation of development programmes (Redclift, 1987). Redclift (1987) stated that it was vital, and that it was important for sustainability to consider the indigenous techniques of rehabilitating and conserving landscape. It was therefore good that the Ugu District municipality involved various stakeholders in its IDP and ISRDP programmes.

7.2.7 Popular Participation in the Vulamehlo ISRDP

Due to the fact that the planning team was in-house, there was sufficient opportunity to maximise participation and consultation. The Ugu District IDP steering committee was responsible for the consultation process, but it was at local municipality level that most of the participatory workshops were conducted. Many of these workshops were organized at Vulamehlo in places like the Dududu community hall. Some of the meetings were informal with the intention of getting more spontaneous interaction with the communities.

The councillors lead the consultation process during participation. Their role was to chair and constitute the steering committee, and to focus the ISRDP process to the social issues. The appointed committee considered recommendations from the Steering Committee and it also functioned as a project reference group (Vulamehlo municipality, 2002). As stated in Chapter Six, communication through the local newspapers and the radio facilitated participation in the projects and programmes. This is in line with the assertion by Hindson and Patel (1996) that successful sustainable development has to deliver basic services to all.

It was stated in Chapter One that the concept of popular participation in development planning was emphasised throughout the principles of the Rio Declaration (UNCED, 1992). Participatory decision-making was also consistent with the *National Environmental Management Act's* provisions relating to environmental impact assessments and

regulatory powers. It was further stated that environmental conservation projects failed dismally when they were imposed from outside and were often inappropriate. Popular participation is based on the notion that it was imperative that technical planners take into cognisance the socio-economic milieu of the intended beneficiaries for the successful identification, design, and implementation of sustainable development strategies...

7.2.8 The Integration of Sectors and Dimensions in Vulamehlo

The Ugu IDP was focused on the integration of sectors (e.g. water, sanitation, tourism, land reform, agriculture, education, health) and development dimensions (e.g. social, spatial, economic, institutional, political). According to the Ugu District municipality (2002) the purpose of focusing on the integration of sectors and development dimensions is to ensure that development projects and programmes are in line with the localized strategic guidelines, sector specification and the integrated approach.

The selected integrated sectors of the Vulamehlo ISRDP are consistent with the notion that environment and development were interdependent issues, and that there was an association between environmental degradation and poverty (UNCED 1992). It was mentioned further in Chapter One that the Rio Declaration was adopted on recognition of the environmental concerns of the poor (Adams, 1990). That the poor were concerned with basic issues such as the lack of clean water, sanitation, electricity, roads, education, etc. which threatened life in many developing countries (Redclift, 1987).

The sustainability framework stresses that the developmental task of the IDP is that of changing the direction of local development towards sustainability so that poverty and social justice can genuinely be addressed while the economic base of the district is strengthened. The framework is an explicit outcome of the planning process since communities, councillors, management and business all stress sustainability as the local agenda. In keeping with national legislation, sustainable development is the “Integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure that development serves the present and future generations” (*National Environmental Management Act No 107 of 1998*). This is also in line with the *Municipal Systems Act No. 32 of 2000*, which stipulates that all municipalities prepare an Integrated Development Plan (IDP) for their areas of jurisdiction (Ugu District Municipality, 2002).

There was integration of sectors and dimensions in Vulamehlo, and there was the potential that this will be successful given the backing that it was receiving from government structures at all levels as well as from relevant stakeholders.

7.2.9 Financial Plan of Vulamehlo ISRDP

The Vulamehlo ISRDP has a financial plan that contains financial resources available from external sources, analysis of the municipal budgets over the past two years and project proposals leading to the formulation of the strategies not covered by the budget. Municipal role-players, such as the municipal manager, councillors, treasurers have had

training workshops in financial planning. This has given the municipality sufficient confidence to prepare the plan in-house (Vulamehlo municipality, 2002). Is the plan linked to the budgeting process? - There is a planning committee consisting of the municipal manager, development planner, general manager and other councillors which drives the planning process. The municipal budget has, however, limited influence on the plan. The financial plan is a good indicator for sustainability, given that the vision and objectives of the Vulamehlo municipality was to become economically viable in the next 15 to 20 years.

