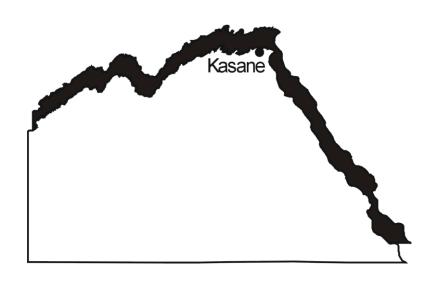


CHOBE DISTRICT DEVELOPMENT PLAN 6: 2003 – 2009



"Towards Realisation of Vision 2016: Sustainable and Diversified Development Through Competitiveness in Global Markets"

CHOBE DISTRICT COUNCIL CHOBE DISTRICT DEVELOPMENT COMMITTEE MINISTRY OF LOCAL GOVERNMENT

FOREWORD

The Chobe District Development Plan 6 is a six-year development document, which translates the objectives of various National Policies and strategies like NDP 9, Vision 2016 and the Chobe District Settlement Strategy into implementable projects or spatial dimensions.

Preparation of this plan was carried out through adequate consultations with different communities, NGOs, CBOs, Government Departments and other stakeholders. Proposed projects contained in this document reflect the desires of the communities of Chobe on how they would like to see their District in the next six years and even beyond. The Chobe District Development Plan therefore represents the wishes and consensus of the people of Chobe and those expected to implement it.

It is hoped that departments will identify projects relevant to them and implement these within the stipulated time frame work. This does not however mean that all projects have adequate funding. However, the issue of extra funding will be addressed during the mid term review of the plan and if funds are available the projects will be taken abroad.

We consider the preparation of the Chobe District Development Plan 6 as a milestone in the right direction. We therefore urge all concerned parties to embrace and use this document to develop the Chobe District. We also urge those who lay their hands upon this document to read it as it contains a wealth of pertinent information, which is critical to successful implementation of our Plan and informed decision-making.

Lastly, we would like to appreciate the Chobe Communities for their participation during all consultations. We assure all interested parties of the NWDCs and District Administrations' commitment to implementation of all the proposed projects.

Thank you

Hon. Councillor Luckson Sankwasa

Council Chairman (NWDC)

C.T.T Magowe District Commissioner Chobe District

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CHAPTER ONE

1 DISTRICT AND PEOPLE

1.1 Regional and Geographic Setting

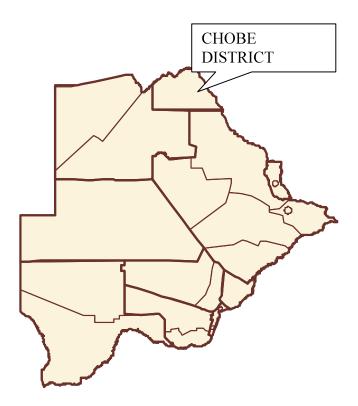
The Chobe district is the north-most district of Botswana. It forms an international boundary with the Caprivi Strip of Namibia to the north and west, Zambia to the north, and Zimbabwe to the east. The district lies within the lines of longitude 24 degrees and 26 degrees East, and between latitude 17.45 degrees and 19 degrees South. Administratively, it is bordered by Ngamiland in the west and south-west, and the Central district in the south (Map 1.1). The district is made of the Kasane township which is the district headquarters, and the villages of Pandamatenga, Lesoma, and Kazungula in the east, and Mabele/Muchenje, Kavimba, Kachikao, Satau, and Parakarungu in the west, commonly known as the Chobe Enclave. The rest of the district is comprised of the Chobe National Park, Wildlife Management Area, and six Forest reserves. The total size of the district is about 22 052 sq.km (Table 1.1).

The district has three fully fledged and autonomous local authorities, namely the District Administration, Land Board and Tribal Administration. On the local government side, Chobe is a sub-district of North-West District Council and is therefore administered from Maun, the district headquarters.

Table 1.1 Major land uses in Chobe District

Land tenure	Land use	Area (sq.km)	Percentage (%)
Stateland	Chobe National Park		50
	Kasane township	28	0.1
	Forest reserves(Kasane, Kasane Extension, Kazuma, Maikaelelo, Sibuyu)	2611	11.8
Tribal land	Nunga WMA	2350	10.7
	Forest reserve (Chobe)	1485	6.7
	Chobe West settlements	93	0.4
	Chobe East settlements	1990	9.0
	Chobe Enclave Concession	1657	7.5
	Chobe East Concession	808	3.7
	Total	22052	99.9

N.B: The figures quoted above are from various sources and are therefore estimates.



1.2 Communication and Linkages

1.2.1 Road transport

The district has two tarred primary roads, Kasane-Francistown, and Kasane-Ngoma roads. The other internal roads that exist form a feeder roads system. The Kasane-Francistown road links the eastern villages with Kasane and also links Kasane with Zimbabwe and Zambia whilst the Kasane-Ngoma road links Kasane with the Enclave villages and Maun and most importantly, with Namibia. However, the Enclave villages are connected with a secondary road.

1.2.2 Air transport

The district has an international airport, the Kasane International airport. Currently, the airport can only land aircrafts of a limited size compared to neighbouring airport facilities. Night landing cannot be undertaken at the moment as there is no night landing facilities.

1.2.3 Water transport

The common types of vessels used in the Chobe river are the motorised boats, *mekoro*, and the ferry at Kazungula. Motor boats are used mainly by tourists for leisure whilst *mekoro* are mostly used by local people to transport their goods to neighbours in nearby countries. The ferry is largely used to carry vehicles and people across the river to Zambia.

1.2.4 Telecommunications

The main provider of telecommunications infrastructure is the Botswana Telecommunications Corporation (BTC). Currently, the coverage of these facilities is Kasane, Kazungula, and Pandamatenga. Villages not so connected use radio-telephones commonly known as "Roger-

roger" phones. Cellular network communication has been extended from Pandamatenga, Kazungula, and Kasane to Ngoma.

1.2.5 Postal services

Postal services are provided by the Botswana Postal Services. Two post offices are in operation in Kasane and Kavimba, with postal agencies at Satau and Parakarungu.

1.3 <u>District Environmental Features</u>

1.3.1 Physical Features

1.3.1.1 Topography

The district is made up of a relatively featureless central plateau and floodplains in the north and west of the district. On the plateau, near Pandamatenga are three large flat plains. Away from the Zambezi-Chobe floodplains is an escarpment. The floodplains are flat with several pronounced ridges. In the west is the Mababe depression, a seasonal swamp connected with the Linyanti marsh in the west through the Savuti channel.

1.3.1.2 Geology

The district has undergone considerable geophysical activity evidenced by clear fault lines in the SW-NE and others in the SE-NW direction which are however inferred from regional drainage directions. The district is built on basalt rocks. Most of the solid geology is covered by deposits of the Kalahari beds.

1.3.1.3 <u>Hydrology</u>

In the north is the large floodplain of the Zambezi river. Some of the channels are perennial while others are not. The Enclave forms part of the Kwando/Linyanti river system but the flooding here is not year round. The main channel is the Linyanti or Shaile channel which is the lower course of the Kwando river. During times of high flood, the Mababe depression turns into a marsh.

1.3.1.4 Climate

Chobe district has a subtropical climate. The rainfall varies between 550 mm and 650 mm being the highest in the country and the least variable.

1.3.2 Natural Resources

1.3.2.1 Vegetation

Along the Chobe river-front there is a narrow stretch of riverine forest. Teak forests occupy parts of the district with sandy soils and the dominant species are the Zimbabwean teak (mukusi) and bloodwood (mukwa). The Mababe depression is occupied by acacia and mophane, with some portions occupied by open grassland. The western part of the district is occupied by a mosaic of tree and shrub savanna with mophane as the dominant species while the floodplains of the Linyanti-Chobe rivers support an aquatic grassland vegetation with islands of *mokola* palm. The large plains of the Pandamatenga are open grassland. There is limited availability of good grass species for livestock grazing. Pockets of good grasses occur within the Controlled Hunting Area 5 and the Chobe enclave.

1.3.2.2 Soil

The soils of the Chobe district can be divided into sandy soils in the centre, deep clay on the plains of Pandamatenga, and loamy clay and sand along the Chobe river and in the Enclave. Soils in the Chobe enclave are comparatively fertile for arable agriculture in relation to the rest of the country. The soils in the eastern part are also fertile but because of their high clay content they generally require mechanised farming. In general, land suitability for rainfed crop production ranges from moderate to high.

1.3.2.3 Water

Chobe is one of the districts in Botswana endowed with water resources and high and least variable rainfall. However, due to high temperatures and low humidity, much of the rain-water is lost through evaporation and transevaporation. The Chobe river is perennial and provides potable water for the Kasane/Kazungula planning area. The main constraint towards the utilisation of the Chobe river water is that large scale utilisation requires international agreements. Other settlements depend on groundwater resources for their water needs and it is understood that the under-groundwater resource is significant, though some of it is saline and has sulphur odour. Wildlife in the north and west of the district rely on the Kwando-Linyanti-Chobe river system.

1.3.2.4 Wildlife

The district boasts of a large population of wildlife, notably elephant and buffalo populations. Perennial availability of water and quality wildlife management practices are believed to be responsible for the high animal populations in the district, making the district an international tourist destination. The animals, especially elephants migrate freely to and from the Caprivi Strip in Namibia and Hwange National Park in Zimbabwe.

1.3.2.5 <u>Forestry</u>

The district is blessed with particularly two tree species known to have potential for commercial exploitation if the stock is sufficient. It is understood that currently, the stock is not sufficient to warrant large scale commercial utilisation. These are the mukusi and mukwa tree species which can be harvested for timber production. There are six forest reserves in the district and these are the only ones in the district.

1.4 <u>District Social Development</u>

1.4.1 Ethnicity and Culture

Several ethnic groups are found in the district. The Basubiya are found mainly at Parakarungu, Satau, Kavimba, and Mabele. They are the most dominant in Satau and Parakarungu. Originally, they are fishermen but now many of them rear cattle. The Batawana are found in Kachikao. Originally dryland farmers and pastoralists, the Batawana now practise *molapo* farming, perhaps due to changing climatic patterns. The Basarwa are dominant in Pandamatenga. They are now moving away from hunting and gathering and are resorting to cultivation. Other ethnic groups found in Chobe are the Nandjwa, Ndebele, and Kalanga.Kasane is a mixture of ethnic groups, attracted to the area by employment prospects.

1.4.2 Population Characteristics

The 2001 population and housing census results show that the population of Chobe district rose from 14 126 in 1991 to 18 258 (9395 males and 8863 females) in 2001. This reflects a growth

rate of 4.03 percent, the highest in the country. The district household size fell from 4.3 in 1991 to 4.1 in 2001 which is greater than the national average of 3.9. During the latter part of DDP 5, Chobe had one of the highest prevalence rates of HIV/AIDS in the country. Between 1998 and 2002, the district had a total of 360 home based care patients. Of these, 57% were HIV/AIDS patients and 43% were patients of other conditions. The district is one of the least populated, with a population density of 1 person per square kilometre, compared to the national average of 3 persons per square kilometer.

1.4.3 Migration

Migration in the district is of three forms. The first one is that which is internal in the district. The second is that of people coming into the district from within the country, and the third is that of people, especially tourists from outside the country through the Ngoma, Kazungula, Victoria Falls borders or by air from outside the country. Movement of people within the district is constrained by times of operation of the Park gates (Data on migration rates was not available at the time of publication of this report).

1.4.4 Settlement Patterns

The Enclave settlements are found along the Chobe river where they also carry-out *molapo* farming. Kasane and Kazungula are similarly located along the river even though there is no evidence of extensive *molapo* farming in the area except a small portion in Kazungula which is not being cultivated now because of wildlife destruction of crops. Only Lesoma and Kazungula are not located along the river but they are close to their farm lands and along the Botswana-Zimbabwe border. It is suspected that due to the status of Kasane as the employment centre of the district, settlements far away from the township, especially those in the Enclave are experiencing a decline in settlement growth.

Kasane township is predominantly of modern structure homesteads whilst the rest of the settlements are of traditional structures. However, due to proximity to the township, Kazungula is fast adopting modern type structures.

1.5 Economic and Social Developments (DDP5)

1.5.1 Major Economic Developments

The major economic developments during DDP 5 were:

Tourism

The development of mainly foreign owned lodges/hotels and mobile safari businesses has led to some considerable levels of employment for locals even though it is mainly at lower scales. There is however an increase in the number of Batswana engaged in the mobile safari operation but these are constrained by perceived congestion in the Chobe National Park, especially along the river.

Commercial arable farming

Even though the Padamatenga farms are not yet fully operational they are proving to be a possible viable breadbasket for the country in the future. They are mostly run by foreigners. Most of the labourers are Zimbabweans because it is alleged that Batswana feel the payment is too low. The Chobe farms in Kazungula do also produce various agricultural products for the local

population as well as for export to neighbouring countries and other districts. They employ quite a number of locals as middle managers and labourers.

Community management of natural resources

Even though the number of people employed is insignificant, these projects have the potential to develop the communities if funds are utilised efficiently and for viable projects. However, transfer of skills to locals at middle and top management is not taking place.

The major infrastructural developments during DDP 5 were:

- Tarring of Kasane-Ngoma road- This has promoted trade with Zambia and also improved access to the enclave.
- Upgrading of the Kasane airport to international standards- It is anticipated that the landing of bigger aircrafts at the Kasane airport will greatly boost the tourism industry in the district as well as in the region.
- Land servicing in Kasane and Kazungula- Even though there is still demand for serviced land, the servicing of land in Kasane and Kazungula released quite a number of plots for residence and commerce.
- Provision of electricity to Pandamatenga, Lesoma, Mabele, Kavimba, Kachikau, and Satau- This will promote establishment of economic activities in the enclave which are currently almost non-existent.
- Electric fencing of Pandamatenga farms- This has significantly reduced crop destruction by wildlife and hence improved production.
- Upgrading of the old SHHA- This has improved the sanitation levels in the old SHHA areas.

The major institutional development during DDP 5 is the preparation and approval of the Chobe district settlement strategy which is currently the guiding framework for the preparation of DDP 6 for the district. Even though it is being implemented, full implementation is expected during DDP 6 and beyond when various components receive funding and are implemented.

The major social developments during DDP 5 include the expected improvement in the levels of literacy and health care due to the construction of a community junior secondary school in Kasane as well as health-posts and clinics in all villages in the district.

1.6 Strategic Environmental Assessment (SEA) Principles

SEA is an environmental tool applied at planning stages of project, programme or policy formulation. It enables consideration of potential environmental impacts of projects, programmes, and policies. It also examines sustainability of the overall goals and objectives of the district. Chobe being one of the few districts in the country with considerably high endowment of natural resources, coupled with a very fragile eco-system, as well as high demand for services due in part to its high tourism potential requires the use of such tools so that developments do not irretrievably damage the environment.

CHAPTER TWO

2 REVIEW OF DDP5 AND LONG TERM DEVELOPMENT POTENTIAL

2.1 Introduction

The Chobe District Development Plan 5 (DDP 5) is a document, which set out the District overall development goals and objectives for the period from April 1997 to March 2003, thus covering a six-year period. It was based on issues raised during the consultation process and professional input by officers both at the District and Ministry levels. DDP 5 was presented to full Council in June 1997, and had a theme of "*Towards Sustainable Economic Diversification*". This was primarily to be achieved through tourism and Community Based Natural Resource Management (CBNRM) especially in Chobe.

This chapter will review the extent to which the goals and objectives of Chobe DDP 5 were achieved. It will also highlight the problems, constraints and limitations experienced during the implementation of programmes and policies outlined in the plan. Suggestions will then be made with regards to alleviating the problems identified as well as on policy and programmes reforms. After the review of the goals and objectives, achievements, problems, constraints, limitations, policy and programme reform suggestions will be made according to the various productive sectors of the plan.

2.2 Development Goals and Objectives of DDP 5

2.2.1 Overall Goal

The overall goal of DDP 5 was to diversify the local economy in order to promote income generating and employment creation activities. This was to be achieved through the strategies of addressing the issue of conflicting demands on the land, and enhancing the participation of rural communities in the management and utilization of the natural resources, especially wildlife in the district. Specifically, the sectoral objectives of the plan could be summarized as follows:

2.2.2 Tourism Sector

Tourism and wildlife was to focus on improving the participation of communities in the management and utilization of the wildlife in the district. In addition, the preparation of a Tourism Plan and the implementation of the Chobe National Park Management Plan were other priority areas.

2.2.3 Agricultural Sector

Agricultural development was to promote arable agriculture in more intensive forms such as horticulture, forestry utilization, poultry and other forms that could support the tourism industry.

2.2.4 Land Servicing

Land servicing for commercial, industrial and residential uses was a critical area for DDP 5. Closely related to this was the training of a Labour force especially the out of school youth for

the commercial and industrial sectors. Therefore, FAP grants were to be used to support a diversity of projects.

With the high growth rate of the Kasane-Kazungula area, a new development plan was to be prepared to aid the upgrading of the planning area.

Small scale and medium scale industrial enterprises were to be promoted to meet the needs of the district and even to consider the possibilities of export.

2.3 Major Achievements in Implementation of DDP 5

2.3.1 The Extension of FAP (1997)

The tourism sector has facilitated the local community participation in tourism related activities. Two transfer operators, a mobile safari and 5 camps/lodges with a total investment of P893 768, FAP grant of P666 662 and projected employment of 44 has been achieved. The Tourism Master Plan and the Chobe National Park Management Plan are in place. A second Community Based Organisation namely Kazungula, Lesoma and

Pandamatenga Community Trust (KALEPA) was established in 1996 but it started operating in 2000. A draft CBNRM policy has also been released.

There are four poultry projects, six backyard nurseries, eight bee-keeping projects and five horticultural projects in the district. Despite the land use conflict in the district, arable farming still remains a priority. Pandamatenga still retain its status of being the country's "bread basket". It is projected that the commercial farms project would generate an internal rate of return of 12%, economic rate of return of 14% and create employment as well.

2.3.2 Agricultural Development

A task force was established in 1997 to identify key problems affecting performance and suggest options for the rehabilitation of the commercial farms in Pandamatenga. The task force implementation of its first recommendation commenced in 2000 with the electrification of 91.3km game proof electric fence enclosing the entire commercial farms.

The performance of the Lesoma electric fence needs to be monitored with a view to replicate it elsewhere in the district. The second loop of the Lesoma fence was put up and crop production in the area increased. Therefore the fence proved to be an effective deterrent to big animals until the solar panels were vandalized and stolen.

In addition the NWDC has commissioned a consultancy on the Pandamatenga Development Plan (2000-2024) to pave the way for the upgrading of Infrastructure services in the village including the farms. Also the Ministry of Agriculture has secured P2.5m funding for the farms' drainage problems. Efforts are underway to reconcile the two consultancies so as to provide a coordinated and comprehensive infrastructure development package for the village.

The following projects were implemented during the plan period:

- District Agricultural office and horticultural projects (5).
- 110 ALDEP implements distributed.
- Forestry boundaries/fire lines (435 6.km) and Firebreaks (208.5km).
- Renovation and expansion of forestry camp at 171km and Kachikau.

- Upgrading of the Kasane tree nursery.
- Look out towers at Kavimba and at 171 camps.
- Research trials at Munga plantation is on going, to assess the growth rate of indigenous plants under local conditions.

Degazzettement exercise conducted at Chobe Forest Reserve – 6000ha out of 154 500 ha allocated to tribal land and 1200ha out of 16 800 of Kazuma Forest Reserve demarcated and allocated to tribal land.

2.3.3 Cooperatives

Construction of an office block and two staff houses.

A group has been identified from the three villages of Kachikau, Satau and Parakarungu for the formation of a cooperative dealing with crafts. A quality control course has been conducted for the group and their cooperative is expected to be registered before the end of this financial year.

2.3.4 <u>Land Use Planning</u>

The Kasane-Kazungula development plan is being revised, more land uses will be accommodated in the de-gazetted portion of the forest reserve to augment the planning area. Further,, 11km of street lights has been provided and the road linking Kasane and Kazungula has been a major beneficiary, although a corridor was provided for the wildlife movement.

In order to rationalize the conversion of agriculture land to other uses, it is hoped that the revised Kasane-Kazungula development plan will prevent the haphazard changes of land use in the area and also provide a guide for future rationalisation of land use changes. This development plan will also attempt to accommodate more land uses over a longer period of time.

To rationalize the utilization of forests, emphasis was placed on co-management and multiple uses. In this regard, the Chobe Forests Inventory and Management Plan has been prepared and adopted. In addition the Ministry of Agriculture is in the process of formulating the National Forestry Policy to allow certain activities to be carried out in the forest reserves. An Eco-Tourism Officer has been posted to implement the forestry management plan.

Questionnaires have been developed to assist applicants in coming up with management plans for their proposed projects and these have been in use for quite some time. The questionnaires are being revised to accommodate new land uses and new requirements. This has been an endeavor to minimize delays in land allocation. The Chobe river front management plan, Environmental Impact study on the Kasane Landfill, and Chobe Settlement Strategy have been completed, the Kasane-Kazungula Development Plan and

KM 256 land use plan are on going. These are all attempts to revise the district Land use plan, taking cognizance of the fact that events have taken place in the different planning areas.