7.2.10 The Efficiency of the financial management structure of Vulamehlo

The Ugu IDP has a five-year financial programme. In order to create innovative solutions for coping with financial resource constraints and to get more benefit out of given internal resources the following projects have been identified as part of this IDP:

- a) Development of a Strategic Revenue Leverage Plan
- b) Develop a Strategic Asset Management Plan in conjunction with the Strategic Revenue Leverage Plan
- c) Develop and maintain the assets register
- d) Develop a Strategic investment policy study
- e) Develop an effective & economical treasury
- f) Develop an incentive driven billing system

g) Financial Planning and systems changes project complying with the
Municipal Systems Act and GAMAP

These were good financial management principles, and did provide a sound basis for efficient and sustainable financing of the development projects in the district.

7.2.11 The Identified Development Goals and Projects in Vulamehlo

The Ugu District municipality, carried out an all stakeholder participatory consultative programme in 2001. As stated in Chapter Six, the initial workshops were arranged at inter-municipal level by the Ugu District municipality to assist the local municipalities in the development of their development objectives and strategies. This process also ensured that local municipalities' development objectives and strategies were in line with those of the District Municipalities (Ugu District municipality, 2002).

With regard to the identification of issues that are key challenges the Vulamehlo Municipality started well. It has been stated in Chapter Six that seven broad development goals were identified and developed in Vulamehlo in the light of the localised guidelines. The development issues were grouped into broad inter-sectoral categories to which they are related. This is a positive indication of the potential for the successful implementation of the ISRDP in Vulamehlo.

7.2.12 The Poverty Reduction Programme in Vulamehlo

Under the section sectors and dimensions 7.2.8 it was indicated that the sustainability framework stressed that the developmental task of the IDP was that of genuinely addressing poverty and social justice. The strategy of integrating sectors such as water, sanitation, tourism, land reform, agriculture, education and health, with development dimensions such as social, spatial, economic, institutional and political was one way of ensuring successful poverty eradication in the district (Ugu District Municipality, 2002). The identification of development priorities and issues were derived from the communities during the community consultation phases to ensure that the ISRDP focused on relevant poverty reduction issues.

It was stated in Chapter One that the fifth chapter of the Rio Declaration states that the eradication of poverty was an indispensable requirement for sustainable development (UNCED, 1992). It was also indicated that the need to eradicate poverty was realised during the 1972 the Stockholm UN Conference on the Human Environment. It was stated at that conference that environment and development were interdependent issues, and that there was an association between environmental degradation and poverty. It was mentioned further in Chapter One that the Rio Declaration was adopted on recognition of the environmental concerns of the poor (Adams, 1990). That the poor were concerned with basic issues such as the lack of clean water, sanitation, electricity, roads, education, etc. which threatened life in many developing countries (Redclift, 1987).

Since poverty was associated with disease and other natural hazards, the Ugu District municipality incorporated health as well as disaster management programmes in planning the its IDP. A substantial budget was set aside for the prevention of the spread of the HIV/AIDS pandemic and, through various projects, for the demographic, social, economic and institutional impacts of the epidemic. There was also a disaster management framework that still needs to be developed further into a plan (Ugu District municipality, 2002)

It can therefore be confirmed that the ISRDP in Vulamehlo had the potential of adequately addressing the eradication of poverty.

7.3 SUMMARY

Agenda 21 of the Rio Earth Summit is based on the belief that unless sustainable development is placed at the top of the international development agenda, the global environmental degradation will continue to marginalise the poor, damage human health, slow down growth and world food productivity (Johnston, 1993). Of relevance to this thesis are Agenda 21 Chapters dealing with the following declarations and principles: (i) combating poverty, (ii) demographic dynamics and sustainability and (iii) Integrated approach to the planning and management of agricultural land resources.

The fourth principle of the Rio Declaration states that:

“In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it”(UNCED, 1992).

Environment is interpreted very broadly to include physical, biological, social, economic, and institutional dimensions within which a farming community lives and operates. This calls for process-based research in sustainable agricultural development, integrating social, economic, and ecological perspectives. Meeting sustainable development challenges will require new orientations away from the old practice of treating each issue or sector separately and towards dealing with this issues of poverty, food insecurity and environmental degradation, in a integrated way. This new approach to sustainable development should embrace issues of development, participation, empowerment, accountability, indigenous knowledge, poverty alleviation and environmental conservation in a holistic systems approach. The approach is to try to weave together an understanding of the social, economic and natural resource aspects of farming systems and the environment.

The notion of sustainable development in the context of rural areas has evolved substantially in the last few years in terms of the recognition of its ecological, economic, political and socio-cultural dimensions. Sustainable development is a dynamic process rather than a fixed state or set of conditions. Given the holistic nature of the sustainable development, interrelationships are examined as whole or in totality.

Inclusive in the process are elements of social equity and justice. Sustainable development tends to focus on 'Fair' distribution of available resources between people alive now and the future generation. Putting it simple, both inter-generational equality (Fairness among individuals currently alive) and inter-generation equity (fairness among generations of individual concerned must be met before society can attain the goal of sustainability (Turner, 1995).

The environment has suddenly been recognised by many of the world leaders as an issue of central rather than peripheral importance. It is believed that the storm of controversy arises from things like equity and poverty between the rich and the poor. It is also acknowledged by both natural and social scientists that these topics invoke powerful ideologies, strong emotions, and deep-seated prejudices (Young, 1990).

Most rural areas of South Africa may be divided, according to level of economic development, into the commercialised agricultural sector and the subsistence agricultural sector. This duality in the level of economic development, which is a legacy of colonial and apartheid agricultural and land policies, is a negative factor to sustainable rural development.

Whereas the commercial farming sector were characterised by inefficiency and dependence on government subsidies (Lipton, 1986). The subsistence agricultural land is characterised by overpopulation, land degradation, low agricultural productivity and underdevelopment. Marginal and erratic rainfall, marginal soils, and the frequency of natural hazards such as

drought, floods, hail, frost and disease have frequently inflicted heavy losses in agricultural production over the years. There is lack of infrastructure such as roads, electricity supply, clean tap water, sanitation, health facilities and training centres for skills development. The rural population is characterised by high fertility rate, high man/land ratios, high unemployment rate, high illiteracy rate, high dependency ratio, low-income levels and poverty. The abuse and mismanagement of agricultural land resources through the cutting of trees for fuel, overgrazing, and overcultivation was a common phenomenon among the poverty stricken population. Among the commercial agricultural areas large areas of land remained underutilised (Lipton, 1986; May, 1987).

Poor management of the agricultural land resources gave rise to a variety of desertification symptoms such as soil erosion, deforestation and veld deterioration. As a result there is low agricultural productivity, especially in the subsistence agricultural areas. Poor agricultural productivity has compelled the many economically active people to seek off-farm work in the neighbouring towns. Many become migrant labourers in distant towns and cities, with serious socio-economic consequences on the rural communities and the general quality of life.

The challenge facing South Africa is to find ways and means of achieving overall economic growth and reduction in the level of poverty while maintaining the ecological integrity of the resource base. Meeting this challenge requires new orientations away from the old practice of treating each issue of poverty, food insecurity and environmental degradation in a holistic

way. This thesis explores the effectiveness of rural development strategies adopted in South Africa in general, and in the Ugu municipality in particular.

South Africa has formally embarked on a national *Local Agenda 21* campaign assisting local authorities to make the global agenda towards sustainable development part of the every day activities. Integrated development planning (IDP) was first introduced in South African planning law by the *Development Facilitation Act*, 1995, the *Local Government Transition Act*, 1996, and more recently the *Local Government Municipal Systems Act*, 2000. Integrated development planning seeks to integrate the physical, social, economic and political aspects of planning

One of the major targets of the IDP is the eradication of poverty, as a step towards sustainable development. Poverty in South Africa is primarily a feature of the historically disadvantaged population. Dispossession and exploitation is at the root of poverty. About 72 percent of South Africa's poor live in rural areas, which are often highly dispersed and difficult to access for support and service. About 61 percent of the rural poor are Black.

Vulamehlo is a local municipality that forms part of Ugu District Municipality. As a predominantly rural municipality with severe poverty challenges, Vulamehlo was identified with other similar municipalities within Ugu District as a Nodal point in terms of ISRDP (Ugu District Municipality, 2002).

The Integrated Sustainable Rural Development Programme (ISRDP) of Vulamehlo Local Municipality is based on the master plan of the Ugu District Municipality IDP and is interrelated with the National and Provincial IDPs. The major principles of this integrated development approach is the Local Agenda 21 principle of sustainability. Both in terms of its sustainability framework and stakeholder support system, the Vulamehlo ISRDP was on sound foundation. There was sufficient integration of sectors and dimensions, as well as that of stakeholder participation. There was great potential that the ISRDP in Vulamehlo will be successful given the backing that it was receiving from government structures at all levels as well as from relevant stakeholders.