2.3.5 Extension Programmes

The Chobe District Extension Team (DET) has conducted PRA workshops for all the villages in the District. These were aimed at improving the planning and implementation capacity of Chobe villages through PRA, particularly Mabele, Satau, Kazungula and Pandamatenga.

Regional consultation and planning meetings were held to discuss issues of mutual concern. For example, the Chobe National Park Local Advisory Committee, which brings stakeholders from

Botswana and Namibia, and the Upper Zambezi Regional Development Initiatives, which brings stakeholders from Botswana, Namibia, Zambia and Zimbabwe.

2.3.6 Wildlife

- Regional and Anti-poaching Offices at Kasane.
- 46 staff houses and offices at Ihaha, Ngoma, Goha, Poha, Linyanti, Mababe and Sedudu.
- Education centre at Ngoma.
- Public camping sites at Savuti and Ihaha.

2.3.7 Tourism

A lot of developments in the tourism industry have been undertaken throughout the district. These includes amongst other things, Lodges; Camping sites, Guesthouses, golf course, etc. Existing accommodation facilities have also undergone face lifting. Regarding licensing, 35 tourism enterprises have been licensed and are operational, to date. Furthermore the tourism office in conjunction with the DLUPU and Kasane VDC is undertaking an eco-tourism project for the Kasane community.

2.3.8 <u>Commercial Development</u>

The District Development Plan 5 has witnessed the establishment of two Exchange Bureau in Kasane and this has created employment for locals. Regarding public transport, there has been a tremendous increase in the transport sector for Kasane-Francistown route and local transport in Kasane. As a result transportation of goods has greatly improved. The problem of shortage of transport in Chobe west remains.

2.3.9 Primary Health

This plan period also facilitated the construction of health posts at Kazungula, Mabele and Plateau in Kasane, hence bringing the services nearer to the people. It is also anticipated that the Kasane Primary Hospital will be reconstructed and relocated to a more appropriate site. The land for this project has already been secured.

However, the most critical issue in the District is HIV/AIDS particularly among the youth population. This is exacerbated by the fact that there are no recreational facilities in the District and programmes to support those infected and affected are also lacking. As a result recreation revolves around sex and alcohol. According to the sentinel survey in 1999, the sero-prevalence rate of HIV in pregnant women was 50-83% and it is the highest in the country.

2.3.10 Public Health

The Chobe Sub District Council has continued to provide environmentally friendly toilets for the various communities in the district. In addition, a sanitary landfill has been planned for Kasane. The consultancy for the design of this landfill is now about to be completed and construction is expected to commence before the end of 2003 financial year. It is hoped that when this project is complete, other villages in the district will also benefit from its services.

2.3.11 Primary School Education

Although the Revised National Policy on Education (RNPE) was not fully implemented by the end of the plan period, a major achievement was the elimination of the chronic shortage of classrooms, teachers' quarters, toilets, administration blocks, and kitchen/storerooms.

2.3.12 Vocational Education

During this plan period the Chobe Brigade Development Trust benefited with an improvement to its carpentry workshop. This was mainly through the provision of additional tools and machinery that are being used in the said workshop.

2.3.13 Water and Wastewater

There has been a rehabilitation and expansion of water schemes in the villages of Kachikau, Satau and Parakarungu. This enabled more households to be connected to the water schemes. Furthermore, the villages in the Chobe enclave are to be provided with a single large water scheme that will inter connect all the villages to a reliable and sustainable water scheme. The consultancy for the design of this project is now advanced and construction is expected to start before the end of this financial year.

2.3.14 Roads

The Kasane - Ngoma road was reconstructed and surfaced together with the construction of a weigh-bridge at Ngoma. The NWDC was also able to undertake the gravelling of all the roads linking the Chobe enclave villages. However, the main road from Ngoma to Kachikau was graveled instead of being tarred as planned.

2.3.15 Postal Services

The expansion of the Kasane post office was to be undertaken during the 2001/02 financial year at an estimated cost of 350 000-00.

2.3.16 Civil Aviation

The achievements are mainly on improving the overall buildings and pavements at the airport, as well as improving its security systems with state of the art technology. A consultancy is now ongoing for the general expansion of the airport.

2.3.17 Community Projects

A community hall, craft shop and school of industry at Satau and Kavimba respectively have been constructed through drought relief Labour-Based Public Works Programme.

The implementation of the orphan programme by the Social and Community Development department of Council without additional staff and logistical support is also a noteworthy achievement. This has been possible with the assistance of the communities through their respective Village Development Committees.

2.3.18 Police, Justice and Prisons

The construction of the district headquarters and a police station in Kasane together with several staff houses in Kasane and Kazungula has been a major achievement for this plan period. Electrification of the prison perimeter fence and the farm area has also been accomplished.

2.3.19 Self Help Housing Agency - SHHA

Kasane is the only area that benefits from this programme. With the successive increase in the amount of the Building Materials Loan (BML) amount from P2000 to P3000 to P6000 and now P20 000, 202 BML applications have been processed since the beginning of the plan period and there have been considerable improvements to the SHHA houses. Moreover, out of 398 plots in the new SHHA area, only 6 plots have remained undeveloped.

2.3.20 District Institutions

The District Council and the District Administration have been able to construct high-rise flats (2) for their staff and the Tribal Administration has been able to construct 2 customary courts, at Mabele and Lesoma in addition to staff houses (9).

2.4 Major Constraints and Unresolved Issues

2.4.1 Agricultural Development

The District Agriculture Office including Forestry is generally not well staffed and some officers have to cover the district from another district where they are located. Other resources such as personnel and equipment especially for fire fighting are also not adequate and some are completely lacking. This is also a constraint with the District Wildlife Office.

2.4.2 <u>Community Projects</u>

Despite the formation and operation of Community Trusts, community projects are inherent with financial mismanagement problems as well as community dissociation with the activities of their trusts. Instead, the trusts are mostly associated with the members of their management committees or village trust committees since they benefit directly from their self determined meeting frequencies and consequently the sitting allowances attracted. This is usually done without the consent of the general trust membership.

2.4.3 Land Use Planning

Land use plans are not usually prepared or take too long to be prepared because of the perennial absence of key personnel from the district. Officers are usually transferred or sent for years of training without replacement. Hence the few available are overburdened. The shortage of staff is a general constraint for all departments in the District.

2.4.4 Funding

The Council's recurrent budget for the maintenance of education, infrastructure, and other facilities as well as for the replacement of vehicles and equipment is lagging behind the development budget. Hence facilities or equipment are not been maintained or replaced as per the required cycle. This problem is exacerbated by the lack of self-discipline or irresponsibility of the users of the facilities.

2.4.5 Land Servicing

The other major issue is lack of serviced plots for development in Kasane and Kazungula, hence business ventures are restricted. It should also be noted that other areas with vast land, facilities like power, telecommunication are not available. Though the Government has degazetted some portion of the forest reserve in order to alleviate the shortage of land for the human settlement, this has not helped much because there has not been any funding for land servicing.

2.4.6 Roads

The Chobe district lacks good quality materials for building gravelled roads. Coupled with the lack of locally available contractors, gravelling of roads in the district has proved to be very expensive and lasts only for a short period of time. Therefore, the same roads have to be regravelled every other year or even every year if good quality is to be maintained and funding allows.

2.4.7 Meteorology

The use of volunteers by Meteorological Services as rainfall observers seriously affects the accuracy of the data collected since the volunteers do not take this observation seriously. Moreover, the system also causes a lot of gaps in the data since observation is not always carried out when required.

2.4.8 SHHA

The Kasane SHHA only benefits from the Building Materials Loans Scheme. As a result the roads, water supply and sewerage situation in the SHHA areas is not adequate. Therefore, the programme is not been fully implemented as in other parts of the country. Some allocated land remains undeveloped for a long period of time. This is mostly the case with land allocated to speculators who hold on to land and then later sell it for substantial profit.

2.4.9 Accommodation

There is a general shortage of both office and residential accommodation in the district. This is affecting the operations of a number of departments in the district e.g. roads, tribal administration, library services, to mention a few.

2.4.10 Tourism

A moratorium was imposed in 1998 in order to allow for investigation on the impact of mobile safari operations on the environment, particularly in northern region. This has, however, negatively impacted on small scale projects, an area where most rural Botswana have skills to undertake.

Confusion as to what should be secured first; the tourism license or FAP grant has resulted in some applicants losing out on an opportunity to exploit the defunct FAP scheme. This is compounded by the fact that it takes a long time before the Licensing Authority meets, such that even those given FAP grants under conditions end up forfeiting the opportunity when their grace period expires.

Tourism operators are faced with restrictions and permits requirements when doing business with their counterparts in Zimbabwe, even though such restrictions and permits are not demanded from Zimbabwean Tour Operators.

2.4.11 Libraries

The Kasane Public Library does not have a vehicle to service its points. The only vehicle available is shared between Kasane and Tutume. This is a serious inconvenience because the vehicle spends more time in Tutume since it has more service points than Kasane. Another noteworthy constraint is that it is the only library in the District, serving about 2,500 readers but the existing facility has become too small to accommodate all its readers.

2.5 Suggestions on Policy and other Reforms

- Chobe needs to be made a fully-fledged district with all complements of a district. This will go a long way in addressing its staff and other resources shortages.
- District Councils as the main institutions responsible for the provision of social services to the various rural communities, should be represented and have a stake in the utilization of funds that accrue to community trusts. However, since these trusts are legally registered entities, there will be a need for a legal tool like an act of parliament or presidential declaration before any change can be appropriately implemented.
- Transfer of officers should be done on a rotational basis and also provide motivations such as free housing or increase the remote area service allowance for officers working in the district and other remote areas.
- Institutions like DA and TA should be allowed to budget, present and defend their budgets instead of using a formula to allocate a ceiling to them. Also, there is need for imposing penalties of replacing or making good damages to public facilities that are caused by irresponsibility or through negligence of the users.
- As a township, Kasane should be made to benefit from the Township Services vote, urban land servicing vote and the urban sewerage vote instead of competing with Maun and other secondary settlements in the North West for the Village Infrastructure funding which is not even enough for Ngamiland.
- Funding for roads should be increased to enable the tarring of roads and hence less maintenance. However, because of the remoteness of the district, substantial packages of work need to be carried out at any particular time in order to attract competition amongst contractors. Furthermore, large packages will also ensure that the mobilization cost of contractors will be well justified and appropriately utilized.
- The payment that is made to volunteer rainfall observers for meteorological services needs to be increased in order to motivate people to take the issue seriously.
- The Township of Kasane should be made to also benefit from the other component of SHHA that deals with the upgrading of infrastructure in the SHHA areas.
- There is need to increase the buildings in the RAC to cater for some of the departments. There is also a need for accelerated housing programme to alleviate the housing shortage in the district mainly because private houses are not available for officers to rent.

- Land speculation should be discouraged. Efforts should be made to enforce laws already in place as regards taking land from those who do not develop their land for more than four years.
- The Kasane post office is situated in a very congested area. Due to the fact that Kasane is a township and a tourist destination as such the infrastructure should be of high quality. It is therefore recommended that during expansion the department should explore the possibility of relocating the post office to a better place or consider the construction of high rise building.
- Non-health hazard businesses should be allowed to operate in residential backyards depending on the locality. IFS Personnel should be trained in technical courses that are not offered locally so that locals can be trained with less expenses. It is hoped that these would encourage diversification of projects.

2.6 Long Term Potential Development

Chobe District has seen impressive developments over DDP5 period. Public services have been extended considerably and the private sector has also shown remarkable growth.

The completion of the Pandamatenga Commercial Farms Infrastructure and the National Master Plan for Agricultural Development provide new light for the sector. Chobe has great potential in food production. *Molapo* farming also contributes towards food availability at household level. However, agriculture in the communal sector is adversely affected by wildlife.

The tourism sector also provides potential for economic development. Related services are well spread providing income and employment. Diversifying the sector could lead to additional services and more sources of income.

2.7 Links to NDP9 Theme

The basis for NDP9 is to achieve the ideas set out in the Vision 2016 plan. The key strategy for attaining the intended objects is by promoting competitiveness through diversification and ensuring long term sustainability. Chobe DDP6 also seeks to strengthen capabilities and opportunities in the dominant sectors of the local economy. The plan puts more emphasis in areas where there is latent potential such as the tourism and agricultural sectors.

CHAPTER THREE

3 DDP6 DEVELOPMENT GOALS AND OBJECTIVES

3.1.1 Planning Framework

The Chobe District Development Plan 6 outlines development strategies and priorities for a six-year period (2003-09) that will guide developments in Chobe. These have been designed to address key development issues that have been identified locally and nationally and embedded in the Vision 2016 Strategic Plan.

3.1.2 Vision 2016

Botswana's Vision 2016 underscores the necessity for the country to fully manage the process change resulting from changing global economic, social, and environmental order by making optimal use of the opportunities availed by such change. Chobe district fully appreciates these commitments and observations, and with its natural resource base, the district will, during DDP6 strive to realise the objectives of vision 2016 as reflected in the Vision pillars.

An Educated, Informed Nation

Despite the relatively high abundance of natural resources in the district, Chobe communities have not taken advantage of these resources to empower themselves economically. This could be attributed mainly to the national school syllabus which does not target the uniqueness of districts to further enhance productive learning. During DDP 6, the district, whilst adhering to the national school syllabus, it will emphasize potential areas unique to the district that could be harnessed for entrepreneurship. Some of these include amongst others, the various languages and traditions existent in the district.

During DDP6, the district will take advantage of its tourism potential to acquire quality information technology to sell its tourism to the outside world. The different cultural traditions of the district will be part of the package to sell tourism to the rest of the country and the world. Further, Village Extension Teams (VETS) are being revived to amongst others, disseminate information from government, Non Governmental Organisations (NGOs), and the private sector to communities.

A Prosperous, Productive and Innovative Nation

Despite its high potential for arable production, tourism development, as well as wildlife utilisation, very few Batswana participate in these industries. During DDP6, the district will, together with government, strive to ensure that benefits from community utilisation of wildlife resources in the district trickle to the common man. In partnership with the private sector, communities will be encouraged to directly manage their own forest and wildlife resources in a sustainable way. The current crisis in the regional tourism industry has shown the sensitivity of this industry to external factors, and as such the district will diversify its economy to other areas like timber production, local market targeted tourism ventures like amongst others cultural villages.

A Compassionate, Just and Caring Nation

During DDP6, communities utilising wildlife resources will be talked into using part of their revenues to augment the destitute package under the Social and Community Development department of Council. A new primary hospital will be built in the plan period and thus improve the quality of the healthcare services provided currently. Public education will be intensified to drastically reduce death resulting from malaria, as well as reduce the HIV/AIDS infection rate. Due to its proximity to Zimbabwe and Zambia, cross-border crime, especially burglary is rife in the district. The district will engage the law enforcement agencies to come up with a strategy to reduce crime.

An Open Democratic and Accountable Nation

During DDP 6, the existing Local Institutions Consultative Committee (LICC) comprising a broad spectrum of community leaders and public servants will have its mandate expanded to conduct public meetings on the importance of openness, democracy, and accountability among the Chobe community. In addition, VETs are being revived to educate residents of Chobe on government policies and programmes with the ultimate aim of having a public service and the general community who are open and accountable to one another.

A Moral and Tolerant Nation

Recognising and appreciating the varied traditional cultures and languages in the district, and the existing ethnic differences amongst the various communities, the district will work out modalities of using the existing LICC structure to preach morality and tolerance. It should be noted however that this will not be an easy task as the existing ethnic differences date many years back in history.

A United and Proud Nation

During DDP 6, and with the introduction of Strategic Planning and Performance Management Systems (PMS), the district together with Central Government will strive to implement all its projects. Regular briefing will be done to community leaders on project implementation as is being done currently. In addition, the general community will be taken on board to address them on specific issues. In this way, it is hoped that the community will have pride in themselves and the public service.

3.1.3 National Environmental Key issues

Studies have revealed that even though there are a lot more national environmental key issues, the following are more pronounced and deserve utmost attention:

3.1.3.1 Water

Botswana's arid climate and location of high demand areas vis-a-viz potential for construction of dams limit investment in surface water catchment facilities. With the highest water demand in the country, the southern and eastern parts of the country have relatively fewer perennial river systems compared to the northern parts of the country which have relatively lower demand. The north-western and western parts of the country have virtually no rivers and rely on groundwater which in most cases is saline. As a result, water scarcity in the country is pronounced. Chobe has an abundance of surface water, and a relatively high groundwater potential.

3.1.3.2 Land

Despite Botswana's relatively bigger land area than most of the southern African countries, most of the land suitable for arable production is found in the eastern part of the country where prospects for irrigation are low, with pockets in the Chobe area. Land suitable for livestock production is in the north-western part where groundwater is mostly saline, and to some extent, the eastern part of the country. Similarly, human settlements are mainly concentrated in the eastern part of the country because a large chunk of land is mainly the Kalahari desert. As a result, vast tracts of land are unsuitable for agriculture and human settlement, making land shortage a serious problem. Chobe is constrained by a shortage of communal land because about 80 % of the land is a gazzetted conservation area.

3.1.3.3 Natural resource utilisation

Studies have revealed that in some parts of the country, the utilisation of natural resources like fuel wood, grazing, and *mophane* worm to mention a few, is being done at unsustainable levels. It is therefore imperative to put in place measures to protect these resources including amongst others, fish, wildlife, and veld-products from excessive harvesting. No studies have been conducted to determine the magnitude of this problem in Chobe.

3.1.3.4 Protection of bio-diversity

Activities of man are known to have potential to cause extinction of flora and fauna. This is potentially true in Botswana where the country usually experiences annual veldfires especially in sensitive eco-systems of the north-western part. It is therefore important for the country to have signed the international convention on the protection of biodiversity. Chobe district experiences out breaks of veldfires every year, and with the fragility of the Chobe eco-system, decimation of rare species could be occurring.

3.1.3.5 Air pollution and waste management

Significant levels of air pollution and poor waste management have been recorded in some parts of Botswana, notably around the mining towns and other urban areas generating significant amount of waste. These have the potential to change weather/climatic patterns and also pollute acquifers. Steps must therefore be taken to minimise adverse impacts of industrial development. Chobe district does not have a significant industrial base, and as such, air pollution is not yet a problem. However, there is potential for pollution from the frequent veldt-fires.

3.1.3.6 Energy

Most parts of the country still rely on fuel-wood for their energy needs. This has put tremendous pressure on this natural resource prompting the government to promote alternative forms of energy like solar and coal amongst others. Otherwise in the near future, most people would not have sufficient energy sources after the depletion of the fuel-wood resource. This makes the issue a national priority. The Chobe district also relies mainly on fuel-wood for its energy requirements. Even though depletion of fuel-wood is not yet a problem in the district, in future it can be a priority considering population growth, veldt-fires, and range degradation by elephants.

3.1.3.7 Climate and global warming

It has been proven that the globe is undergoing climatic change caused by amongst others, global warming which in turn is caused mainly by chloro-fluoro carbons from industries. This phenomenon of climatic change and global warming has potential adverse consequences on the

earth's surface. Cognisant of this threat, Botswana endeavours to take steps to reduce climate change and global warming.

3.1.4 Ministry of Local Government Strategic Plan

With the overall vision of the ministry being a competitive, customer focused centre of excellence in social service delivery, development coordination and capacity building, the ministry set itself the following key result areas:

- Employee competency. In addition to formal training of employees, it is expected that the revival of VETs in the district will be able to take advantage of funds available for training of VETs to increase their level of competency.
- Customer satisfaction. The envisaged expansion of the mandate of the role of the LICC to directly communicate with the general community and the on-going revival of VETs is expected to improve the current levels of client-customer relationship and hence improve Customer satisfaction.
- Policy implementation effectiveness. With the concepts of PMS and Strategic Planning already off the ground, as well as the implementation of the local structure commission recommendations, it is hoped that implementation of policies and programmes will improve. However, with the current low level of training of staff in the district which is however expected to improve, it would be necessary for the Ministry headquarters to continually lecture staff on key sections of policies, lest communities are misled.
- Ministry leadership effectiveness. This will depend to a great extent on the competency of the staff at the ministry headquarters.
- Community quality of life. DDP 6 projects were derived from the communities themselves. They were then examined to determine the potential to improve people's lives. Hence, with their implementation, the quality of life of the communities should improve.
- Productivity and organisation effectiveness. The ministry will roll out the concept of PMS to all local authorities, and with its full implementation, productivity in the work place will improve. This is in view of the fact that in sectors where it is being implemented, productivity has improved. Already some officers have been trained in PMS in the Chobe district.

3.1.5 District Key Issues

3.1.5.1 Environmental issues

Water

Chobe has an abundance of surface water from the Chobe/Zambezi river system. Ground water potential is relatively high but the quality is poor in some areas.

Land

There is an acute shortage of land in the district due to the fact that about 80 % of the district is devoted to conservation of the wildlife and forest resources leaving very little for settlement expansion and other economic activities.

Natural resource utilisation

Chobe has considerable natural resource endowment, namely wildlife, forest, good soils for arable production, and water from the Chobe river. However, due to the need to prepare a forestry policy before forest resources can be utilised, and damage to crop produce by wildlife, utilisation of these resources except wildlife is still at a very low level. The Chobe river is used to supply Kasane and Kazungula but a project is on-going to connect the Enclave villages to the Kasane water pipeline.

Loss of biodiversity and rangeland degradation

An extremely high population of elephants and the yearly veld fires are the main causes of concern regarding biodiversity loss and rangeland degradation in the district. However, very little has been documented on the extent of the problem.

Air pollution and waste management

Due to the relatively low industrial activity in the district, industrial air pollution is not as yet an environmental issue in Chobe, save for the air pollution arising from veld fires. Regarding waste management, the district currently does not have a landfill. A landfill is however to be constructed during DDP6.

Energy

The main source of energy is fuel-wood in the villages and gas and electricity in the township. There doesn't appear to be a serious problem of fuel wood shortage currently. However, with increasing population and range degradation due to elephants, this could be a problem in the long term.

3.1.5.2 Socio-economic issues

HIV/AIDS

The 2001 HIV/AIDS Sero Prevalence Sentinel Survey among pregnant women revealed a 39.1% prevalence rate. The study further revealed that men with sexually transmitted infections had a 73.2% prevalence rate. Thus HIV/AIDS is of great concern in the district. Table 3.1 shows HIV/AIDS statistics in the Chobe district.

Table 3.1 HIV/AIDS statistics in Chobe district

Year	Number tested	Number tested positive
2001	153	93
2002	344	165

Source: Chobe Sub-District Council, 2003.

Malaria

Even though the incidence of death due to malaria has been declining over the years, Chobe is still regarded as a malaria prone district. Table 3.2 shows the prevalence of malaria in Chobe in the years 2001 and 2002.

Table 3.2 Malaria cases in Chobe

Year	Confirmed cases	Deaths	Unconfirmed cases	Deaths
2001	1228	3	9306	0
2002	367	0	5533	0

Source: Chobe Sub-District Council, 2003

Unemployment

Chobe has a very low industrial and economic base. Agriculture is not optimally exploited because of damage from wildlife, and only tourism is the major employment earner after government. According to the Central Statistics Office, in the year 2001, out of a total population of 18258, only 6860 people were meaningfully employed, with 1048 people being seasonal workers. One thousand, three hundred and seventeen people were looking for work.

Illiteracy

Despite the availability of primary schools in all the villages, and a junior secondary school in Kasane, illiteracy level in Chobe is relatively high. It is not known for a fact the reason behind this but is generally believed that reliance on free fish from the river for subsistence could be part of the reason. Table 3.3 shows the number of people who have never attended and those who have attended school in Chobe.

Table 3.3 School attendance in Chobe

Not applicable	Never attended	Still attending	Completed	Total
1071	3266	4456	9465	18258

Source: Central Statistics Office, 2001.

Wildlife based tourism

There is growing concern that wildlife based tourism is easily susceptible to external forces beyond the country's control and as such efforts should be made to diversify it. Besides, there is potential negative impact on the ecology of the park if the influx of tourists into the park continues to increase.

Lack of diversification

Much as the district wants to diversify from tourism to other economic activities, the choice is limited by the poor performance of the agricultural sector owing to livestock predation and crop damage by wildlife. Worse still, even the commercial Pandamatenga farms which are electric fenced are not producing optimally apparently due to unreliable rains. Opportunities for irrigated agriculture exist but the cost of drawing water from the Chobe river to Pandamatenga may be prohibitive to most farmers.

3.1.6 Long term district plans

During DDP5, the district prepared and adopted several development and settlement plans, these being:

3.1.6.1 Chobe District Settlement Strategy

This is a 24 year Strategy which seeks to operationalise the National Settlement Policy. The strategy came up with concrete areas and amongst others recommended excising portions of forest reserves to augment land for settlement expansion as well as fencing out settlements and agricultural areas from wildlife to improve agricultural production.

3.1.6.2 <u>Kasane-Kazungula Development Plan</u>

This is a 24 year plan necessitated mainly by degazzetment of a portion of the Kasane Forest reserve to augment Kasane-Kazungula planning area as well as to update the then existing plan. The plan is at approval stage.

3.1.6.3 Pandamatenga Development Plan

Also a 24 year plan, the Pandamatenga plan was prepared and adopted to promote orderly development of the village in view of economic activities that are being attracted to the village due to production of agricultural products at the Pandamatenga commercial farms. It was also to lay the framework for the sewerage and infrastructure provision on the farms.

3.1.6.4 Waste Management Strategy

This strategy is being prepared to address the issue of waste management in the district. This is in view of the absence of waste management facilities in the district. However, a landfill will be constructed during DDP 6.

3.1.6.5 Northern Region Master Plan

This plan will be prepared during DDP 6 and it seeks to optimize natural resources utilisation in the northern region in a holistic manner. An integrated land use plan for Chobe will be prepared as well.

3.2 DDP6 Development Goals and Objectives

3.2.1 <u>Development goals</u>

- a. To Promote Sustainable Development and Economic Diversification
 - Through promotion of creation of processing industries
 - Through promotion of intensive forms of agricultural production
 - Through promotion of improved management practices in both the agricultural and industrial sectors
 - To promote the adoption and use of appropriate technologies.
- b. To Promote Diversification of the Tourism Sector
 - Through exploitation of natural resources outside the National Park.
 - Through sustainable use of resources in the Forest Reserves
 - Through promotion of eco-tourism projects
 - Through the development of cultural heritage as an alternative tourism product
 - Through promotion of community participation and mobilisation of local resources.

- c. To Promote Employment Creation and Enhanced Productivity
 - To facilitate entrepreneurial training and promotion of assistance packages
 - To promote production through cooperative societies
 - To facilitate the creation of locally based production groups
 - To facilitate enhanced access to investment resources to enable citizens to participate in the economy.
- d. To Improve the Quality of Life in the Chobe District
 - Through provision of quality and timely services.
 - Through promotion of community participation in project and programme implementation.
 - Through the provision of adequate social and economic infrastructure
- e. To Reduce the Spread of HIV/AIDS
 - Through provision of education and information on reproductive health.
 - Through provision of youth friendly facilities and programmes.
 - Through provision of recreational facilities.
 - Through promotion of window of hope concept.
 - Through facilitation of wide participation by all stakeholders.
 - Through enhanced access to counseling services and adoption of appropriate preventive measures.
 - Through facilitating change of attitude by engaging in client focused approaches and other alternatives.

3.2.2 Environmental goals

- a. To Promote Sustainable and Sound Environmental Management of the Chobe Ecosystem.
 - Through development of comprehensive integrated land use and development plans.
 - Through development of sector specific management plans.
 - Through promotion of community participation in resources management.
- b. To reduce loss of bio-diversity
 - Through development and implementation of a fire management strategy
 - Through fire control and management workshops.
 - To facilitate sustainable resource utilisation
 - Through appropriate resource use charges
 - Through preparation and implementation of management plans.

3.2.3 Framework for monitoring goals and objectives

Experience from project implementation shows that lack of project implementation arose mainly from poor monitoring of projects. Structures set up in the districts were ineffective. For effective monitoring to be done during DDP 6, the Plan Management Committee (PMC) will be revived. The District Extension Team and Village Extension Teams are already being revived to spearhead project/programme implementation as targetted. Regarding development goals and objectives, performance targets are set for all the sectors. Similarly, for environmental goals and

objectives, the use of monitoring tools like Environmental Impact Assessment (EIA), Archeaological Impact Assessment (AIA), Environmental Audit, and Environmental Management Plans (EMP) amongst others will be promoted and strictly enforced.

3.3 Framework for Strategic Environmental Assessment

Having set the district goals and objectives, it becomes imperative to evaluate their potential environmental impacts.

Goal 1 To promote sustainable development and economic diversification.

Potential adverse impacts arising from the objectives and programs under this goal include pollution of groundwater as well as the atmosphere and salinization of the subsoil emanating from fertilizers and chemicals which usually goes with intensive agricultural and industrial production.

Goal 2 To promote diversification of the tourism sector

Increased exploitation of natural resources especially in the forest reserves could lead to extinction of rare flora and fauna, disturbance of wildlife migratory patterns and possibly a change in the rainfall pattern of the district if there is over-exploitation of the forest reserves. However, preparation of management plans and development of eco-tourism strategies could alleviate some of the impacts. Further, development of cultural tourism could also reduce attention from exploitation of natural resources and thereby minimise adverse impacts.

Goal 3 To improve the quality of life in Chobe

Provision of social and economic infrastructure has inherent problems of environmental degradation which can be minimised by the use of EIAs, AIA, EMS, and Audit to mention a few.

Goal 4 To reduce the spread of HIV/AIDS

Depending on the programs and projects to be undertaken, this goal does not pose significant adverse environmental problems. However, waste from Home Based Care patients would have negative impacts if not disposed properly.

Goal 5 To promote sustainable and sound environmental management of the Chobe ecosystem

The programs to be undertaken to realise this goal are meant to protect the environment. However, there are always trade-offs to be made which may have adverse impacts. These shall be minimised by subjecting them to the various environmental protection tools.

Goal 6 To reduce loss of bio-diversity

This goal does not pose serious adverse environmental impacts. Rather, it enhances environmental protection.

Goal 7 To facilitate sustainable resource utilisation

Depending on the components of the management plans, this goal does not pose serious adverse environmental impacts.

CHAPTER 4

4 ENVIRONMENTAL CONSERVATION

4.1 Introduction

The Chobe district is endowed with a rich natural resources base. The Chobe-Zambezi-Linyanti river system, the varied species of fauna and flora, and the potentially rich forests in the district present issues that require sound conservation strategies and measures.

4.1.1 Institutional framework

At national level, conservation strategies and issues are coordinated by the National Conservation Strategy Agency (NCSA) which however does not have offices in the districts. At district level, conservation issues are coordinated by various sectors responsible for issues that directly fall under their portfolio responsibilities, namely; Sub-herbage and Conservation Committee, DWNP, Forestry, Fisheries, and to some extent DLUPU.

4.1.2 <u>Strategic Plans for Respective Ministries</u>

4.1.2.1 Ministry of Lands and Housing

The ministry set itself the following targets:

- Availability and equitable distribution land. Chobe district has virtually no land for economic activities other than wildlife and forestry utilisation. In the long run, there will be pressure on the government to excise some portions of land from conservation areas to augment land for communal use. This will compromise environmental conservation.
- Facilitation of housing delivery and ownership. This target area has no bearing on conservation except the requirement for Environmental Impact Assessment studies before large scale housing construction.
- Environment friendly and conscious nation. Chobe eco-system is documented as sensitive, and as such, large scale developments in the area should be subjected to environmental monitoring tools like Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA), and Environmental Management Plan (EMP) amongst others.

4.1.2.2 Ministry of Minerals, Energy and Water Resources

The ministry set itself the following targets:

• To promote the quality of life of the nation through a sustainable supply of safe water. While the ministry is currently electrifying villages in Chobe west and also connecting these villages to Kasane water supply in an effort to improve the quality of life of the communities, the National Water Master Plan has observed that generally, water tariffs in the rural areas are way below cost recovery. This could act as an incentive to treat water as a free resource that could easily be misused. Unless the ministry sets tariffs that could act as a disincentive to the misuse of water, Chobe will not contribute significantly to the

- realisation of this goal. This is compounded by the fact that water will be supplied from the river which in some people's minds will last for ever.
- To contribute towards a sustainable environment by minimising damage and harmful side effects from the exploitation of energy, minerals and water resources. Chobe's role in this regard is minimal because the district does not have plans to develop a mine in the near future, and its electricity requirements are met by importing electricity from neighbouring countries. Regarding fuel-wood, there are no indications that there may be over-harvesting of fuel-wood. Chobe district will however have to facilitate matching water tariffs with cost recovery to discourage misuse. Further-more, regional initiatives to prepare the Zambezi river basin management plan will contribute significantly towards attaining this goal.

4.1.2.3 Ministry of Trade, Industry, Wildlife and Tourism

The ministry is committed to the following:

- Diversification of the economy. Chobe district can contribute handsomely to this goal by making use of its natural resources like forestry, diverse cultures, and water resources among others. This will assist in reducing pressure on the Park and hence avert environmental degradation in the Park. On the other hand, diversification requires availing more land for development. Consequently, land will have to be excised from conservation areas, and in the process compromise environmental protection.
- Sustained bio-diversity. With a highly fragile eco-system, maintenance of bio-diversity becomes a very important undertaking. This eco-system is however likely to be tampered with by developments in the Park and the envisaged utilisation of the forest reserves.

4.1.2.4 Ministry of Agriculture

The ministry's target areas area as follows:

- Diversification of agriculture through amongst others improved technology, sustainable exploitation of natural resources, and creation of markets for agricultural produce. With abundant water resources, and good soils for arable production, unique forest reserves, as well as proximity to three countries, Chobe is in a favourable position to diversify and market its agricultural produce. However, extensive agricultural production has the potential to lead to loss of bio-diversity and diversion of natural wildlife migratory patterns.
- Agricultural development to focus on dairy, poultry, piggery, fishery, ostrich farming, horticulture, and veld products to mention a few to create employment. A shortage of land makes most of these activities unrealisable save for fishery in the Kwando-Linyanti area. Otherwise a considerable stretch of the Chobe River falls in the national park where fishing is prohibited.
- Development of policies to target strategic products like leather, oil seeds, milk, cotton, and other dairy products. Of all these products, Chobe is only producing cotton and sunflower at a considerable scale and already an investor is producing sunflower oil out of sunflower at Pandamatenga.

4.1.3 Environmental Priorities

Issues of concern during consultations included the following:

- Shortage of land for economic activities.
- Veld fires especially in the conservation areas.
- Littering and poor refuse collection.
- Rangeland degradation especially by elephants.

4.2 Environmental Policies and Legislation

4.2.1 Vision 2016

Botswana's Vision 2016, under the pillar A Prosperous, Productive and Innovative Nation calls for a fully integrated approach towards conservation and development, in which communities are involved in the use and preservation of their assets and benefit directly from their exploitation. Chobe's natural resource base requires that while promoting tourism in the district, the ecosystem that sustains tourism should be protected as much as possible. In the quest to diversify the economic base of the district, negative impacts to the environment arising from such diversification should be outlined and mitigation measures taken.

4.2.2 <u>National Conservation Strategy</u>

The National Conservation Strategy identifies several environmental issues to be addressed by the strategy, and these are:

- Pressure on water resources- Most of the settlements in Chobe draw water from underground sources. There has been little, if any, monitoring of groundwater levels and characteristics to determine the balance between draw-off and recharge. However, this issue may not be that critical in the district because most of the settlements are along the river which recharges the underground acquifers.
- Rangeland pasture degradation- There is no clear indication that livestock could be degrading the rangeland, apparently because being a foot and mouth zone, the district does not sell its livestock outside the district. As such, there is no incentive to keep large herds of livestock. However, it is important to monitor pasture degradation due to increase in wildlife numbers, especially elephants.
- Depletion of wood resources- Perhaps with the exception of Kasane, all the settlements in Chobe rely on wood for their energy requirements. Though there are considerable forest resources in the district, it is imperative that studies be undertaken to gauge the impact of reliance on wood for energy on the sustainability of the resource.
- Over-use of veld products- There has not been an inventory of veld products in the district. Nevertheless, over-use of these resources is a remote possibility because there is no commercial utilisation of these products in the district.
- Industrial/Urban pollution and urban enhancement- Chobe district is primarily a tourism area with an insignificant industrial base. Similarly, there is not much industrial activity in nearby towns or villages in neighbouring countries. The problem of industrial pollution is therefore unlikely to impact on the environment during the plan period. It is however important to take precautionary measures to avoid pollution of the Chobe river by emissions from boats in the river.

- Population Although Chobe has one of the smallest population sizes in the country, the 2001 population count shows that it has one of the fastest growth rates.
- Depletion and conservation of wildlife- Even though poaching is a major issue in this regard, records show that it has gone down considerably. Veld fires and pasture degradation could however be a set back.
- Public awareness- Public education on environmental issues is spearheaded mainly by the department of Wildlife and National Parks, the Chobe Wildlife Trust, and the Conservation Committee.

4.2.3 <u>Waste Management</u>

The general objective of waste management is to control solid and liquid wastes to prevent environmental health nuisances associated with pollution, vermin breeding and transmission of diseases. The specific objectives are to plan for management of waste, minimise environmental pollution, and conserve natural resources. That notwithstanding, the growth of Kasane and the peripheral villages, points to the urgent need to address issues of waste generation, storage, collection and disposal.

4.2.4 Environmental Impact Assessment Act (Draft)

The draft Environmental Impact Assessment Act makes it a requirement for large scale projects to conduct an impact study before project commencement. Another component of this study is the archaeological impact study. The requirements of this draft act are more relevant in the Chobe district due to its environmental sensitivity.

4.2.5 <u>Community Based Natural Resources Management</u>

Being a pioneer in wildlife based community natural resources management projects in the country, it is imperative to constantly monitor the contribution of the project towards natural resource conservation. It would also be necessary to conduct studies on the impact of these projects on poaching of wildlife.

4.2.6 Wetlands Policy

Recent and current conflicts on the utilisation of Chobe-Okavango river systems point to the need to come up with an inclusive management plan for the Okavango-Chobe-Zambezi system. These conflicts include Namibia's attempt to divert some of the water flowing into the Okavango delta, Botswana's abandoned plan to dredge the Boro channel, and dispute over ownership of the Sedudu Island. Fortunately, a national wetlands policy and strategy has been completed and its implementation will take place in earnest during NDP 9.

4.3 Environmental Goals and Objectives

Based on the consultation priorities and critical assessment of issues in the district, the land use and conservation objectives during DDP 6 are:

Goals	Objectives
To minimise land conflicts in Chobe through implementation of Chobe Settlement Strategy	To implement Chobe Settlement Strategy during DDP 6 To explore feasibility of fencing out wildlife from agricultural areas by 2005
To improve waste management in the district through implementation of the district waste management plan.	To implement the Chobe district waste management plan by 2005
management plan.	To pilot privatisation of refuse collection in Kazungula 2003
To reduce adverse environmental impacts of waste land by reclaiming burrow pits	To inventorise existing burrow pits, and waste dump sites in Chobe by 2003
	To assess potential use of burrow pits and waste dumps in Pandamatenga, Lesoma, Kazungula, Kavimba, and Kachikau by 2004.
	To facilitate the carrying-out of geo-technical surveys in Pandamatenga, Lesoma, Kazungula, Kavimba, and Kachikau by 2005 through liaison with Geological Surveys.
To reduce loss of bio-diversity through improved fire management strategy (also see chapter 6)	To develop and implement Chobe district fire management strategy by 2004
	To conduct fire control workshops for the public in all the villages once a year until 2008/09.
	To conduct fire control workshops for the private sector and public officers every two years until 2008/09
To contribute to resolution of the impact of excessive wildlife population on rangeland through continued discussions between	To conduct a time series study on the impact of elephant population on the vegetation of the Chobe National Park by 2006.
stakeholders	To facilitate continuation of CITES talks on the culling of elephants in Botswana.
To facilitate sustainable natural resources utilisation through appropriate resource use charges	To facilitate review of resource use charges every two years until 2008/09 by collecting and analysing data on resource use charges.
	To conduct yearly seminars for Chobe communities on resource utilisation.
To facilitate proper utilisation and management of the Linyanti-Chobe river system through preparation of a management plan	a) To facilitate preparation of a management plan for the Linyanti-Chobe river system by 2007 through liaison with NCSA and Water Affairs

4.4 Framework for Strategic Environmental Assessment

It is not anticipated that the goals and objectives outlined above would have significant adverse environmental impacts. However, the implementation of the Chobe Settlement Strategy is likely to cause some environmental problems if the district is to annex more land from conservation areas for tourism development and agriculture as recommended. Also, fencing out wildlife areas using electric fence is likely to contribute to wildlife mortality and loss of bio-diversity.

Policies that are likely to have significant adverse environmental impacts include:

Tourism Policy- This policy promotes development of tourism infrastructure and facilities for Batswana to participate in the industry. Besides requiring more land for tourism development, the expected proliferation of lodges/hotels in the Chobe National Park and its vicinity and the resultant mobile safaris could lead to adverse ecological impacts on the Park.

Convention on Illegal Trade in Endangered Species (CITES)- This convention strictly restricts trade in ivory. With trade in ivory unlikely to be relaxed, the high elephant population in the district could result in both rangeland degradation and elephant starvation and ultimate mortality.

Community Based Natural Resources Management (CBNRM)- This policy agitates for joint venture partnerships between communities and safari operators. The likely impacts on the environment include poaching of wildlife especially the rare species by safari operators, and general range degradation due to infrastructure being put up in concession areas.

National Agricultural Master Plan on Arable Agriculture and Dairy Development (NAMPAADD) - This policy earmarks Chobe northern plains for development of arable farms. Implementation of this policy in Chobe is likely to lead to loss of bio-diversity, blockage of Chobe National Park- Kazuma National Park (Zimbabwe) wildlife corridor, and increased human-wildlife conflict, amongst others.