It was found that the organizational structure of the Vulamehlo ISRDP was sufficient for the overseeing of the implementation and monitoring of ISRDP. The Vulamehlo municipality incorporated spatial development framework in its ISRDP, which is a positive sign towards sustainability. The phasing of the ISRDP followed the prescribed procedures of development planning, including a popular participation consultation process.

The ISRDP financial plan was satisfactory, albeit dependent largely on outside funding. Given that the vision and objectives of the Vulamehlo municipality was to become economically viable in the next 15 to 20 years, the financial plan was a good indicator for sustainability. Based on a five-year financial programme and the creation of innovative

solutions for coping with financial resource constraints, there was a sound basis for efficient and sustainable financing of the development projects in the district.

The identification of development priorities and issues were derived from the communities during the community consultation phases to ensure that the ISRDP focused on relevant poverty reduction issues. This is a positive indication of the potential for the successful implementation of the ISRDP in Vulamehlo. The strategy of integrating sectors such as water, sanitation, tourism, land reform, agriculture, education and health, with development dimensions such as social, spatial, economic, institutional and political was one way of ensuring successful poverty eradication in the district (Ugu District Municipality, 2002).

7.4 RECOMMENDATIONS

Although the Vulamehlo ISRDP has a generally positive potential for success in its task, there were a few obstacles preventing the full realisation of its objectives. The first obstacle is that of the unresolved issue of the role of Amakhosi in the ISRDP. As mentioned in Chapter Six the issue of representation of traditional leaders at local government was still being negotiated at national government level. At local level, however, they continue to play powerful roles and their status in rural areas is likely to remain in force. It was therefore recommended that, whilst a solution is being sought, the Vulamehlo municipalities (with its large rural population component) should find locally

negotiated means for open communication with traditional leaders so that there is co-operation in development delivery.

Lack of locally generated funding is another obstacle. As was stated, most of the initiatives identified by the ISRDP were funded externally. Where Funding is by national and provincial government, it would make sense to link ISRDP funding with the provincial and national budgets.

Although there was nominal integration of sectors and dimensions, the integration of donor effort was not complete. From Table 6.4 it was apparent that there was a clustering of stakeholders around closely related issues. It is stated, for instance, that although some departments commented on the project concepts, this did not include all projects and all affected departments (Ugu District municipality, 2002). A truly integrated approach to development would overlook boundaries and concentrate on a holistic effort, so as to eliminate possible gaps in the execution of development projects. Water and sanitation provision, for instance, does not only require DWAF, CMIP and Ugu as participant donors. Departments such as health, public works, education and transport were equally involved in the provision of these services. It is recommended that the efforts by different stakeholders get more integrated during the various phases of the ISRDP.

Instead of concentrating on sugar cane and maize, it is recommended that there should be more diversification of crops since monoculture provides the conditions for the spread of soil and wind borne pathogens specific to these crops. This could improve crop yields and

prevent crop failure. Some reform should be brought about in the communal system of land tenure that places certain limitations on the individual's right to agricultural land.

7.5 CONCLUSIONS

In conclusion, the objective of the study was to determine the degree of success in the implementation of the goals of the Integrated Sustainable Rural Development Programme (ISRDP) in Vulamehlo and to evaluate the capacity of the Vulamehlo municipality to achieve the goals of the ISRDP.

It is re-iterated that the ISRDP of Vulamehlo Local Municipality, which was based on the master plan of the Ugu District Municipality IDP, and was interrelated with the National and Provincial IDPs, was based on the principles of sustainability of Local Agenda 21. The Vulamehlo ISRDP was on sound foundation, both in terms of its sustainability framework and stakeholder support system. There was sufficient integration of sectors and dimensions, as well as that of stakeholder participation. There was great potential that the ISRDP in Vulamehlo will be successful given the technical and financial support that it was receiving from government structures at all levels as well as from relevant stakeholders.

It was found that the organizational structure of the Vulamehlo ISRDP was sufficient for the overseeing of the implementation and monitoring of ISRDP. The Vulamehlo municipality incorporated spatial development framework in its ISRDP, which is a

positive sign towards sustainability. The phasing of the ISRDP followed the prescribed procedures of development planning, including a popular participation consultation process.

The ISRDP financial plan was satisfactory, albeit dependent largely on outside funding. Given that the vision and objectives of the Vulamehlo municipality was to become economically viable in the next 15 to 20 years, the financial plan was a good indicator for sustainability. Based on a five-year financial programme and the creation of innovative solutions for coping with financial resource constraints, there was a sound basis for efficient and sustainable financing of the development projects in the district.