4.5 Proposed Strategies to Achieve Conservation Goals

In principle, all goals, objectives and projects in DDP 6 will be subjected to SEA, EIA, and the Environmental Audit. Where necessary, Environmental Management Plans and Systems would be required. However, the goals, objectives and projects of this chapter are unlikely to have significant impacts at least until the components of these plans are known.

Goal	Projects	Negative impacts	Mitigation
To minimise land conflicts in Chobe through implementation of the Chobe Settlement Strategy	Assess annexation of more land for economic activities, study to fence out wildlife from agricultural areas	Bio- diversity loss, wildlife mortality	SEA, EIA, Audit
To improve waste management in the district through preparation of the district waste management plan.	Preparation of a district waste management plan, privatization of refuse collection	nil	nil
To reduce adverse environmental impacts of waste land by reclaiming burrow pits	Collection of data on existing waste dumps, carrying out of geotechnical surveys	nil	nil
To reduce loss of bio-diversity through improved fire management strategy	Development and implementation of district fire management strategy, conduct public seminars	nil	nil
To facilitate resolution of the impact of excessive wildlife population on rangeland through continued discussions between stakeholders	Conduct study on impact of wildlife on vegetation	nil	nil
To contribute to sustainable natural resources utilisation through appropriate resource use charges	Conduct workshops	nil	nil
To facilitate proper utilisation and management of the Linyanti-Chobe river system through preparation of a management plan	Preparation of the Linyanti- Chobe river system management plan	nil	Nil

4.6 Resource Requirements for DDP 6

4.6.1 <u>Performance targets</u>

Goal	Activity	Start	End	Monitoring
To minimise land conflicts in Chobe through implementation of the Chobe Settlement Strategy	Annex more land for economic activities b) Study to fence out wildlife from agricultural areas	Apr 2006 Apr 2003	Mar 2008 Mar 2005	Regular presentation to DDC and Council
To improve waste management in the district through implementation of the district waste management plan.	Implementation of the district waste management plan b) Privatization of refuse collection	Apr 2003 Apr 2003	Mar2008 Jun 2003	Regular presentation to DDC and Council
To reduce adverse environmental impacts of waste land by reclaiming burrow pits	Collect data on existing waste dumps Assess potential use of waste dumps Carry out geotechnical surveys	Apr 2003 Jul 2003 Feb 2004	Jun 2003 Nov 2003 May 2004	Submit report at end of Nov 2003 to Lands/NCSA. Report to Reference group every 3 months
To reduce loss of biodiversity through improved fire management strategy	Develop and implement a district fire management strategy conduct public seminars	On-going (preparatio n of strategy)	Dec 2008 (implemen tation) Mar 2009	Presentation to DDC, and ARB every 3 months
To facilitate resolution of the impact of excessive wildlife population on rangeland through continued discussions between stakeholders	Conduct study on impact of wildlife on vegetation Facilitate continuation of CITES talks between stakeholders	Apr 2003 Apr 2003	Mar 2006 Mar 2009	Presentation to DLUPU, DDC, ARB, and NCSA every 3 months
To contribute to sustainable natural resources utilisation through appropriate resource use charges	review resource use charges conduct yearly seminars on resource use	June 2004 Jan 2004	Dec 2008 Dec 2008	Brief Council and DDC regularly
To facilitate proper utilisation and management of the Linyanti-Chobe river system through preparation of a management plan	Preparation of the Linyanti-Chobe river system management plan	Jan 2005	Dec 2007	Regular presentation to DLUPU, DDC, Council, Land Board

It should be noted that it would be unrealistic to set indicators for the activities that would be carried out due to the fact that most of them are long term activities. As a result, only when these activities are broken down into annual plans would it be feasible to set performance indicators.

4.6.2 <u>Development budget for DDP 6</u>

Goal	Activity	Amount (Pula)
To minimise land conflicts in Chobe through implementation of the Chobe Settlement Strategy	Annex more land for economic activities b) Study to fence out wildlife from agricultural areas	50 000
To improve waste management in the district through implementation of the district waste management plan.	Implement the district waste management plan b) privatisation of refuse collection in Kazungula	To be determined
To reduce adverse environmental impacts of waste land by reclaiming burrow pits	Collect data on existing waste dumps Assess potential use of waste dumps carry out geo-technical surveys	100 000
To reduce loss of bio-diversity through improved fire management strategy	Develop and implement a district fire management strategy conduct public seminars	10 000
To contribute to resolution of the impact of excessive wildlife population on rangeland through continued discussions between stakeholders	Conduct study on impact of wildlife on vegetation Facilitate continuation of CITES talks between stakeholders	10 000
To facilitate sustainable natural resources utilisation through appropriate resource use charges	review resource use charges conduct yearly seminars on resource use	0.00
To facilitate proper utilisation and management of the Linyanti-Chobe river system through preparation of a management plan	Preparation of the Linyanti- Chobe river system management plan	5 000 000

CHAPTER 5

5 LAND USE PLANNING

5.1 Introduction

Chobe district is one of the smallest districts in the country. It is renowned for its natural resources, notably the Chobe river and the varied species of wildlife and plant life. About 80% of the district is devoted to conservation, and human settlements account for about 20%. Land use in Chobe is determined by several factors, some of which are the increase in human population, tourism potential of the area, and government policies.

5.1.1 Institutional framework

Various institutions are responsible for land use and environmental conservation issues. The key institutions are the Chobe Land Board, Council, Departments of Lands, Wildlife and National Parks, Tourism, Crop Production and Forestry, and the Agricultural Resources Board. The District Land Use Planning Unit (DLUPU) comprising members from these institutions and other government departments provides technical advice to public institutions, Non-Governmental Organisations, and the private sector.

5.1.2 <u>Strategic Plans for Respective Ministries</u>

5.1.2.1 Ministry of Lands and Housing

The ministry set itself the following targets:

- Availability and equitable land distribution land. Chobe district has virtually no land for economic activities other than wildlife and forestry utilisation. In the long run, there will be pressure on government to excise some portions of land from conservation areas to augment land for communal use. The Land Board is in the process of revising the land allocation guidelines in an effort to distribute the land resources fairly to citizens.
- Facilitation of housing delivery and ownership. With development plans for Kasane-Kazungula and Pandamatenga completed, it is expected that this will facilitate housing delivery in the district. The extension of the Self Help Housing Agency (SHHA) to the rural areas will further assist in housing delivery and ownership. However, in future there will be a problem of land shortage making housing delivery and ownership difficult.
- Environment friendly and conscious nation. Chobe eco-system is documented as sensitive, and as such, large scale developments in the area should be subjected to environmental monitoring tools like Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA), and Environmental Management Plan (EMP) amongst others.

5.1.2.2 Ministry of Trade, Industry, Wildlife and Tourism

The ministry is committed to the following:

- Diversification of the economy. Chobe district can contribute handsomely to this goal by making use of its natural resources like forestry, diverse cultures, and water resources among others. However, land shortage is a constraint to this goal. Even where there is land, the shortage of funds becomes a problem to service the land. With communities benefiting money from their concession areas, and royalties being paid to Council, this money could be used to service land where there is a shortage of funds for land servicing.
- Sustained bio-diversity. With a highly fragile eco-system, maintenance of biodiversity becomes a very important undertaking. Land use planning should therefore take into consideration the different species of fauna and flora that exist in the Chobe district.

5.1.2.3 Ministry of Agriculture

The ministry's target areas area as follows:

- Diversification of the agricultural produce through amongst others improved technology, sustainable exploitation of natural resources, and creation of markets for agricultural produce. With abundant water resources, and good soils for arable production, unique forest reserves, as well as proximity to three countries, Chobe is in a favourable position to diversify and market its agricultural produce. However, extensive agricultural production is not feasible because communal land is almost exhausted.
- Agricultural development to focus on dairy, poultry, piggery, fishery, ostrich farming, horticulture, veld products to mention but a few to create employment. In view of the land shortage in the district, intensive forms of agriculture are the most preferred in the district. Actually, there is provision for these forms of agriculture in both the Kasane-Kazungula and Pandamatenga Development plans.

5.1.2.4 Ministry of Local Government

The ministry's targets are:

- Efficient service delivery and infrastructure provision. Part of the land shortage in Chobe, particularly Kasane and Kazungula is not absolute unavailability of land but lack of provision of infrastructure to demarcated plots. If the ministry could service land on time, the problem of land shortage would be alleviated.
- Community quality of life. Timely provision of services and other infrastructure will release land for allocation and development. This will consequently improve the quality of life of the people in the Chobe district.

5.1.3 Consultation Priorities

Issues of priority during consultations included the following:

- Shortage of land for settlement expansion and agricultural production owing to the fact that about 80% of the district is a gazetted conservation area. This problem is compounded by land speculation especially in Kasane and Kazungula.
- Conflict between wildlife and agriculture. Being a predominantly wildlife area, agriculture in the district suffers from destruction by wildlife in the form of crop destruction and livestock predation.
- Loss of agricultural land to other uses due to diminishing viability of agricultural production owing to wildlife crop destruction and livestock predation.
- Absence of integrated district land use plans making land delivery difficult for land authorities.
- Non-observance of land development covenant- Mainly due to land speculation, most of the land in Kasane and Kazungula remains undeveloped for a long time. There is a need for the district to monitor and enforce land development covenants.
- Delay in servicing demarcated land. Demarcated plots in Kasane and Kazungula stay for too long before services are provided, in the process delaying land allocation.

5.2 Land Use Policies and Legislation

5.2.1 Vision 2016

One of the tenets of Vision 2016 is a prosperous, productive and innovative nation. The district is well placed to realise this vision because of its vast potential of natural resources which can be harnessed for the welfare of the community. The Chobe Settlement Strategy will go a long way in helping to realise this vision as it sets out in clear terms the wishes, needs and aspirations of the community with regards to land use and development in general. However, Chobe may not be able to contribute meaningfully towards the realisation of the Vision because land is not available to engage in entrepreneurship.

5.2.2 <u>District Settlement Strategy</u>

Among others, the Chobe Settlement Strategy calls for degazzettement of portions of forest reserves to augment land for settlement expansion and other activities. Whilst this would be a commendable proposition in terms of development, it would compound the conflict between wildlife and human beings by encroaching into their natural habitats. It would also be defeating the purpose for which the forest reserves were gazzetted.

5.2.3 <u>National Agricultural Master Plan for Arable Agriculture and Dairy Development (NAMPAADD).</u>

The expected implementation of the master plan is expected to contribute towards household food security. However, it could also contribute towards increase in the conflict between humans and wildlife if the natural migratory patterns of wildlife are substantially disturbed. The formulation of the Forest policy will further give direction with regards to the utilisation of forest reserves which the district has long complained of as an impediment to their realisation of a better future for themselves. The utilisation of forest reserves would however alleviate the problem of land shortage in the district.

5.2.4 Tourism Policy

Whilst the goals of preservation and conservation espoused in the Wildlife Conservation Policy are consistent with the objectives of the Tourism policy, increases in the number of tourists through tourism promotion could have adverse ecological consequences. In this regard, the revision of the Chobe National Park Management Plan is a step in the right direction. These policies, together with other development oriented plans impact both positively and negatively on land use. It is therefore imperative that any long term district plan takes cognisance of the opportunities and constraints provided by these policies.

5.3 Land Use Planning Goals and Objectives

Based on the consultation priorities and critical assessment of issues in the district, the land use and conservation objectives during DDP 6 are:

Goals	Objectives
To facilitate efficient and equitable land distribution in Chobe through appropriate policies	To develop a Chobe integrated land use plan by 2004 To prepare development plans for Kachikau and Kavimba by 2006. To prepare village lay-out plans for Mabele, Satau, and Parakarungu by 2005.
To preserve land suitable for arable production in the district by minimising conflict between wildlife and agriculture	To explore a feasibility of electric fencing Pandamatenga Block One fields by 2004. To explore a feasibility of electric fencing of Chobe west ploughing fields by 2006.
To speed up land allocation through land servicing and streamlined land allocation procedures	To service 400 demarcated Kazungula and Pandamatenga plots every two years until 2008/09 To service 500 demarcated plots in Kasane every two years until 2008/09 To review and revise the Chobe tribal land allocation guidelines every two years for the duration of DDP 6 To develop a land allocation criteria for use in tribal land by 2003.
To facilitate a speedy development of allocated land in the district through relevant policies	To facilitate relaxation of legal requirements for repossession of common law plots by 2003/04 To repossess and re-allocate 100% of the customary rights undeveloped plots in Kazungula by 2004/5 To facilitate repossession and re-allocation of 100% of ALSP undeveloped plots in Kasane by 2006.
To facilitate reclamation of wasteland through assessment of the potential use of land	To inventorise burrow pits and quarries in Chobe by 2003. To assess potential use of burrow pits/quarries in Pandamatenga, Lesoma, Kazungula, Kavimba, and Kachikao by 2004. To facilitate the carrying-out of geo-technical surveys in the above listed villages by 2005.
To improve the perception of customers towards land allocating authorities in the district through public education on land matters	To conduct public campaigns on land use once every year in the Chobe district for the duration of DDP 6 To conduct one public relations seminar for Chobe Land Board members and staff every two years until 2008/2009.

5.4 Framework for Strategic Environmental Assessment

Goal 1

To facilitate efficient and equitable land distribution in the district through appropriate policies.

No negative environmental impacts are anticipated.

Goal 2

To strive to preserve land suitable for arable production in the district by minimising conflict between wildlife and arable agriculture.

Blocking of animal corridors, wildlife mortality and loss of bio-diversity could be the major impacts.

Goal 3

To speed up land allocation through streamlined land allocation procedures.

Negative environmental impacts could include opening up more forest-land for development and the resultant cutting down of trees, dust and noise pollution.

Goal 4

To facilitate a speedy development of allocated land in the district through relevant policies.

Adverse impacts include opening up more forest-land for development and the resultant cutting down of trees, dust and noise pollution. There could also be destruction of artefacts.

Goal 5

To facilitate reclamation of waste-land through assessment of the potential use of land.

No adverse impacts are anticipated.

Goal 6

To improve the perception of our clients towards the Chobe Land Board through public education on land matters.

No environmental impacts are anticipated.

Policies and programs that could have significant negative environmental impacts are:

- Chobe Settlement Strategy- annexation of more land from conservation area for tourism, subsistence agriculture as well as fencing away human settlements and grazing/ploughing area from wildlife using an electric fence could lead to wildlife mortality and loss of bio-diversity.
- Tourism policy- Besides requiring more land for development of tourism infrastructure, the proliferation of lodges/hotels inside the Chobe National Park and its vicinity and the resultant mobile safaris could lead to adverse ecological impacts on the Park. The wilderness aspect of the Park is also being compromised for economic benefits.

- CEDA- The application of CEDA uniformly across the country is likely to put pressure on the district to open up conservation areas in order to meet demand for land and in the process the district could lose valuable tree species in the district.
- CITES- With the international trade in ivory unlikely to be relaxed, the high elephant population in the district could result in both rangeland degradation and elephant starvation and ultimate mortality.

5.5 Proposed Strategies to Achieve Land Use Goals

Goal	Projects	Negative impacts	Mitigation
To facilitate efficient and equitable land distribution through appropriate policies	Preparation of land use plans, village development plans, village layout plans, waterpoint survey.	nil	nil
To strive to preserve land suitable for arable production by minimising conflict between wildlife and agriculture	Study on feasibility of electric fencing ploughing fields	Blocking of wildlife corridors, wildlife mortality, loss of biodiversity	SEA, EIA, Audit
To speed up land allocation through land servicing and streamlined land allocation procedures	Land servicing, revision of land allocation guidelines, development of land allocation criteria	Loss of biodiversity by opening up forests, destruction of artefacts, soil erosion	Archaeologi cal impact study Tree re- planting
To facilitate a speedy development of allocated land through relevant policies	Initiation of relaxation of repossession requirements, plot repossession and re-allocation	Cutting down of trees, loss of biodiversity, dust and noise pollution, destruction of artefacts, excessive extraction of construction materials	Tree replanting, EIA, archaeologi cal impact assessment materials
To facilitate reclamation of waste-land through assessment of the potential use of land	Inventory of waste dumps, assessment of potential use of waste dumps, geo-technical surveys	nil	nil
To improve public perception towards Chobe Land Board through public education	Public education campaigns	nil	nil

Like in the previous chapter, performance targets will only be meaningful when annual plans are prepared; as such they are not indicated in this plan.

5.6 Resource Requirements for DDP 6

5.6.1 <u>Performance targets for DDP 6</u>

Goal	Activity	Start date	End date	Monitoring
To facilitate efficient and equitable land distribution through relevant policies	Prepare land use plans Prepare village plans Prepare village lay-outs	Jun 2003 Apr 2005 Mar 2003	Dec 2005 Jun 2006 Nov 2004	Quarterly reports to DLUPU, DDC, L/Board
To strive to preserve land suitable for arable production by minimising conflict between wildlife and agriculture	Conduct study on feasibility of electric fencing	Apr 2003	Mar 2005	Quarterly reports to DLUPU, DDC, L/Board
To speed up land allocation through land servicing and streamlined land allocation procedures	Demarcate land Service land Revise land allocation guidelines Develop land allocation criteria	Apr 2003 Feb 2004 Jan 2003	Mar 2007 Apr 2008 Jul 2003	Quarterly reports to DLUPU, DDC, L/Board
To facilitate speedy development of allocated land through relevant policies	Initiate relaxation of repossession requirements Repossess & allocate 100% of customary titles in Kazungula Repossess & allocate 100% of ALSP plots	Apr 2003 Apr 2003 Apr 2003	Jul 2003 Dec 2003	Present identified clauses to L/B, Lands. Bi-monthly progress reports to L/B, Lands
To facilitate reclamation of waste-land through assessment of the potential use of land	Inventorise waste dumps Assess potential of waste dumps Conduct geo-technical surveys	Apr 2003 Jul 2003 Feb 2004	Jun 2003 Nov 2003 May 2004	Submit report end April to Lands. Report to reference group every three months
To improve public perception towards Chobe Land Board through public education	Conduct public education Conduct seminar for Land Board	Jun 2003 May 2003	Jul 2009 May 2009	Regular reporting to DDC

5.6.2 <u>Development budget for DDP 6</u>

Goal	Activity	Amount (Pula)
To facilitate efficient and equitable land distribution through relevant policies	District land use plan & village plans, GPS high technology, water-point survey	850 000
To strive to preserve land suitable for arable production by minimising conflict between wildlife and agriculture	Conduct a study on feasibility of electric fencing, EIA	50 000
To speed up land allocation through land servicing and streamlined land allocation procedures	Land surveying, servicing, Environmental and Archaeological impact study	65 500 000
To facilitate speedy development of allocated land through relevant policies	Land repossession	0.00
To facilitate reclamation of wasteland through assessment of the potential use of land	Inventory, assessment, and geo-technical survey	100 000
To improve public perception towards Chobe Land Board through public education	Seminars	20 000

CHAPTER SIX

6 SETTLEMENT AND HOUSING

6.1 Introduction

Housing and sustainable development are key components of people's well-being and national sustainable development. Botswana, and in particular the Chobe District is committed to ensuring that there are sustainable human settlements which make efficient use of resources within the carrying capacity of ecosystems thereby contributing to the achievement of national sustainable development goals.

In Chobe, housing conditions are varied between those in major villages and those in small villages. They generally depend on the availability of income and to a certain extent, on the land tenure. Generally, housing conditions are good in the district.

6.1.1 <u>Institutional</u> framework

Settlement planning and housing is the portfolio responsibility of the Ministry of Lands and Housing whose role is to formulate policies and legislation related to land use planning and housing delivery. At district level a number of institutions are responsible for housing and human settlement management. In Chobe, the major players are the Chobe Land Board for residential land allocation on tribal land, the Department of Lands for residential land allocation in Kasane township, the Council, through the Selp Help Housing Agency (SHHA) program for provision of loans and technical expertise to low income earners, and the Botswana Housing Cooperation (BHC) for provision of rented accommodation to the general population. The private sector (Habitat for Humanity) also plays a role in assisting community members, especially low income earners by constructing them houses with the owner paying back the expenses in installments. The commercial sector, through the Botswana Building Society also provides loans to plot holders for house construction.

6.1.2 <u>Strategic Plans for Respective Ministries</u>

6.1.2.1 Ministry of Lands and Housing

With the development of the vision, mission and values which provide the strategic direction of the Ministry, key result areas are required and provide the ministry with outcome measures that will enable it to assess progress towards its strategic foundations. The key result areas as far as housing and settlement is concerned are outlined as follows:

- Availability and equitable distribution of land. Due to a shortage of land for settlement expansion, the Chobe district requested the government to excise portions of the forest reserves to augment both tribal and state lands. After the request was granted, the district prepared land use and development plans to guide land allocation and also came up with guidelines on how to equitably allocate the land.
- Housing delivery and home ownership facilitated. The Council continues to give SHHA loans to eligible applicants, and currently more than 95% of SHHA plots are developed with the assistance of the Council, and Habitat for Humanity

to mention a few. The BHC also rented out and sold some of their housing stock. However, very few non-SHHA plots are developed and may be repossessed undermining this target. On tribal land, there is a gradual shift from reed and mud huts to concrete and zinc roofed houses.

• Environment friendly and conscious nation. Local authorities will have to do a lot to continue sensitizing plot holders of the need to build durable and environment friendly houses to reduce uptake of construction materials and also to take advantage of natural heating/cooling.

6.1.2.2 Ministry of Local Government

The Ministry of Local Government strategic plan identifies several issues that affect the social welfare of communities in Botswana, but of major importance to settlement planning and housing is the target of policy implementation effectiveness. Experience from the past in Chobe shows that the ministry's policy implementation was not very effective. As a result, quite a good number of SHHA (163) and non-SHHA (400) plots in Kasane remain unserviced despite the fact that they were demarcated more than 10 years ago.

6.1.3 Settlement and Housing Consultation Priorities

Issues of priority during consultations included the following.

- Inadequate land servicing to facilitate housing delivery
- Need for extension of SHHA to rural areas
- Unhygienic standard of Kasane Old SHHA area
- Shortage of staff accommodation
- Lack of access to the river front in Kasane due to numerous jetties along the river
- Unavailability of a public bus rank in Kasane
- Shortage of land for settlement expansion.
- Relaxation of prevailing institutional rigidities pertaining to land allocation procedures.

N.B. The last two issues are captured under Chapter 5.

6.2 <u>National Policies And Legislation</u>

6.2.1 Vision 2016

Botswana's Vision 2016, under the pillar, A Prosperous, Productive and Innovative Nation provides that settlement growth and development in Botswana will be sustainable by the year 2016. It further states that all Batswana will be able to obtain access to good quality basic shelter, in both urban and rural areas. The Chobe District has already started to work towards realizing this vision by mobilizing the private sector (Habitat for Humanity), housing institutions like the Botswana Housing Corporation, and housing oriented commercial institutions like the Botswana Building Society to participate in housing delivery and implementation of the provisions of the revised policy on housing in Botswana.

However, several policies could either facilitate or hamper the realisation of Vision 2016 in as far as housing delivery and settlement patterns are concerned.

6.2.2 National Settlement Policy

The relaxation of the population quota for qualification to be a recognised settlement is not likely to have any impact on the number of recognised settlements in the district. This is in view of the fact that the current unrecognised settlements consider themselves to be either cattle-posts or lands areas. Already communities are asking for more land specifically for grazing and to a lesser extent, ploughing. As such it would not be wise for them to want to turn their few grazing/ploughing areas into villages where their livestock are likely to be moved out.

6.2.3 Chobe Settlement Strategy

Implementation of this strategy, which among others calls for annexation of more land from conservation areas to augment settlement areas could lead to more housing delivery which would be consistent with Vision 2016. However, by so doing, the district could also be impacting negatively on the protected natural resources of the district which the strategy agitates for protection. On another positive note, the Settlement Strategy together with other settlement development plans like the Kasane/Kazungula Development Plan and the Pandamatenga Development Plan will go a long way in rationalizing and shaping the socio-economic and physical outlook of the settlements in the district.

6.2.4 National Housing Policy

This policy advocates for provision of good quality basic shelter in both rural and urban areas. It further advocates for changing the role of government from home provision to that of facilitator, channeling of more resources to low and middle income housing, promotion of housing as an economic empowerment tool, and promotion of a partnership with the private sector in home development and ownership. Already all these objectives are being realised in the district through the SHHA scheme, as well as the private sector - the Habitat for Humanity. However, expansion of the SHHA scheme would require additional manpower for implementation and monitoring.

6.2.5 Self Help Housing Agency (SHHA)

Provision of building materials loan and technical expertise under this scheme has drastically changed the physical outlook of Kasane. Of 851 (453 in Old SHHA and 398 in Plateau) SHHA plots allocated in Kasane, 95% have been developed mainly through this scheme and a few with the assistance of the private sector. This contrasts with non-SHHA plots of which very few have been developed and are due for repossession. It should be noted though that the Old SHHA area requires upgrading. It however remains to be seen how the scheme will fare in the rural areas.

It is worth noting and appreciating the critical importance to housing and settlement of the Town and Country Planning Act, Tribal Land Act, State Land Act, Surveys Act to mention a few. These pieces of legislation give planning guidelines on land use and land allocation procedures.

6.3 <u>Settlement And Housing</u>

6.3.1 Settlement patterns and morphology

All settlements in the Chobe enclave and the township evolved due to the influence of the Chobe river system and the Lake Liambezi water bodies. The people relied on the water for drinking, sourcing food like fish, watering livestock from the river, and ploughing on the nutrient rich flood plains. The settlement patterns have as a result adopted a linear pattern and growth along courses of water bodies. It is only now with almost all the land along the river allocated that village

expansions are outwards, away from the river. Similarly, Kasane and Kazungula are also located along the Chobe river. Meanwhile, the villages in the east evolved as outbreaks from the main settlements of Kasane and Kazungula and some migrated from the Nata areas.

6.3.2 Physical development growth

The development growth of all the villages in Chobe except the Kasane – Kazungula Planning area has been fragmented with no proper planning such that allocations were done ad-hoc giving a fragmented growth with no clear pattern. However, the situation is changing now with a village plan for Pandamatenga already in use, and layout plans for Lesoma, Kavimba and Kachikau also in use. Steps are underway to prepare village layout plans for Satau, Parakarungu, and Mabele during the plan period. Currently, a land use and development plan is being prepared for the Chobe Enclave to rationalise land use in the area, and most importantly to prepare a management plan for the Chobe Enclave Conservation Trust which is the concessionaire in the Chobe Enclave. Recently, a land use plan for communal area CH 5 was prepared and is awaiting a final presentation to the Land Board.

6.3.3 Housing demand and supply

During this plan period efforts will be made to carry out an exercise to determine housing demand and supply in the district. This will help in coming up with an appropriate housing plan for the district.

6.3.4 General infrastructure and services

The infrastructure in the district is fairly provided in the three major settlements of Kasane, Kazungula and Pandamatenga which have electricity, water, telephones and are accessed through tarred roads. In addition, Kasane and Kazungula have a sewerage system. However, Kasane needs to be greatly improved as far as infrastructure is concerned if it is to be perceived as a tourist town. The remaining five settlements in the Chobe enclave, Mabele, Kavimba, Kachikau, Satau, and Parakarungu do not have any of the basic infrastructure like telecommunications, tarred road, and potable water. The tarred road from Kasane ends at the Ngoma immigration gate and from Ngoma to Parakarungu which is the last village in the Enclave, the road is gravelled. During DDP 6, the road will be tarred up to Kachikau. Electricity has been reticulated to all the villages except Parakarungu. Facilities like schools, clinics or health posts are well provided in all the villages.

6.4 Settlement and Housing Goals And Objectives

Table 6.1 Settlement and Housing goals and objectives

Goals	Objectives	
To facilitate a speedy allocation of land for housing delivery and economic development	To demarcate Plateau Extension residential plots by 2003/04 To service all Plateau residential plots by 2004/05 To service Westernale New Standard residential plots by 2004/05	
-	To service Kazungula New Stands residential plots by 2004/05	
	To service Kazungula CBD by 2004/05	
	To service Pandamatenga commercial and industrial plots by 2003/04	
To facilitate housing delivery and	To extend SHHA to rural areas every year of DDP 6	
ownership	To secure SHHA loans for Kasane every year of DDP 6	
	To secure SHHA loans for rural areas every year of DDP 6	

Goals	Objectives
	To purchase two vehicles for rural SHHA by 2003/04
To strive to secure hygienic living standards in Kasane Old SHHA	To upgrade Kasane Old SHHA by 2003/05 To promote effective waste disposal in residential areas every of DDP 6
To alleviate the problem of shortage of staff accommodation	To construct staff residential accommodation units for the four local authorities every year of DDP 6
To secure public access to the river front	To construct communal jetty in Kasane by 2004/05
To ensure availability of properly designated public bus rank	To construct a public bus rank in Kasane by 2005/06

6.5 Framework For Strategic Environmental Assessment

6.5.1 Evaluation of sector goals and objectives

Goal 1

To facilitate a speedy allocation of land for housing delivery and economic development.

Anticipated negative impacts include loss of biodiversity and destruction of artifacts from ground clearing, noise and dust pollution from construction of sewer lines.

Goal 2

To facilitate housing delivery and ownership-

Due to the anticipated high demand for housing loans in the rural areas, the district will experience extensive opening up of the remaining available land and even encroach into the forest reserves. Consequently, there will be diversion of animal movements and corridors, destruction of artifacts, loss of fauna and flora, soil erosion and land degradation from extensive land clearing, and the change in the scenic beauty of the landscape due to the expected housing boom.

Goal 3

To strive to secure hygienic living standards in Kasane Old SHHA

Significant negative impacts include noise and dust pollution from destruction of old houses and building of new ones, as well as the temporary displacement of the current title owners during the upgrading exercise.

Goal 4

To alleviate the problem of shortage of staff accommodation

Adverse impacts include noise and dust pollution, destruction of artifacts, and loss of flora and fauna during land clearing and construction.

Goal 5

To secure public access to the river front

Negative impacts include river bank erosion during construction and operation phases, and localized noise pollution from too many boats operating at one point.

Goal 6

To ensure availability of properly designated public bus rank.

Noise and dust pollution and destruction of artifacts are the main potential adverse impacts.

6.5.2 Evaluation of policies and programs

6.5.2.1 National Settlement Policy

With no new settlements in Chobe unlikely to be declared recognized settlements during DDP 6, no adverse impacts are anticipated due to the application of this policy.

6.5.2.2 <u>District Settlement Strategy</u>

The strategy advocates for more annexation of land from forest reserves to augment communal land and also to fence out settlements and grazing/ploughing areas from wildlife by electric fence. The implementation of this strategy could lead to extinction of rare species in the forest reserves, diversion of wildlife movement patterns from encroachment of settlements into wildlife habitats, and wildlife mortality arising from contact with extensive electric fences as is already happening with Pandamatenga commercial farms fence.

6.5.2.3 National Housing Policy

The policy amongst others calls for extension of the SHHA scheme to rural areas. This is likely to put pressure on the forest reserves to be used as expansion areas due to shortage of land in the existing communal areas. Wildlife, including birds would be disturbed from their natural habitats, increasing wildlife-human conflict that already exists.

6.5.2.4 Town and Country Planning Act

Once an area is declared a planning area, a development plan has to be prepared in two years to guide development. This enhances environmental protection as it seeks to optimize land use. However, depending on the components of the development plan, there may be adverse impacts. And also, being a planning area requires certain services which usually impact negatively on the environment.

6.6 Strategies to achieve Settlement and Housing goals and objectives

Table 6.2 Strategies to achieve goals and objectives

Goal	Projects	Negative impacts	Mitigation
To facilitate a speedy allocation of land for housing delivery and economic development	Plot demarcation Plot servicing	Noise and dust pollution, destruction of artifacts, loss of biodiversity, soil erosion	SEA, EIA, AIA, tree re-planting
To facilitate housing delivery and ownership	Plot demarcation Plot servicing Securing of loans House construction Purchase vehicles	Opening up of forest land, blocking of animal corridors, destruction of artifacts, noise and dust pollution, loss of flora and fauna, soil erosion, land degradation, development of quarries	SEA, EIA, AIA, Audit, re- vegetation, avoidance of sloping surfaces, land reclamation
To strive to secure hygienic living standards in Kasane Old SHHA	Upgrade Old SHHA Promote proper waste disposal methods	Noise and dust pollution, displacement of titleholders, excessive mining of building materials	EIA, AIA, Land reclamation
To alleviate the problem of shortage of staff accommodation	Construct staff houses	Noise and dust pollution, loss of biodiversity, destruction of artifacts, excessive mining of top-soil	Avoid cutting down trees (where possible), re-plant trees, land reclamation
To secure public access to the river front	Construct communal jetty	River bank erosion, noise and dust pollution	EIA, blend the jetty with existing vegetation
To ensure availability of properly designated public bus rank	Construct public rank	Noise and dust pollution, destruction of artifacts	EIA, AIA, re-plant trees

6.7 Resource Requirements for DDP 6

6.7.1 <u>Issues and Strengths</u>

All the projects have been budgeted for. However, the shortage of land will the major constraint towards the expansion of the SHHA scheme to rural areas. This is despite the fact that already the district is preparing a land use plan for the recently degazzetted 6000 hectares of land from the Chobe forest reserve. The demand for land is likely to be overwhelming. To negotiate annexation of more land from conservation areas is a very lengthy process. The other constraint towards extending the SHHA scheme to the rural areas is shortage of trained personnel to implement and monitor the scheme as it is rolled out. Kasane township has been without a Senior Housing Officer for more than two years and the post of the Principal Housing Officer has been

transferred to the headquarters in Maun leaving the Kasane office with skeletal staff. On a positive note, however, the construction of the communal jetty, bus rank, and staff houses will not face problems of land shortage as land has already been earmarked for them.

6.7.2 <u>Performance Targets and Plan Monitoring</u>

Table 6.3 Performance targets and monitoring

Goal	Project	Start date	End date	Monitoring
To facilitate a speedy allocation of land for housing delivery and economic development	Plot demarcation Plot servicing	2003 2003	2004 2005	Quarterly reports to DDC, Council
To facilitate housing delivery and ownership	Plot demarcation Plot servicing Securing of loans Purchase vehicles	2003 2004 2003 2003	2009 2009 2009 2004	Quarterly reports to DDC, Council
To strive to secure hygienic living standards in Kasane Old SHHA	Upgrade Old SHHA Promote proper waste disposal methods	2003 2003	2005 2005	Quarterly reports to DDC, Council
To alleviate the problem of shortage of staff accommodation	Construct staff houses	2003	2009	Report to Ministry of Housing, DDC, Council
To secure public access to the river front	Construct communal jetty	2004	2005	Quarterly reports to DDC, Council
To ensure availability of properly designated public bus rank	Construct public rank	2005	2006	Quarterly reports to DDC, Council

6.7.3 Development Budget for DDP 6

Tables 6.4 to 6.7 below show the district budget for the duration of DDP 6.

Table 6.4 LG 301 District Housing

Project	Location	Year	D.A.	T.A.	Land Board	Council	Funding
Housing	Kasane	2003/04	3 X LA2	1 FLAT	-	-	4 097 000
Housing	Kasane	2004/05	-	-	2 X LA2	1 FLAT	4 097 000
Housing	Kasane	2005/06	1 FLAT	-	-	2 X LA2	4 097 000
Housing	Kasane	2006/07	-	1 FLAT	1	2 X LA2	4 097 000

Housing	Kasane	2007/08	2 X LA2	-	-	1 FLAT	4 097 000
Housing	Kasane	2008/09	1 FLAT	2 X LA2	2 x LA2	-	4 060 000
TOTAL							28642 000

Proposed housing for other government departments is outlined in their different sector chapters.

Table 6.5 LG 1113 Urban Services

Project	Location	Justification	Year	Funding
Cadastral Surveying of plots	Kasane	To avail serviced land for housing in Township	2003/ 2004	2 500 000
Infrastructure design and construction	Kasane	To avail serviced land for housing in Township	2004/ 2005	18 000 000
Public Jetty	Kasane	To curtail mushrooming of private jetties along the Chobe river.	2004/ 2005	500 000
Design and construction of bus rank	Kasane	To provide a properly serviced bus rank in Kasane	2005/ 2006	5 000 000
TOTAL				26 000 000

Table 6.6 LG 1111 Village Infrastructure

Project	Location	Justification	Year	Funding
Infrastructure Construction	Kasane	To avail serviced land for housing in Kasane Township.	2004/ 2005	10 000 000
Infrastructure design and construction	Kazungula (New Stands)	To avail serviced land for residential development in new stands.	2004/ 2005	23 500 000
Infrastructure design and construction for Kazungula CBD.	Kazungula CBD	To avail serviced land for commercial activities,	2004/ 2005	3 500 000
Infrastructure construction	Pandamaten ga	To avail serviced land for commercial, industrial, and agro industrial activities.	2003/ 2004	6 000 000
TOTAL				41 000 000

Table 6.7 LG 201 SHHA Development

Project	Location	Justification	03/04 '000	04/05 ' 000	05/06 ' 000	06/07 ' 000	07/08 ' 000	08/09 ' 000	Cost '000
Upgrading Old SHHA area (design and construction).	Kasane,	Fully upgrade low income housing area (old SHHA).	1 500	10 000					12 300
SHHA Loans for Kasane	Kasane, and all the 8 villages.	To avail housing finance for the self help programme	980	1 500	1 500	1 500	1 500	1 500	12 000
SHHA LOANS Chobe West and East	Kasane	To avail housing finance for the self help programme	5 600	6 000	6 000	6 000	6 000	6 000	35 600
2 vehicles for Chobe West and East	Chobe West and East	To facilitate effective implementatio n of the rural SHHA scheme	400						400
TOTAL						60 300			

6.7.4 Plan Monitoring Programme

Quarterly reports and Mid-term reviews will be submitted to DDC and the Council.

CHAPTER SEVEN

7 AGRICULTURE

7.1 Introduction

The Chobe district is marketed as a tourist destination. This is due to the rich wildlife resources and the magnificent Chobe-Zambezi river system as well as the forest resource found in the district. However, because of the relatively low employment opportunities in the district, a majority of the residents of Chobe still rely on subsistence agriculture. Arable agriculture continues to be a priority in the Chobe District despite the problem of land shortage and unreliable rainfall. Intensive forms of agriculture such as horticulture, beekeeping, piggery and poultry are encouraged despite the land shortage. Livestock production is hampered by a shortage of grazing land, predation and limited marketing opportunities.

7.1.1 Institutional Framework

Even though the Ministry of Agriculture comprises of several departments, there are only three that are available in the Chobe district. These are the departments of Crop Production and Forestry (CP&F), Animal Health and Production AH&P), and Cooperatives. They are headed by the District Agricultural Officer, Veterinary Officer, and the Cooperatives Officer respectively. The department of Crop Production and Forestry provides extension services in crop and horticultural production as well as preparing agricultural land use plans and managing forest resources. The department of Animal Health and Production promotes diversified and improved livestock production, while the department of Cooperatives provides services to the cooperative movements.

7.1.2 <u>Strategic Plans for Respective Ministries</u>

7.1.2.1 Ministry of Agriculture

The ministry's target areas are as follows:

- Diversification of the agricultural produce through amongst others improved technology, sustainable exploitation of natural resources, and creation of markets for agricultural produce. With abundant water resources, and good soils for arable production, unique forest reserves, as well as proximity to three countries, Chobe is in a favourable position to diversify and market its agricultural produce. However, production is hampered by wildlife destruction of crops, predation, and the general shortage of land. The prevalence of Foot and Mouth Disease (FMD) in Chobe also hampers commercial livestock farming.
- Agricultural development to focus on dairy, poultry, piggery, fishery, ostrich farming, horticulture, veld products to mention a few to create employment. The shortage of land makes most of these activities unrealisable save for fishery in the Kwando-Linyanti area. Otherwise a considerable stretch of the Chobe river falls in the national park where fishing is prohibited.
- Development of policies to target strategic products like leather, oil seeds, milk, cotton, and other dairy products.

7.1.2.2 Ministry of Trade, Industry, Wildlife and Tourism

The ministry's target areas are as follows:

- A conducive environment for business. Due to its closeness to three countries, Chobe district would benefit greatly from business agreements meant to foster mutual trade where no trading partner benefits unduly over the other.
- Protection of consumer rights. Due to the monopoly of the business sector by the tourism industry in Chobe, prices for the tourism facilities are exorbitant and even prices in the retailer's shops are quite high by all standards.
- Management of wildlife resources to meet local and global challenges. Despite of efforts by the Anti-Poaching Unit of the department of Wildlife and National Parks to reduce human-wildlife conflict in Chobe, the problem is not abating. The district would therefore welcome any management intervention aimed at minimising the conflict.

7.1.2.3 Ministry of Lands and Housing

The ministry's target areas are:

- Availability and equitable distribution land. Chobe district has virtually no land for economic activities other than wildlife and forestry utilisation. Given more land, the district has considerable resources to contribute towards achieving some of the targets set by the Ministry of Agriculture.
- Facilitation of housing delivery and ownership. This target area has no bearing on the agricultural sector.
- Environment friendly and conscious nation. The Chobe eco-system is documented as sensitive, and as such, agricultural developments in the area should be subjected to environmental monitoring tools like Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA), and Environmental Management Plan (EMP) amongst others.

7.1.2.4 Agriculture consultation priorities

Issues raised during community consultation meetings as well as public officers included:

- A shortage of land for agricultural production.
- Review of the Forestry policy and Act to guide sound forestry management.
- Electric fencing of ploughing fields and livestock areas from wildlife.
- Need for provision of infrastructure at the Pandamatenga commercial farms.
- Need for introduction of artificial insemination, group marketing of livestock, and improved animal husbandry.
- A shortage of expert manpower in all the ministry's departments in Kasane.

7.2 <u>National Policies and Legislation</u>

7.2.1 Vision 2016

Botswana's Vision 2016 recognizes the country's considerable natural resources potential that could be exploited for the benefit of its citizens. Some of these resources are good arable soils, good grazing, water resources, and human resources. It also acknowledges the availability of constraints some of which are, saline groundwater, livestock diseases, vast desert conditions, and lack of skilled manpower. However, one of the Vision pillars, whilst appreciating the foregoing, advocates for a prosperous, productive, and innovative nation. Notwithstanding the limitations Chobe has, the district can still be innovative enough to overcome some of the constraints. Even though there is a shortage of land in the district, Chobe could opt for more intensive forms of agriculture to make use of the little amount of land at its disposal.