The shortage of locally generated development capital is one of the most serious problems to agricultural development, and is closely associated with the weaknesses of the Vulamehlo ISRDP.

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APPENDIX A

UNIVERSITY OF ZULULAND

DEPARTMENT OF GEOGRAPHY

DURBAN - UMLAZI CAMPUS

Research Project Questionnaire - G.T. Ngwabi (2000)
for a D.Phil. degree

1. QUESTIONNAIRE FORMAT

1.1 DECLARATION OF CONFIDENTIALITY

**** This questionnaire is purely for Research purposes. It is by no means a test or an examination, therefore, all answers are correct. The investigator appeals to you to give your views on the delivery and sustainability of the Reconstruction and Development Programme and their use for the coming generations as well as to how to maintain the environment. He needs your perception of the situation. All information obtained will remain strictly confidential, and under no circumstance will it be used for any other purpose other than the one specified.**

**** You may give answers in the order of importance**

DATE :

Questionnaire Number

--

1. Sex Status

1. Male	
2. Female	

1. Where do you Live?

1. Dududu
2. Dumisa
3. Amahlongwa
4. Amandawe
5. Other

2. Marital Status

1. Married
2. Single
3. Divorced
4. Widowed

3. How old are you?

1. 20 - 30	.....
2. 30 - 40	.....
3. 40 - 50	.....
4. 50 - 60	.....
5. Over 60	.....

4. What is your occupation?

1. Skilled	.....
2. Unskilled	.....
3. Self-employed	.....
4. Clerical	.....
5. Technical	.....
6. Housewife	.....
7. Retired	.....
8. Manual labourer	.....
9. Unemployed	.....
10. Administrative	.....
11. Artisans	.....
12. Other (specify)	.....

5. What is your Level of education?

1. Matriculated	.....
2. Non Matriculated	.....
3. Graduate	.....
4. Other (specify)	.....

6. Where is your current place of employment?

1. Ifafa Mission Reserve	.....
2. Durban	.....
3. Amanzimtoti	.....
4. Springvale	.....
5. Umzinto	.....
6. Amahlongwa	.....
7. Springvale	.....
8. Umkomazi	.....
9. Scottburg	.....
10. Other (specify)	.....

7. Do you know of any Development Projects in Vulamehlo?

1. Before 1994	.....
2. After 1994	.....
3. After 1999	.....
4. None	.....
5. Other (specify)	.....

8. If yes, What were those projects?

1. School	.....
2. Creches	.....
3. Roads	.....
4. Community Gardens	.....
5. Electricity	.....
6. Water Supply	.....
7. Farming Activity	.....
8. None of the above	.....
9. All of the above	.....
10. Some of the above	.....

9. Why do you live at this place?

1. Land availability	.....
2. Good services	.....
3. Proximity to town	.....
4. Other	.....

10. What are common projects in Vulamehlo?

1. Water Supply	.....
2. Electricity Supply	.....
3. Community Halls	.....
4. Schools	.....
5. Creches	.....
6. All of the above	.....
7. Some of the above	.....
5. Other (specify)	.....

11. Who sponsored your projects?

1. Business Companies	.....
2. Commercial farmers	.....
3. N.G.O	.....
4. C.B.O	.....
5. Other	.....

12. Who introduced the projects?

1. Local Government	.....
2. Trical Council	.....
3. Central Government	.....
4. Regional Trical Authority	.....

13. Are you satisfied with the provision of schools?

1. Yes	.....
2. No	.....
3. Not sure	.....
4. Other	.....

14. How many primary schools are there in your Area?

1. One	.....
2. Two	.....
3. Three	.....
4. Four or more	.....

15. What is the distance from the school?

1. 5 km	.....
2. 10 km	.....
3. 15 km	.....
4. Other	.....

16. Are you satisfied with the provision of secondary schools?

1. Yes	.....
2. No	.....
3. Not sure	.....
4. Other	.....

17. How many secondary schools are there in your area?

1. One	.....
2. Two	.....
3. Three	.....
4. Four or more	.....

18. What is the distance from the school?

1. 5 km	.....
2. 10 km	.....
3. 15 km	.....
4. Other	.....

19. How do pupils reach the school?

1. Walk	.....
2. Buses	.....
3. taxis	.....
4. Vans	.....
5. Bicycles	.....
6. All of the above	.....
7. Some of the above	.....