7.2.2 <u>Community Based Strategy for Rural Development</u>

The strategy seeks to improve livelihoods of the rural population. Decentralisation of government functions, targeted economic incentives towards rural areas, and devolving natural resources management to communities are some of the strategies meant to improve the livelihoods of the rural population. In the Chobe district, opportunities exist in the form of community utilisation of the forest resources once the Forestry policy is in place. Fisheries could be another option. Even though fishing is not allowed in the park, a concession could be made for an organised group to fish in the park in as much as concessions are given for tourism operations within the park.

7.2.3 <u>District Settlement Strategy</u>

The Chobe District Settlement Strategy advocates for improving options for the livelihoods of the communities. Noting that the main source of livelihood for the majority of the population is agriculture, and that agricultural production is hampered by among others, wildlife, the strategy argues for fencing out arable fields and livestock areas by an electric fence. Whilst this will definitely increase production and contribute towards the strategic plans of the ministry, it will create another problem for the wildlife industry which is also being nurtured to ultimately improve not only the state revenues, but also the livelihoods of the rural population.

7.2.4 <u>National Forest Policy</u>

The policy aims to lay down management guidelines for the conservation of the woodland resources, including forest woodlots. It also aims at opening up the forest reserves to be utilised by the community. Noting that the forest reserves occupy close to 20% of the district, community utilisation of the forest reserves would to some degree offset the costs associated with the shortage of land in the district.

7.2.5 <u>National Policy on Agricultural Development</u>

The policy advocates for commercialisation of both the livestock and the arable sectors of agriculture. In the livestock sub-sector, it agitates for fencing of communal rangelands by syndicates, communities, or individuals to improve production. Due to the shortage of communal land in Chobe, the Foot and Mouth Disease Red Zone status of the district, and the undesirability of blocking wildlife movement patterns by fences in a tourist area, this component of the policy is not feasible. In the arable sub-sector, the policy advocates for commercialisation of arable and dairy production through the National Agricultural Master Plan for Arable Agriculture and Dairy Development (NAMPAADD). Preliminary soil suitability results indicate that the Chobe district could be piloted for this policy. For similar reasons advanced for the livestock sub-sector, and the

fact that the arable commercial farms at Pandamatenga are not yet optimally utilised, it would be unwise to implement this policy in Chobe.

7.2.6 <u>Convention on Combating Desertification</u>

The Convention calls for measures to be put in place to reduce or reverse the rate of desertification identified in some sub-Saharan African countries, Botswana included. Some areas in Botswana have been identified to be undergoing desertification and are targetted for amelioration projects such as community woodlots and tree planting amongst others. Chobe is not one of the areas undergoing desertification. However, the Ministry of Agriculture has identified pockets of areas in the district where erosion is taking place and remedial measures like tree planting and cordoning affected areas off from use were put in place.

7.3 Agricultural Sector Activities

This setion summarises activities that the different sub-sectors of the ministry undertake on a regular basis.

7.3.1 Crops

The crops sector is responsible for promotion and improvement of the arable sector by promoting use of improved crop production techniques, control of non-migratory pests and weeds and organisation of district agricultural shows. The sector also promotes diversification of the arable sector by facilitating planting of bee plants. One major project the sector is engaged in is the provision of road and sewerage infrastructure to the commercial farms at Pandamatenga with the aim to improve production. The shortage of land for agricultural development in Chobe is a major set-back to the arable sector.

7.3.2 Animal Health and Production

This sector is responsible for improvement of the national livestock herd qualitatively and quantitatively. It conducts bi-annual Foot and Mouth disease campaigns and surveillance of other livestock diseases. Being a Foot and Mouth disease Red Zone, one of the primary functions of the sector in Chobe is to control the disease from spreading to other districts. Shortage of Skilled personnel is a major problem in this sector. Further, there is not enough grazing land for livestock.

7.3.3 Forestry

The Forestry section is responsible for the management of the natural woodlands through policy guidance and development of management plans. This role is more pronounced in Chobe because of its forest reserves that need to be protected. The shortage of skilled personnel is however likely to impact negatively in the management of these forest reserves.

7.3.4 <u>Cooperatives</u>

The department of Cooperatives promotes formation of Cooperative societies. It audits and inspects the operations of these societies. It also runs workshops and courses for members of the Boards of these societies. With a relatively low population in Chobe, this task should not be very difficult to accomplish.

7.4 Agricultural sector goals and objectives

Table 7.1 Agricultural sector goals and objectives

Goal	Objectives				
To promote diversification of the agricultural sector	To promote intensive forms of agriculture for duration of DDP 6				
To promote sustainable use of	T review the Forest Act and Policy by 2004/05				
forest reserves	To research on resource utilisation and potential by 2003/04				
	To facilitate production of management plans by applicants when necessary				
To promote customer oriented extension service	To conduct workshops for extension staff on customer service every year of DDP 6				
	To facilitate recruitment of trained manpower in all fields for duration of DDP 6				
To facilitate improvement of	To promote animal health and disease containment by 2008/09				
agricultural production	To provide infrastructure to Pandamatenga farms by 2004/05				
	To improve farmer access to farm implements by 2006/07				
	To promote adoption of improved livestock husbandry techniques by 2008/09				
	To facilitate expansion of horticultural projects by 2005/06				
	To promote group marketing by establishing cooperative groups by 2005/06				
To promote Cooperative	To facilitate creation of youth cooperatives by 2004/05				
movement development	To promote formation of savings and credit societies in Chobe by 2008/09				
	To facilitate administration of the Cooperatives Act to Chobe Co-ops				
	To promote skills and knowledge transfer to Chobe Co-ops.				
To alleviate the problem of the shortage of staff and office accommodation	To construct staff houses and office block by 2006				

7.5 Framework for Strategic Environmental Assessment

7.5.1 Evaluation of goals and objectives

Goal 1

To promote diversification of the agricultural sector.

Negative impacts include pollution of both surface and groundwater arising from the use of chemicals.

Goal 2

To promote sustainable use of forest reserves.

The utilisation of forest reserves is likely to lead to loss of flora and fauna, increased human-wildlife conflict, and poaching of wildlife in the reserves.

Goal 3

To promote sustainable use of forest reserves.

No adverse impacts are anticipated.

Goal 4

To facilitate improvement of agricultural production

Expansion of horticultural projects would require additional land. Further, the use of fertilizers especially along the river could lead to contamination of the river with serious consequences for marine life. Infrastructure provision for Pandamatenga farms is likely to cause dust to the nearby village community arising from disturbance of the black cotton soil.

Goal 5

To promote Cooperative movement.

No adverse impacts are anticipated.

Goal 6

To alleviate problem of shortage of staff and office accommodation.

No major impacts are anticipated except for mining of building materials and localised dust pollution during construction.

7.5.2 Evaluation of policies and programs

- Community Based Strategy for Rural development. If communities are given the opportunity to utilize forest reserves as the strategy and the revised Forest policy advocate, there is likely to be an influx of people in the forest reserves either conducting tourism activities, or exploiting timber. In an area that hitherto has been a pristine wilderness area, human-wildlife conflict in the district will exacerbate. Unless an inventory of the rare species and their location in the reserves is made, the district is likely to lose in this regard. Poaching levels are also likely to rise with people having free access in the forest reserves, some of which share boundaries with the Park.
- **Convention to Combat Desertification.** Even though this convention is not applicable in Chobe, its activities actually enhance the environment.
- National Policy on Agricultural Development. Commercial livestock and arable production in the district will lead to social problems with the ordinary man having nowhere to practice subsistence farming. Implementation of NAMPAADD in Chobe would be an ecological disaster. Studies have been conducted in the past that showed that any further extension of the Pandamatenga commercial farms area would lead to disruption of the natural wildlife movement between the Chobe National Park and the Matetsi and Hwange wildlife areas. It would also cause serious destruction to the sensitive Chobe eco-system. Wildlife and human conflict will rise, and with blocking of natural trans-boundary wildlife movement routes, not only shall there be conflicts between Botswana and its neighbours, but there shall also be conflicts with environmental groups.

7.6 Strategies to achieve Agriculture sector goals and objectives

Table 7.2 Strategies to achieve goals and objectives

Goal	Projects	Negative impacts	Mitigation
To promote diversification of the agricultural sector	Workshops on horticulture, beekeeping, poultry, small stock	Nil	Nil
To promote sustainable use of forest reserves	Contribute to review of legislation Conduct research on resource utilization and potential	Nil	Nil
To promote customer oriented extension service	Conduct training of extension staff on customer relations	Nil	Nil
To facilitate improvement of agricultural production	Provide infrastructure at Pandamatenga farms Form Co-op groups Conduct promotional Workshops on horticulture, beekeeping, poultry, small stock Workshops on animal health	Noise, dust pollution	Nil
To promote Cooperative movement development	Creation of youth cooperatives Revive dormant co-ops, Conduct educational course for Board members Inspect and audit Co-ops Train cashiers and shop assistants Contribute to review of Co-ops Act	Nil	Nil
To alleviate problem of shortage of staff and office accommodation	Construction of storeroom, offices, staff housing and electrification of staff houses	Noise and dust pollution	Surround construction area with materials to reduce dust and noise

7.7 Resource requirements for DDP 6

7.7.1 <u>Issues and Strengths</u>

Chobe district faces a serious problem of shortage of skilled personnel in various sections of the Ministry of Agriculture. Part of the problem emanates from the district being serviced from either Francistown or Maun. Much as the ministry aims to promote intensive forms of agriculture, it would be very difficult to realize this objective under the present conditions where small stock, dairy, piggery, poultry, fisheries, and marketing officers amongst others are not based in Chobe.

7.7.2 Performance targets and Plan Monitoring Program for DDP 6

Table 7.3 Performance targets and Plan monitoring

Goal	Projects	Start date	End date	Monitoring
To promote diversification of the agricultural sector	Workshops on horticulture, beekeeping, poultry, small stock	2003	2009	Quarterly reports to DET, DDC, MOA
To promote sustainable use of forest reserves	Contribute to review of legislation Conduct research on resource utilization and potential	2003 2003	2004 2004	Quarterly reports to DET, DDC, MOA
To promote customer oriented extension service	Conduct training of extension staff on customer relations	2003	2009	Quarterly reports to DET, DDC, MOA
To facilitate improvement of agricultural production	Provide infrastructure at Pandamatenga farms Form Co-op groups Conduct promotional Workshops on horticulture, beekeeping, poultry, small stock Workshops on animal health	2003 2004 2004 2003	2004 2004 2006	Quarterly reports to DET, DDC, MOA
To promote Cooperative movement development	Creation of youth cooperatives Revive dormant co-ops, Conduct educational course for Board members Inspect and audit Co-ops Train cashiers and shop assistants Contribute to review of Co-ops Act	2004 2003 2004 2003 2003 2003	2005 2004 2009 2009 2009 2004	Quarterly reports to DET, DDC, MOA, MLHA
To alleviate problem of shortage of staff and office accommodation	Construction of storeroom, offices, staff housing, and electrification of staff houses	2005	2005	Quarterly reports to DET, DDC, MOA

7.7.3 <u>Development Budget for DDP 6</u>

Table 7.4 Development Budget Agricultural projects

Project title	Objectives	Target	Funds
Residential and Office Accommodation AG 109	To provide housing and office accommodation	Pandamatenga	P 618 860
Animal Diseases Emergency Control AG 201	To promote animal health and contain diseases	Chobe	P23 050 000
Services to Livestock Owners in Communal Areas	To enhance animal husbandry and raise production	Chobe	P5 823 306
Arable Lands	To improve access to farm	Chobe	P1 380 000

Project title	Objectives	Target	Funds
Development Programme AG 301	implements		
Development of Extension Services AG 315	Construction of Storeroom Electrification of staff houses	Mabele, Kachikau	P 738 260
Horticultural Development AG 354	To promote agricultural diversification	Chobe	P 112 500
Forestry and Apiculture AG 359	To encourage diversification	Chobe	P1 589 970
Pandamatenga Development AG 360	To enhance productivity in the commercial farms	Pandamatenga Farms	P31 854 000
Agricultural Research AG 423	To promote innovation and productivity	Pandamatenga Research Farms	P5 653 600
Cooperatives Development AG 501	To promote cooperative movement	Chobe	P2 500 000

CHAPTER EIGHT

8 TRADE, INDUSTRY, WILDLIFE AND TOURISM

8.1 Introduction

The Ministry of Trade, Industry, Wildlife and Tourism is represented at the district level by three departments. These are the departments of Wildlife and National Parks, responsible for the management of wildlife and other natural resources; Industrial Affairs, charged with the promotion of industrial development; and Tourism which is charged with the development and management of the tourism sector.

The Chobe district is well endowed with natural resources specifically the pristine Chobe National Park, Forest reserves and the Chobe river. These resources provide a great opportunity for development. Given the limited opportunities in other areas of commerce and industry, tourism and related activities are increasingly assuming a dominant role in the local economy.

8.1.1 Institutional Framework

8.1.1.1 Department of Wildlife and National Parks (DWNP)

The Department of Wildlife and National Parks is responsible for the conservation of indigenous wildlife resources and habitats both within and outside the Protected Areas. It takes an active role in how communities manage their natural resources and how they directly benefit from the sustainable use of those natural resources found in their areas.

The Kasane Wildlife Office is managed by the District Wildlife Coordinator, and it is a fully-fledged office with all the departmental divisions and units. These include the Management & Utilization; Parks division; Research division; Community Extension & Outreach division; and Management/Administration division. There are nine outstations within the district, which are also under the management of the District Wildlife office. These are Pandamatenga, Poha, Ngoma, Ihaha, Savuti, Mababe, Goha, Sedudu, and Linyanti.

8.1.1.2 Department of Industrial Affairs

Industrial development is spearheaded by the Integrated Field Services division. The division facilitates the transfer of skills, technology and provides business advisory services to entrepreneurs.

8.1.1.3 Department of Tourism

The District Tourism Office is charged with the development and management of the tourism sector by playing a coordinating role between government agencies, public and private sectors. It formulates and executes programmes designed to promote tourism development, while monitoring various industry activities to ensure that high quality service and facilities are offered to customers. The district office is managed by a Regional Tourism Officer who is based in Maun.

8.1.2 <u>Strategic plans for respective ministries</u>

8.1.2.1 Ministry of Trade, Industry, Wildlife and Tourism

With a Vision of effective and efficient organization focusing on business and providing quality service to its customers, the Ministry of Trade, Industry, Wildlife and Tourism set itself the following strategic key areas:

- Promotion and maintenance of equitable balance between business policy and consumer protection. This target area is relevant in the Chobe district where the private sector is monopolized by foreign owned tourism operators who either charge exorbitant prices for their services or are believed to be racist with the whole intention of keeping away the indigenous population from their operations. Much as foreign investment is promoted in the country, it should not be seen to be discriminating against a certain class of consumers.
- To encourage stakeholders to adopt and implement appropriate quality standards that improves the competitiveness of Botswana's products and services. The Chobe is promoted as a tourism destination despite the fact that it still lags behind competing regional tourism centres in terms of tourism infrastructure and development. It is therefore important that stakeholders set themselves high quality standards to lure tourists into the district. One area that needs improvement is the congestion in the Chobe river-front which is diluting the wilderness aspect of the Park. It would be worthwhile exploring and developing other parts of the Park to reduce congestion at one place.
- Industry specific policies need to be formulated and continually reviewed. Faced with competition from neighbouring developed tourism and commercial areas, it becomes important for industry specific policies and procedures that are not rigid, to accommodate the rapidly changing socio-economic environment. Tourism itself is a very sensitive business that requires minimal if any, rigidities in operational procedures, be they land use or license related rigidities.

8.1.2.2 Ministry of Lands and Housing

The ministry set itself the following target areas:

- Availability and equitable distribution of land. With Chobe being marketed as a
 tourism hub of the country, pressure is exerted on land authorities to avail land for
 tourism development. However, due to land shortage, this key result area is
 unlikely to be fully realised in the district. That notwithstanding, the approval of
 the Kasane-Kazungula Development Plan will alleviate the situation as more land
 will be available for different uses.
- Environment friendly and conscious nation. With the whole concept of development revolving around sustainability of resource use, and with the Chobe eco-system described as fragile, this target area is of utmost importance. It is hoped that the Environmental Assessment Act will be in place before major developments take place in Chobe.

8.1.2.3 Ministry of Local Government

The ministry set itself the following key result areas:

- Efficient service delivery and infrastructure provision. A shortage of funds, vehicles and necessary equipment makes it very difficult for the Council to discharge its mandate effectively, for instance, the unsightly waste dump in Kasane is unmanageable because of constant machinery breakdowns resulting in tourists complaining that it is an eye-sore. The shortage of funds makes it difficult to provide services to land that could be used for commercial and industrial development.
- Community quality of life. Wildlife and tourism already play a significant role in the livelihoods of the people in Chobe as well as the general economy. The commercial and industrial sectors are not yet developed. However, with the preparation and approval of the Pandamatenga Development Plan, as well as the installation of the road and sewerage infrastructure in the Pandamatenga farms, it is intended to develop Pandamatenga as an industrial base of the district, taking advantage of the produce from the farms. Already, there is a sunflower oil extraction plant at Pandamatenga that is operational.

8.1.3 Role of the Private Sector

In the wildlife sector, private sector participation in the district has been initiated through the formation of a Local Advisory Committee whose membership includes the private sector, government, and community leaders. The committee has been set up to advise the Director of Wildlife and National Parks on the management of the protected areas. The private sector, through the Hotel and Tourism Association of Botswana (HATAB) has been allocated sites in the Park to develop and manage campsites. A local Non Governmental Organisation, the Chobe Wildlife Trust has assisted the DWNP in the management of the park by drilling and equipping some artificial water-points in the Park for use by wildlife during the dry season.

The tourism sector is a domain for private investors (HATAB). The private sector is expected to conduct project specific studies for investment purposes, provide the necessary investment, training programmes for labour, and advise government on tourism and travel trends. In addition, given the ecologically fragility of the Chobe district, investors are expected to adopt environmentally friendly practices that are in line with sustainable utilisation and conservation.

Industrial development depends largely on a vibrant private sector. There are limited investors in the manufacturing sector in the Chobe district. The Rural Industries Promotion Company constitutes a major private company involved in rural industrial development. Through its subsidiary, the Rural Industries Innovation Center, the company is involved in research and development of appropriate technologies as well as provision of extension services to local entrepreneurs.

8.1.4 Consultation Priorities

Community consultations were undertaken at the inception of the plan preparation to tap ideas from the communities. These consultations have identified a number of development projects and issues to be incorporated in the DDP 6. These are:

- Low compensation rates, which do not reflect the market price/value of livestock, and crops destroyed by wildlife.
- Destruction of properties by problem animals. Property owners should be compensated.
- Need for review of the Forestry Policy and Act to allow Eco-tourism projects.
- Need for timely preparation of land use and development plans, and provision of land services to expedite commercial development.
- Need for creation of recreational facilities.
- Absence of linkages between small-scale retailers and manufacturers.

8.2 National Policies and Legislation

8.2.1 <u>Vision 2016</u>

One of the pillars of Botswana's Vision 2016, A Prosperous, Productive and Innovative Nation, urges the nation to take necessary steps to ensure that by the year 2016, conservation and development would be fully integrated. Communities would benefit directly form conserving and managing their natural resources. The Chobe district is already on course in this regard with two Community Based Organisations (CBOs) already benefiting directly from the utilisation of the wildlife resources in their vicinity. It is however not yet clear whether the funds accruing from this utilisation are used to benefit the larger community or just a select few in management positions. Neither is it clear as to whether some of the proceeds from this venture are ever used to enhance environmental conservation.

8.2.2 <u>National Licensing Act</u>

The Act gives authority to Local Licensing Committees to issue licenses for investment. In Chobe it has been operating well except that some investors feel that it takes too long for the committee to meet and consider their applications for licenses. The committee meets fortnightly. It is hoped that the Licensing bill before Parliament will address the situation.

8.2.3 Tourism Policy

The policy appreciates the extent of the range of tourism products the country has and seeks to ensure that the country derives maximum possible socio-economic benefits from these resources. Chobe being one district well endowed with such resources should benefit significantly. However, the industry is just developing and besides employment creation which ranks second after government in the district, not much has been realised. It should be noted though, that some of the benefits like Park and license fees go to the government treasury.

8.2.4 Tribal Land Act

The Act provides for zoning land into different land uses. In this regard, the district zoned five pieces of land as concession areas, three for the communities and two for the private investor. This was done in furtherance of the Wildlife Conservation Policy. Furthermore, some commercial and industrial plots have been demarcated to service the tourism sector.

8.2.5 Industrial Policy

The policy promotes the growth of the manufacturing and industrial sector, sustainable employment creation, economic diversification, and exports. The contribution of Chobe towards

the realisation of this policy is minimal. The district does not have significant industries that could contribute meaningfully to the attainment of the ideals of the policy, and quite a number of industrial plots allocated at Kazungula are undeveloped. It is argued that part of the reason for this situation is that it is expensive to transport materials from the source to Kasane.

8.3 Trade and Industry

8.3.1 <u>CEDA</u>

The Department of Industrial Affairs stands to promote industrial development. During DDP5, the Financial Assistance Policy (FAP) provided the main strategy for stimulating enterpreneurship and industrial development in the district. FAP has since been replaced by the Citizen Empowerment Development Agency scheme, which is to become the main driving force during DDP6. CEDA gives loans to eligible applicants, with the applicant paying security. Chobe is serviced from Francistown and Maun, about 500 km and 600 km away respectively, hence distance could be a disincentive. Further, land shortage, inadequate market due to small size of the population, and land use conflicts are limiting factors with regards to making use of the scheme.

Chobe has limited opportunities for trade and industrial development. The sector is dominated by small-scale retailers and manufacturers. The shortage of serviced land, skilled manpower and distance from suppliers constitute the major constraints. Linkages with the tourism sector are minimal. In order to promote industrial development, emphasis should be placed on harnessing linkages to the more robust tourism sector.

8.3.2 Tourism

The tourism sector is relatively more developed than the trade and industrial sector, mainly because Chobe is predominantly a wildlife area with the scenic view of the Chobe-Zambezi river system. The sector is also robustly marketed both by the District Office and the Head Office. The sector is however still dependent on wildlife and needs to diversify to other forms of tourism like cultural tourism. Given that the district is one of the two prime tourism areas in the country, and one of the biggest tourism destinations in the region, there is need for it to be a fully fledged District Office, independent of the Maun Office.

8.3.3 Wildlife and National Parks

The department manages the wildlife resource within and outside the protected areas. The department drills and manages artificial waterholes that are used to water wildlife during the dry season when most of the pans are dry. Besides anti-poaching activities, the DWNP also conducts research on a wide range of issues related to wildlife. With a generous assistance from the European Union some years ago to fund the construction of offices, camp-sites and staff accommodation in the Park, coupled with yet another generous supply of a fleet of vehicles and manpower, the department should be fairly in a position to discharge its duties in line with its strategic plan.

8.4 Trade, Industry, Wildlife and Tourism Sector Goals and Objectives

Table 8.1 Trade, Industry, Wildlife, and Tourism Goals and Objectives

Goal	Objectives
Department of Wildlife and Na	tional Parks
To reduce human – wildlife conflict	To reduce the time taken to attend to problem animal control reports in Chobe district to two days by 2006 To train at least two CBOs in Chobe such that they can undertake problem animal control by 2003
To manage species –specific off-take level to fall within biologically sustainable quota by 2009	To reduce over-hunting due to abuse of licenses in Chobe district by 2005 To reduce the killing of animals as problem animals in Chobe district by 10% per annum throughout the plan period To reduce poaching levels by 10% by end of the plan period
To facilitate development of endangered species conservation strategy and policy	To list all endangered species in Chobe by April 2003 To contribute towards policy/strategy formulation by 2008/09
To educate the public such that they understand the importance of wildlife as a natural heritage	To educate the public in Chobe on the importance wildlife by 2006 To have viable projects in 80% of the schools in Chobe with environmental clubs by 2006
Department of Tourism	
To facilitate the development and implementation of entrepreneurial support programmes for the tourism industry in Chobe District through partnering with public and private sector organizations	To ensure community participation in planning, development, implementation and management of at-least two tourism projects in the Chobe District by 2005 To hold bi-annual workshops to empower communities in Chobe with viable tourism related opportunities by 2003 To facilitate provision of appropriate tourism education, training and awareness with emphasis on entrepreneurial development to target groups and individuals in Chobe by 2003 To secure support and involvement of private and public sector organizations in at-least two tourism projects in the Chobe District by 2005
To accelerate the diversification of the tourism product in the Chobe district by implementing strategic development mechanisms To promote the conservation and development of natural and cultural resources for sustainable and equitable tourism use through education and responsible integrated land—use planning	To undertake a resource audit in the Chobe district for product diversification purposes by 2003 To implement the marketing strategy in Chobe district by 2004 To implement the Eco-tourism strategy in Chobe district by 2005 To undertake bi-annual audits of cultural and natural areas in Chobe district to ensure proper management impacts over the plan period To ensure that locals have equitable access to natural and cultural tourist attractions in the Chobe district by 2004 To promote and market pride in Botswana's cultural and natural
To have readily available and accessible industry information	areas of Chobe district by 2005 To facilitate increased investment in conservation of cultural and natural areas of Chobe district by 2005 To put in place linking mechanisms between the District office and stakeholders in Chobe district by 2003 To have equipped District office staff with IT skills by 2003

Goal	Objectives
	To have improved IT facilities in the district office to a standard that supports the delivery of information by 2003
	To have created Chobe district information data bank by 2004
Department of Industrial Affai	rs
To have in place a highly skilled, motivated and productive workforce to carry out the Department's mandate and customer and stake holder's expectations in the Chobe District	To facilitate the recruiting of trained and qualified staff to fill up at least two of the vacant posts for the Kasane Office by 2003 To facilitate the training and equipping of the existing two staff posts for Kasane Office with appropriate work competencies on a continuous basis
To facilitate diversification of the trade and commerce industry by promoting utilisation of indigenous materials	To facilitate the formation of a basketry weaving group for Chobe Enclave people by the end of 2003 To facilitate the acquisition and development of project plot by 2004

8.5 Framework for Strategic Environmental Assessment

8.5.1 Evaluation of Sector Goals and Objectives

Goal 1

To reduce human-wildlife conflict.

No adverse impacts are anticipated. However, the impacts will depend on the type of intervention to be taken.

Goal 2

To manage species –specific off-take level to fall within biologically sustainable quota by 2006

No adverse impacts are anticipated.

Goal 3

To facilitate development of endangered species conservation strategy and policy.

No adverse impacts are anticipated. However, the impacts will depend on the type of intervention to be taken.

Goal 4.

To educate the public such that they understand the importance of wildlife as a natural heritage

There will be no adverse impacts.

Goal 5

To facilitate the development and implementation of entrepreneurial support programmes for the tourism industry in Chobe District through partnering with public and private sector organizations

No adverse impacts are anticipated.

Goal 6

To accelerate the diversification of the tourism product in the Chobe district by implementing strategic development mechanisms

Any negative impacts will depend on what the eco-tourism strategy entails.

Goal 7

To promote the conservation and development of natural and cultural resources for sustainable and equitable tourism use through education and responsible integrated land—use No adverse impacts as the goal actually enhances environmental protection.

Goal 8

To have readily available and accessible industry information

Adverse impacts are not anticipated.

Goal 9

To have in place a highly skilled, motivated and productive workforce to carry out the Department's mandate and customer and stake holder's expectations in the Chobe District

There will be no adverse impacts

Goal 10

To facilitate diversification of the trade and commerce industry by promoting utilisation of indigenous materials

There will be no adverse impacts.

8.5.2 Evaluation of Sector Polices and Programs

8.5.2.1 Tourism Policy

Even though the policy promotes deriving maximum possible socio-economic benefits from the tourism resources of the country, it has the potential to erode the wilderness aspect of the Chobe eco-system which is the marketing tool of the tourism sector. This is in view of the fact that the tourism policy calls for more land for development of the tourism infrastructure including community use zones in the Park.

8.5.2.2 CEDA

With the incentives provided by CEDA and its predecessor, FAP, there is already substantial demand for land which is one of the pre-requisites for a CEDA loan. In the absence of such land, there will be pressure to annex more land from the forest reserves to augment land for settlement expansion and other activities. Inevitably, there will be a conflict between CEDA and the Forestry policy which, while advocating for the utilisation of the forest reserves for eco-tourism activities, does not accommodate other land uses which CEDA promotes.

8.5.2.3 Wildlife Conservation Policy

The policy advocates for community utilisation of the wildlife resources in their vicinity. The communities are expected to manage their resources sustainably while deriving economic benefits from them. The spirit of the policy is to enhance natural resources conservation. While elsewhere it has been recorded that poaching levels went down considerably after the implementation of the policy, it is not clear whether the same can be said of Chobe because no audit has been done to-date. However, there are isolated cases of poaching in the community use areas which is against the policy. In short, the policy has both the negative and the positive environmental consequences.

8.5.2.4 Industrial Policy

Chobe is promoted as a tourist hub of Botswana. It would therefore be incomprehensible to lobby for big industrial development in Chobe which would be incompatible with the tastes of the tourism sector and the environment in general. However, it is necessary that light industrial development takes place at Kazungula to service the tourism sector, for instance, in the form of garages for vehicles and boats, sewing, knitting, and basketry amongst others. A relatively heavier industrial development could take place at Pandamatenga to utilise the produce from the Pandamatenga farms. In short, if applied continuously in the district, the industrial policy would not have significant environmental consequences save for land uptake which is inevitable.

8.6 Strategies to Achieve Sector goals and Objectives

Table 8.2 Strategies to achieve sector goals and objectives

Goal	Projects	Negative impacts	Mitigation
	Recruitment of additional PAC staff and construction of Regional wildlife offices in Kasane, Office	Land uptake	Systematic land clearing
	block at Kachikau, Pandamatenga	Noise and dust	nil
	office block	Generation of waste	Use movable toilets.
Goal 1		Excessive mining of building materials	EIA, reclamation, controlled mining of sand/gravel
	Training of three communities	nil	nil
	Monitoring offices at Kachikau and Pandamatenga	Land uptake	Selective de-bushing
		Noise and dust	Re-planting of indigenous species
Goal 2		Generation of waste	Depositing of solid waste at designated spots
	Recruitment of additional APU staff	Land uptake	Systematic land clearance
and construction of APU staff houses		Generation of waste	Depositing of solid waste at designated spots
Goal 3	List endangered species and contribute to strategy formulation	nil	nil
Goal 4	Conduct workshop	nil	nil
G0a1 4	Form environmental clubs	nil	nil

Goal	Projects	Negative impacts	Mitigation
Goal 5	Construction of Recreational Park (near the river) with Walking Trails Physical alteration Public health groundwater and surface pollution. Habitat degradation Littering		Adequate toilets facilities refuse collection bins . management plan.
	Conduct workshops	nil	nil
Goal 6	Refurbishment of District Tourism Offices, implement marketing strategy, implement eco-tourism strategy, conduct resource audit	Generation of Waste	Depositing of waste at designated spots
Goal 7	Conduct bi-annual audits of cultural and natural areas, promote Botswana's culture	nil	nil
Goal 8	Link with stakeholders, Equip office with IT skills, Create district information desk	nil	nil
Goal 9	Recruit qualified staff, Train two staff members	nil	nil
Goal 10	Form basket weaving group, acquire plot	nil	nil

8.7 Resource Requirements for DDP 6

8.7.1 <u>Issues and strengths</u>

The Departments of Wildlife and National Parks, Tourism, and Industrial Affairs are in the process of strengthening their staff complement and equipment, such as vehicles, with the view to reducing average response time for attending to various demands. The departments will also work closely with other organisations to harmonise all policies on land use which impact on wildlife habitats, tourism resources, and industrial developments. Furthermore, the departments will facilitate relaxation of institutional rigidities which hamper the attainment of the Ministry's Vision as well as the Strategic Plan.

8.7.2 Performance targets and Monitoring for DDP 6

Table 8.3 Performance targets and monitoring

Goal	Projects	Start date	End date	Monitoring
Goal 1	Regional wildlife offices in Kasane, Office block at Kachikau, Pandamatenga	2005	2006	Quarterly reports to DDC, Head office
	Train 3 communities	2003	2003	Quarterly reports to DDC, Head office
	Office at Kachikau and Pandamatenga	2004	2005	Quarterly reports to DDC, Head office
Goal 2	Construction of staff houses at the APU camp (Kasane)	2005	2006	Quarterly reports to DDC, Head office
Goal 3	List endangered species	2003	2003	Quarterly reports to DDC, Head office

Goal	Projects	Start date	End date	Monitoring
Goal 4	Conduct workshop	2005	2006	Quarterly reports to DDC, Head office
Goal 4	Form environmental clubs	2005	2006	Quarterly reports to DDC, Head office
Goal 5	Recreational Park(near the river)	2003	2005	Quarterly reports to DDC, Head office
Gour 5	Walking Trails	2003	2004	Quarterly reports to DDC, Head office
Goal 6	Refurbishment of District Tourism Offices, implement marketing strategy, implement eco- tourism strategy	2003	2005	Quarterly reports to DDC, Head office
Goal 7	Conduct bi-annual audits of cultural and natural areas, promote Botswana's culture	2003	2009	Quarterly reports to DDC, Head office
Goal 8	Equip office with IT skills, Create district information desk	2003	2004	Quarterly reports to DDC, Head office
Goal 9	Recruit qualified staff, train two staff members	2003	2003	Quarterly reports to DDC, Head office
Goal 10	Form basket weaving group, acquire plot	2003	2004	Quarterly reports to DDC, Head office

8.7.3 <u>Development Budget for DDP 6</u>

Table 8.4 Budget allocations for DDP 6

Project Title	Objective	Target	Funding	Phasing
Development of Trad Affairs	e and Consumer			
Office Construction	To open up a new office to promote service delivery and decentralization	New Office Kasane	P2 595 427	2003/04
Construction of Staff Houses	Provide housing for staff	Staff Housing Kasane	P1 310 793	2003/04
Development of Tourism				
Refurbishment of Existing Tourism Offices	To improve office accommodation	Kasane	P3 000 000	2003 – 2005
Walking Trails	To provide recreational facilities	Walking Trails	P 200 000	2003 – 2004
Construction of Kasane Recreational Park	To provide recreational facilities	Seboba Recreational Park	P 700 000	2003 – 2005
Development of DWNP				

Project Title	Objective	Target	Funding	Phasing
Construction of Staff Housing	To provide staff housing	Pandamatenga x3LA2 Savuti x2 LA2 Kachikau x 4LA2	P 600 000 P 400 000 P 800 000	2003/04 2007/08 2003/04
Electrification of Camps	To improve security and living conditions of staff	Ngoma Savuti	P 200 000 P 200 000	2003/04 2003/04
Street Lighting	To improve security	Anti-Poaching Unit Kasane	P 250 000	2003/04
Chobe Nat. Park Development	To provide recreational facilities	Chobe National Park Ablution Block Ngoma Boreholes at Ghoha, Linyanti	P 500 000 P1 000 000 P2 000 000	2004/05 2004/05 2006/07
Aviation and Boats	To facilitate easy transportation	Savuti	P5 000 000	2003/04
CBNRM	To promote community management of natural resources	Chobe Communities	P 100 000	2003/09
Conservation Initiatives	To promote community participation in conservation	Chobe Communities	P 70 000	2003/09
Grand Total Allocation			P19 876 220	

CHAPTER NINE

9 EDUCATION AND TRAINING

9.1 Introduction

Education and training is a tool to prepare an individual to adapt to the environment they find themselves in. A particular system of education and training that a society uses is intrinsically related to the resources available and the overall vision of that society. It is therefore of utmost importance that a national school syllabus should take cognizance of the uniqueness and peculiarities of districts to take advantage of the potential opportunities presented by such uniqueness.

Chobe district is rich in natural resources, and to some extent, cultural resources. However, very little attention has been paid to these resources as opportunities to take advantage of so as to prepare the beneficiaries for productive entrepreneurship. During DDP 6, the district should endeavor to make use of the opportunities it has to empower the residents of Chobe to become the best producers of goods and services in line with one of the pillars of Botswana's Vision 2016, An Educated, and Informed Nation.

9.1.1 Institutional framework

Two key ministries are responsible for provision of education at national level. These are the Ministry of Education and that of Local Government. Other ministries like Agriculture and Health also provide education and training relevant to their portfolio responsibilities. In Chobe, only the Ministry of Education and that of Local Government provide education. The Ministry of Local Government is responsible for construction of public primary schools infrastructure while the hiring and payment of teachers is done by the Ministry of Education. The Ministry of Education is further charged with construction of public secondary schools, and tertiary colleges and the hiring and payment of teachers.

9.1.2 Strategic plans for respective ministries

9.1.2.1 Ministry of Education

The Ministry of Education set itself the following targets:

- A high level of HIV/AIDS awareness. Chobe being one of the districts hardest hit by the HIV/AIDS scourge should take advantage of the ministry's commitment to fighting the scourge and forge a working arrangement to fight the scourge together. It is very important that all efforts are taken to disseminate the education on the scourge to the schools to secure the "window of hope".
- Quality and relevant education and training. With the wealth of natural resources at its disposal, including cultural resources, the district should devise a means of, while not departing from the school syllabus, the education being imparted on the students takes cognizance of the opportunities availed by such resources. The education should pay due attention to the fact that Chobe is an emerging tourism area, and beneficiaries of the education system should be able to be innovative and become tourism entrepreneurs.

• Effective partnerships and stakeholder satisfaction. In response to the needs of the tourism market, as well as the need to robustly market the country's tourism product, the Department of Tourism is in the process of acquiring up-to-date technology responsive to the needs of the changing environment. The Ministry of Education could take advantage of this development and partner with the Ministry of Trade, Industry, Wildlife and Tourism and network. This arrangement would benefit the students; especially those in Chobe understand better what tourism is all about. The Department of Tourism would also benefit as they would also be marketing their product, though internally.

9.1.2.2 Ministry of Local Government

The Ministry of Local Government is committed to:

- Efficient service delivery and infrastructure provision. Chobe district is relatively small in size, and the schools are within easy reach from the centre, Kasane township. As such, the district should be manageable in terms of service and infrastructure provision to the schools, including maintenance works. However, a shortage of funds makes it difficult for efficient service delivery and infrastructure provision to take place.
- Community quality of life. Education and training play a crucial role in the quality of life of the people. If the Ministry of Local Government and the Ministry of Education could coordinate their activities, they would greatly contribute towards achieving this target especially in Chobe. The former should strive to efficiently deliver services and provide infrastructure to schools and the general community, and the latter should take advantage of Chobe's resources and use them as teaching materials to produce innovative entrepreneurs who will improve the quality of life in the district.

9.1.2.3 Ministry of Labour and Home Affairs

The Ministry of Labour and Home Affairs aims at:

• Providing an excellent service to all its customers. One of the customers of the ministry is the education sector. An opportunity should be availed to those outside the formal school system to improve upon what they have acquired in terms of education, and the library is one ideal place to further one's education. Mobile libraries provide an opportunity for those far from the main centres where libraries are available to make use of the library materials. The envisaged expansion of the library in Kasane is expected to contribute handsomely to availing an opportunity to the general community, this in view of the generally high illiteracy rate in Chobe.

9.1.3 Role of the private sector

Although the private sector plays a major role in the education sector in the country, its contribution in Chobe is minimal. The Village Development Committees have taken the lead by establishing day care centres in the villages whilst one individual has established a pre-primary school in Kasane. There is also a private English medium primary school operating at Kazungula..

9.1.4 Education and Training consultation priorities

Issues raised during consultation meetings with communities and the education sector included the following:

- Shortage of classrooms and toilets
- Late supply of teaching materials
- Shortage of accommodation for teachers
- Shortage of transport for schools
- Request for a senior secondary school to be built in Chobe.
- Request for a technical college to be built in Chobe.

9.2 <u>National Policies and Legislation</u>

9.2.1 <u>Vision 2016</u>

One of the pillars of Vision 2016, An Educated, and Informed Nation calls for an education system that empowers the people to be innovative and entrepreneurial in mindset, and where all schools will, by 2016, have access to a computer and computer based communications like the internet. Chobe is well placed to contribute significantly towards the realisation of the Vision in this regard if the district, together with the Ministry of Education takes advantage of the environment in which Chobe is to mould students into producers of goods and services as envisioned. Furthermore, the Tourism office is in the process of introducing modern information technology systems to network with the world as a means of marketing Botswana's tourism. With proper coordination, this development can benefit the education and training sector in terms of exposure to information technology and tourism in general.

9.2.2 Revised National Policy on Education (1994)

The policy advocates for raising of the education standard at all levels with emphasis on science and technology, promoting partnerships between schools and the community, and improving the quality of instruction in schools and also improve response to the needs of the different ethnic groups in the society. Despite the provision of some science apparatus materials in schools, there does not seem to be any improvement in the pass rate of the schools in Chobe, especially primary schools. Many ascribe this problem to the language of instruction, and distance from developed centres of the country. It is believed that a late arrival of equipment to the schools also plays a major role in the poor pass rate. Regarding partnerships with the community, the district could explore partnering with the Hotel and Tourism Association of Botswana for exposure to tourism business; Botswana Confederation of Commerce, Industry and Manpower for exposure to issue of commerce and industry as well as manpower planning. Regarding improving the quality of instruction, the schools should appreciate that Chobe has many ethnic groups whose languages are very different from Setswana and so should be patient with students who do not seem to understand concepts, for that may be due to the problem of language. In short, factors indicate that it will be difficult in Chobe to reasonably implement this policy.

9.2.3 Policy on Tertiary Education

The envisaged policy it to address matters that will improve the quality and standard of tertiary education. This relates to teaching standards, examination, and research. The district has only one tertiary institution, the Brigade. A Vocational Training College will be developed during DDP 6.