20. How is water supplied?

1. Pipelines (tap Water)	.....
2. Boreholes (Buckets)	.....
3. Water tank (rain water)	.....
4. Rivers/streams/dams	.....
5. Other (specify)	.....

21. Is there any electricity supply to households, Streets, Schools or Churches?

1. Yes	.....
2. No	.....
3. Not Sure	.....
4. Other	.....

22. What type of electricity supply do you use?

1. Solar system	.....
2. Card system	.....
3. Meter system	.....
4. More than one of the above	
5. Other	.....

23. Are you happy with your electricity supply?

1. Yes	.....
2. No	.....
3. I do not know	.....
4. Other	.....

24. What problems are encountered with the supply?

1. Expensive	.....
2. Uneven supply	.....
3. Unreliability	.....
4. Very weak	.....

25. How are the roads in your area?

1. Very Good	.....
2. Good	.....
3. Fair	.....
4. Poor	.....
5. Very poor	.....

26. Are you satisfied with transport?

1. Yes	.....
2. No	.....
3. Not sure	.....
4. Other (specify)	.....

27. Are you satisfied with your local clinic?

1. Yes	.....
2. No	.....
3. Not sure	.....
4. Other	.....

28. What problems do you encounter in the clinics?

1. Poor service	.....
2. Poor health facilities	.....
3. Impolite staff	.....
4. Unsatisfactory treatment	.....
5. More than one of the above	.....
6. All of the above	.....

29. Does the local creche serve its purpose?

1. Yes	.....
2. No	.....
3. Not sure	.....

30. Do you need more creches in your area?

1. Yes	.....
2. No	.....
3. Not sure	.....
4. Other (specify)	.....

31. How is your community hall?

1. Complete	.....
2. Under construction	.....
3. Proposed	.....
4. Poor quality	.....

32. How is the hall used?

1. Meetings (holding)	.....
2. Funeral services	.....
3. Wedding ceremonies	.....
4. Cultural activities	.....
5. All of the above	.....
6. Some of the above	.....
7. Other (specify)	.....

33. Who sponsored the hall?

1. Provincial Government	.....
2. Central Government	.....
3. Local Government	.....
4. Business Companies	.....
5. Tribal Authority	.....
6. Regional Council	.....

34. Are there any development Clubs in this area?

1. Sewing	.....
2. Poultry	.....
3. Night	.....
4. Investment	.....
5. 1 & 2 above	.....
6. Other (specify)	..... .....

35. Where do you sell your products?

1. Locally	.....
2. Umzinto	.....
3. Durban	.....
4. - Nearby districts	.....
5. Other (specify)	.....

36. Are there any community gardens?

1. Yes	.....
2. No	.....
3. Not Sure	.....

37. Do you produce enough produce for your family?

1. Yes	.....
2. No	.....
3. Not Sure	.....
4. Other	.....

38. How has farm training helped you?

1. Produce enough for the family	.....
2. Produce surplus for profit	.....
3. Self-sufficient	.....
4. Other (specify)	.....

39. How do you maintain your completed projects?

1. Pay for services	.....
2. Work without pay	.....
3. Local Council	.....
4. Tribal Authority	.....

40. Are you happy with the way in which the completed projects are being used?

1. Politically used	.....
2. Religiously used	.....
3. Culturally used	.....
4. Other	.....

41. Do the rural projects transform rural communities?

1. Culturally	.....
2. Morally	.....
3. Socially	.....
4. Educationally	.....
5. Economically	.....
6. Not Sure	.....

42. Are you happy with the whole process of rural Development?

1. Yes	.....
2. No	.....
3. Not Sure	.....
4. Other (specify)	.....

43. What are your complaints towards rural development?

1. Water and electricity supply	.....
2. School and creches	.....
3. Development as such	.....
4. Other (specify)	.....

44. What discourages rural development programmes?

1. Government	.....
2. Amakhosi	.....
3. Local Council	.....
4. Sponsorships	.....
5. Community	.....

45. Is there a joint cooperation between the different government departments for the enhancement of the rural development?

1. Education	.....
2. Health and Social Welfare	.....
3. Housing	.....
4. Agriculture	.....
5. Security	.....
6. Transport	.....
7. Home Affairs	.....
8. Justice	.....

46. Do you have any recommendations for the enhancement of the integrated rural development?

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