It is hoped that the policy will address the problems that have bedeviled the brigades for a long time, the Chobe Brigade included.

9.3 Education

9.3.1 Schools

9.3.1.1 Pre-School Education

There are nine pre-schools in Chobe, of which seven are operating. These are located at Parakarungu, Satau, Kachikau, Mabele, Kazungula, and four in Kasane. Only Kavimba, Lesoma, and Pandamatenga do not have pre-schools. Of these, four are privately owned and five are owned by the respective Village Development Committees VDCs). Of the privately owned pre-schools, one is owned by a Non Governmental Organisation, the Botswana Council of Women (BCW), and the Kazungula pre-school is actually a combined pre-school with primary school.

The Satau pre-school closed down after the teacher resigned because of erratic payment. The BCW school has never been in operation because of incomplete structures. Even though the Kasane VDC school has all the necessary equipment, it has not started operating because the toilets structure has to comply with building requirements, and this is a problem in most of the pre-schools in the district. The Council Building Control Unit has been requested to assist in resolving the matter. Of all the pre-schools, the privately managed schools are doing well.

Problems facing most of the pre-schools include the non-payment of school fees by parents, unsuitable meals for kids, incomplete classroom structures, toilet structures not conforming to building requirements, non-payment of teachers, inadequate teaching equipment, and use of untrained teachers, even though this is not a very serious problem. The Social and Community Development department of Council is in the process of reviving the Parent Teachers Associations of the concerned schools to address some of these problems.

9.3.1.2 Primary Education

In Chobe district, there is a total of ten government owned primary schools and one privately owned English medium primary school. These primary schools are located in the 9 villages of the district, with Kasane having two primary schools because of a larger population than that of the other settlements. There is a shortage of classrooms in only three schools, Kasane Plateau, Lesoma, and Kazungula. However, there is need to continue building more classrooms, teachers' quarters and recruit more qualified teachers to cope with increasing enrolment. Currently, only Kasane and Plateau primary schools have reached the short term teacher to pupil ratio of 1: 40 while the rest are at 1: 30 ratio which is the long term recommended ratio. The table below shows statistics on primary education as at the end of February 2002. Even though, the table shows just a shortage of two teachers in the whole district, the problem is more than indicated because some teachers have since gone for training and are replaced by temporary teachers. The privately owned English medium primary school is said to be charging exorbitant fees such that parents have withdrawn their kids in favour of cheaper English medium schools in Zambia. The pupils travel to school by public transport in the morning and back in the afternoon.

Table 9.1 Chobe district education facilities and school enrolment (2003)

School	Enrolment	No. of streams	No. of c/rooms	No. of teachers	No. of staff houses	No. of toilets
Pandamatenga	358	14	15	14	13	17
Kasane	542	16	16	17	19	16
Plateau	591	19	16	19	12	20
Lesoma	123	7	6	7	8	6
Kazungula	328	11	10	11	11	10
Mabele	164	7	7	7	6	8
Kavimba	132	7	8	7	6	8
Parakarungu	268	11	12	11	10	12
Satau	238	8	11	8	12	6
Kachikau	275	11	13	11	15	16
Total	3 019	111	114	112	112	119

Source: Department of Primary Education, Chobe (2003)

9.3.1.3 Secondary Education

There are only two junior secondary schools in the district. These are the Chobe Community Junior Secondary School (Chobe CJSS) in Kasane, and the Liswaani Community Junior Secondary School (Liswaani CJSS) at Kachikau. Both schools have boarding facilities. The Chobe CJSS is an 18 streams school while the Liswaani CJSS is a 9 stream school. The Chobe secondary school has a problem of a shortage of land for expansion and is currently negotiating with the Ministry of Labour and Home Affairs to excise some space from the plot belonging to the latter to introduce agricultural projects as well as construction of more educational facilities. The community of Chobe through various kgotla meetings has indicated that there is a need for a senior secondary school in the district. The nearest senior secondary school so far is in Francistown, which is about 500km from Kasane. It should be noted though that Chobe alone will not optimally utilise the school because of the number of students who would be graduating from the junior secondary schools to the senior secondary school.

9.3.1.4 Non Formal Education

The department is headed by a Principal Adult Education Officer based in Kasane. The Regional Office is in Maun.

The adult education programme is running fairly well in Chobe except in Chobe east that is, Pandamatenga and Lesoma where the activities are hampered quite often on a yearly basis. It has been observed that during the harvesting season at Pandamatenga, attendance levels go down. It is not clear what disrupts attendance at Lesoma. Generally, there is a decrease in the number of learners due to various factors amongst which are:

- **Poor supervision-** In most cases, unavailability of transport makes it difficult for staff to visit the various literacy group leaders and assistants for supervision.
- **Domestic commitments-** In some instances, literacy learners yield to domestic commitments and abandon school.
- **Alcoholism** Over-indulgence in alcohol contributes to poor attendance of classes.
- **Lack of interest** Some learners lose interest on the way and quit school.

- Manpower shortage- Shortage of staff in the office hampers proper implementation of the programme.
- **Untrained literacy group leaders-** Trained literacy group leaders usually leave the programme for greener pastures, and the only remedy is to engage untrained group leaders.

Table 9.2 shows the current staff complement and the number of learners per village:

Table 9.2 Statistics on Non-Formal Education

Village	Literacy assistants	Literacy group leaders	Groups	Learners	1
				Male	Female
Pandamatenga	1	2	-	-	-
Lesoma	-	1	1	-	8
Kazungula	-	-	1	2	9
Kasane	1	3	3	24	5
Mabele	-	2	2	-	13
Kavimba	-	1	-	-	-
Kachikau	1	1	2	2	14
Satau	-	1	-	-	-
Parakarungu	-	1	2	2	17
Total	3	12	11	30	66

Source: Department of Non-Formal Education (2003)

9.3.2 <u>Training</u>

9.3.2.1 <u>Brigades</u>

There is one tertiary education facility in the district, the Chobe Brigade Development Trust. At the beginning of 2003, the enrolment stood at 124 students. The courses offered include bricklaying, carpentry, electrical, mechanical, and civil engineering. At the beginning of 2003, the brigade introduced computer courses, and in 2004, it will introduce hotel and catering. Meanwhile, a Vocational Training College will be constructed in Kasane in 2003/2004.

The brigade faces problems of a shortage of funds to finance its programmes. It is also faced with a problem of high rate of staff turnover looking for greener pastures. As a result, some of the subjects are taught by unqualified personnel. Hostel accommodation is inadequate and the kitchen and the dining hall cannot cope with the number of students.

9.3.2.2 Education Centre

Chobe has an Education Centre located in Kasane. It offers in-service training to teachers on a wide range of topics. It also offers library facilities to teachers as well as serving as a forum where teachers could share ideas on professional issues pertaining to teaching. The Kasane Education Centre is constrained by a shortage of staff and transport.

9.4 Education and Training Sector Goals and Objectives

Table 9.3 Education and Training sector goals and objectives

Goals	Objectives
To improve the working environment of teachers in	To strive to provide every teacher with adequate housing by 2008/09
primary and secondary schools,	To strive to achieve the 1: 30 teacher-pupil ratio by 2008/09
and brigade	To construct administration blocks by 2008/09
	To construct 1 block of classrooms, and 2 staff houses for brigade by 2008/09
To raise teacher performance through teacher development and support	To continue training teachers on in-service basis or other means
To create a conducive learning	To facilitate timely supply of teaching materials to schools
atmosphere	To reduce congestion at Kazungula school by constructing a new school by 2004/05
	To proactively prepare for future increases in enrolment by constructing additional classrooms and toilets by 2008/09
	To construct a classroom for hotel and catering course
	To construct an ablution block, kitchen and dining hall for brigade
To promote learning of industry based science and technology	To construct a Vocational Training Centre in Kasane by 2003/04
To promote access and use of information technology in learning institutions	To explore utilising Tourism information technology network for learning purposes by schools and training institutes
To enhance capacity of the education sector to cope with the impact of HIV/AIDS and other social ills	To create a conducive environment for guidance and counseling by constructing guidance and counseling centre at the brigade

9.5 Framework for Strategic Environmental Assessment

9.5.1 Evaluation of sector goals and objectives

Goal 1

To improve the working environment of teachers in primary and secondary schools, and brigade

Negative impacts include excessive mining of building materials, development of quarried, loss of biodiversity, possible loss of artifacts, dust and noise pollution, littering, and poor waste disposal.

Goal 2

To raise teacher performance through teacher development and support

No adverse impacts are anticipated.

Goal 3

To create a conducive learning atmosphere

Negative impacts include excessive mining of building materials, development of quarried, loss of biodiversity, possible loss of artefacts, littering, poor waste disposal, and dust and noise pollution.

Goal 4

To promote learning of industry based science and technology.

Negative impacts include excessive mining of building materials, development of quarried, loss of biodiversity, possible loss of artifacts, dust and noise pollution, littering and poor waste disposal.

Goal

To promote access and use of information technology in learning institutions

No adverse impacts are anticipated.

Goal 6

To enhance capacity of the education sector to cope with the impact of HIV/AIDS and other social ills

Negative impacts will arise from construction of the Guidance and Counseling Centre. The impacts include excessive mining of building materials, development of quarries, loss of biodiversity, possible loss of artifacts, and dust and noise pollution. Poor waste disposal could also be a problem.

9.5.2 Evaluation of Policies and Programs

9.5.2.1 Vision 2016

The Vision advocates amongst others for an Educated, Informed Nation to produce innovative and entrepreneur-oriented community. The Vision itself does not pose any environmental problems. However, it should be understood that entrepreneurship requires land and therefore environmental problems and impacts are inevitable.

9.5.2.2 Revised National Policy on Education

Implementation of the policy requires development of the education infrastructure in all its entirety. Environmental impacts will range from disturbance to flora and fauna, excessive mining of building materials to displacement of communities where there is need to displace them. All these will be addressed at planning, construction, operation and decommissioning of projects in line with the guidelines on Environmental Impact Assessment.

9.5.2.3 Policy on Tertiary Education

The envisaged policy on improvement of the quality and standard of tertiary education does not pose any significant environmental impacts save for those that will be tied to particular projects.

9.6 Strategies to achieve Sector Goals and Objectives

Table 9.4 Strategy to achieve sector goals and objectives

Goal	Projects	Negative impacts	Mitigation
To improve the working environment of teachers in primary and secondary schools, and brigade	Construction of staff houses, administration blocks, and block of classrooms	Excessive mining of building materials, quarries, loss of biodiversity, loss of artifacts, dust and noise pollution, poor waste disposal	EIA, AIA, EMP, Land rehabilitation, Selective land clearing, use of movable toilets
To raise teacher performance through teacher development and support	In-service training and further education	Nil	Nil
To create a conducive learning atmosphere	Timely supply of teaching materials, construction of Kazungula school, additional classrooms and toilets, brigade ablution block, kitchen and dining hall	Excessive mining of building materials, quarries, loss of biodiversity, loss of artifacts, dust and noise pollution, poor waste disposal	EIA, AIA, EMP, Land rehabilitation, Selective land clearing, use of movable toilets
To promote learning of industry based science and technology	Construction of VTC	Excessive mining of building materials, quarries, loss of biodiversity, loss of artifacts, dust and noise pollution, poor waste disposal	EIA, AIA, EMP, Land rehabilitation, Selective land clearing, use of movable toilets
To promote access and use of information technology in learning institutions	Negotiate with Tourism office	Nil	Nil
To enhance capacity of the education sector to cope with the impact of HIV/AIDS and other social ills	Construction of Guidance and Counseling Centre at brigade and Chobe CJSS	Excessive mining of building materials, quarries, loss of biodiversity, loss of artifacts, dust and noise pollution, poor waste disposal	EIA, AIA, EMP, Land rehabilitation, Selective land clearing, use of movable toilets

9.7 Resource Requirements for DDP 6

9.7.1 <u>Issues and Strengths for Education and Training</u>

Proper implementation of the Education and Training plan in Chobe will depend to a great extent on the availability of skilled personnel to initiate and supervise projects and programs. Transport availability is another factor that hampers implementation of projects and programs in the district. The issue of land should also be addressed well beforehand to avoid delays in implementation. On the positive side, Chobe's low population makes access to public educational institutions relatively easy. For instance, there is virtually no overcrowding in the primary schools, and almost all teachers have accommodation. As such, all other factors being constant, Chobe should be doing well in terms of the ideals of policies being implemented. The availability of water in the district is a plus factor for implementation of the Education policy.

9.7.2 <u>Performance Targets and Plan Monitoring for DDP 6</u>

Table 9.5 QPerformance targets and monitoring for DDP 6

Goal	Projects	Start date	End date	Monitoring
To improve the working environment of teachers in primary and secondary schools, and brigade Construction of: staff houses for print secondary staff houses for Brigade administration blocks primary block of classrooms for brigate.		2003 - 2003 -	2009 - 2009 -	Quarterly reporting to DDC, Council, Brigades Booard
To raise teacher performance through teacher development and support	In-service training and further education for primary and secondary schools	2003	2009	Quarterly reporting to DDC
To create a conducive learning atmosphere	Timely supply of teaching materials Construction of Kazungula school additional classrooms and toilets for schools	2003 2004 2003	2009 2005 2009	Quarterly reporting to DDC, Council
To promote learning of industry based science and technology	Construction of VTC	2003	2004	Quarterly reporting to DDC, MOE
To promote access and use of information technology in learning institutions	Negotiate with Tourism office	2003	2009	Quarterly reporting to DDC, Council, MOA, MWTE
To enhance capacity of the education sector to cope with the impact of HIV/AIDS and other social ills	Construction of Guidance and Counseling Centre for brigade, Chobe CJSS	-	-	Quarterly reporting to DDC, MOA, MOH

9.7.3 <u>Development Budget for DDP 6</u>

Table 9.6 Development Budget for DDP 6

Proposed project	Location	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	Total (P .000)
New school	Kazungula		1					-
Classrooms	Kasane				6			870
	Kachikau			2				580
	Plateau	2		2		2		870
	Parakarungu			2				580
	Pandamatenga		2			2		10160

Proposed project	Location	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	Total (P .000)
	Mabele		2					580
	Kavimba				2			580
	Lesoma					2		580
Teachers quarters	Plateau	8				8		30680
	Parakarungu		2					460
	Mabele			2				460
	Kavimba		2					460
	Lesoma			2				460
Admin Block	Kasane			1				400
	Kavimba		1					400
	Plateau	1						400
Toilets	Satau	6			6			180
	Parakarungu	6						90
	Pandamatenga			2				30
	Mabele	4						60
	Kavimba			4				60
	Lesoma		4					60

N. B: Chobe CJSS will construct 1 block of classrooms, 1 toilet block, 1 block for Guidance and Counseling, 2 staff houses and 2 laundry blocks all amounting to P 1.6 million.

Liswaani CJSS will construct 1 block for Guidance and Counseling, 6 staff houses, and 2 laundry blocks all amounting to P2.8 million. The costing for the construction of the brigade's kitchen and dining hall, 1 block hostel type A, 1 block ablution, 1 classroom for hotel and catering is not available.

9.7.4 <u>Performance Targets and Plan Monitoring for DDP 6</u>

Table 9.7 Performance targets and monitoring for DDP 6

Goal	Projects	Start date	End date	Monitoring
To improve the working environment of teachers in primary and secondary schools, and brigade	Construction of: staff houses for primary, secondary staff houses for Brigade administration blocks for primary block of classrooms for brigade	2003 - 2003 -	2009 - 2009 -	Quarterly reporting to DDC, Council, Brigades Board
To raise teacher performance through teacher development and support	In-service training and further education for primary and secondary schools	2003	2009	Quarterly reporting to DDC
To create a conducive learning atmosphere	Timely supply of teaching materials Construction of Kazungula school Additional classrooms and toilets for schools	2003 2004 2003	2009 2005 2009	Quarterly reporting to DDC, Council
To promote learning of industry based science and technology	Construction of VTC	2003	2004	Quarterly reporting to DDC, MOE
To promote access and use of information technology in learning institutions	Negotiate with Tourism office	2003	2009	Quarterly reporting to DDC, Council, MOA, MWTE
To enhance capacity of the education sector to cope with the impact of HIV/AIDS and other social ills	Construction of Guidance and Counseling Centre for brigade, Chobe CJSS	-	-	Quarterly reporting to DDC, MOA, MOH

9.7.5 <u>Development Budget for DDP 6</u>

Table 9.8 Development Budget for DDP 6

Proposed project	Location	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	Total (P .000)
New school	Kazungula		1					-
Classrooms	Kasane				6			870
	Kachikau			2				580
	Plateau	2		2		2		870
	Parakarungu			2				580
	Pandamatenga		2			2		10160
	Mabele		2					580
	Kavimba				2			580
	Lesoma					2		580
Teachers quarters	Plateau	8				8		30680
	Parakarungu		2					460
	Mabele			2				460
	Kavimba		2					460
	Lesoma			2				460
Admin Block	Kasane			1				400
	Kavimba		1					400
	Plateau	1						400
Toilets	Satau	6			6			180
	Parakarungu	6						90
	Pandamatenga			2				30
	Mabele	4						60
	Kavimba			4				60
	Lesoma		4					60

N. B: Chobe CJSS will construct 1 block of classrooms, 1 toilet block, 1 block for Guidance and Counseling, 2 staff houses and 2 laundry blocks all amounting to P 1.6 million.

Liswaani CJSS will construct 1 block for Guidance and Counseling, 6 staff houses, and 2 laundry blocks all amounting to P2.8 million. The costing for the construction of the brigade's kitchen and dining hall, 1 block hostel type A, 1 block ablution, 1 classroom for hotel and catering is not available.

CHAPTER TEN

10 HEALTH

10.1 Introduction

10.1.1 Institutional Framework

The government of Botswana through the Ministry of health is the provider of health care. The Ministry of Health is also responsible for formulation of policy guidelines related to health issues in the country and as wells as plans and implements all national health programs. Primary health care is the responsibility of the Ministry of Local Government through respective district Councils. The Ministry of Environment, Wildlife and Tourism through the Department of Sanitation and Waste Management plays a leading role in control and management of sanitation and waste through Waste Management Act.

Vision 2016 endeavors to have a compassionate and secure nation, a compassionate and caring nation by 2016 when the country will have attained her 50 years of independence. In accordance with vision 2016 Chobe District will continue to provide preventive, curative and rehabilitative services in the district and encourage both traditional and private medical practitioners as well as continuing to implement all other programs that that help to reduce the spread of HIV/AIDS including promotion of behavioral and prevention of mother to child transmission.

The North West District Council will fulfill this pillar by upgrading existing 3 health posts in Kasane, Kazungula and Parakarungu to clinics between 2004 and 2008 to meet the expected demand by the end of the planning period. The Chobe District Health Team will also improve cooperation and collaboration with other stakeholders involved in provision of health care system to reduce HIV/AIDS infection by at least 10% annually.

The Northwest West District Council (Chobe Sub District) operates a Health care System in the district. The district has seven health posts located in; Lesoma, Kazungula, Kasane, Mabele, Parakarungu, Satau and Kavimba. The district has three clinics with maternity located in Kachikau, Pandamatenga and Kasane. Environmental cleanliness, waste management, pest control and food inspection is carried out by the District Health Team (Environmental Health Section). The Ministry of Health administers the health care system through the Kasane Primary hospital. A system of private clinics is also available in the district run by private individuals. The Botswana Defense Force operates a clinic in Pandamatenga and a health post in the Kasane base camps. Referral cases are sent to the Francistown hospital, located 6 hours away by road or 1 to 2 hours by air from Kasane.

10.1.2 Strategic Plans For Respective Ministries

10.1.2.1 Ministry of Health

The Ministry of Health is responsible for policy formulation, development of heath standards and facilitates implementation of the Health policy. It also has the major responsibility of providing comprehensive preventive, promotive, curative and rehabilitative health care services. Other functions and responsibility of the Ministry of Health include; detection and control of environmental wastes that affect human health and treatment of human diseases in line with the laid down National Health Policy

The following are the goals for the Ministry of Heath:

- To improve the efficiency and cost effectiveness of health delivery system
- To ensure equitable distribution of health care delivery
- To Improve quality of health care system
- To attain appropriate skilled manpower
- To strengthen Primary health care programmes

In line with the strategic plan for the Ministry of health Chobe District intends to promote effective solid waste management through construction of a district sanitary landfill in Kasane. Construction of refuse collection points has been undertaken in all the villages in Chobe. Provision of waste bins in all residential areas will be undertaken as a priority throughout the planning period. The district intends to reduce walking distances to health facilities by providing each health post in the district with a car. During the plan period, a total of 135 dry compost toilets will be constructed through out the district.

10.1.2.2 <u>Ministry of Local Government</u>

The statutory responsibilities of the ministry of Local Government include primary health care. Primary health care is run through council health department of clinics and environmental health. Other responsibilities of the Ministry of Local Government include provision of physical infrastructure and social services. The major goals of the Ministry of Local Government are:

- Provision and maintenance of infrastructure facilities
- Human resource development and management
- Effective Policy implementation
- Productivity and organizational effectiveness

To address the goals and objectives of the ministry the Chobe District Health Team (DHT) usually conducts Performance Management Workshops. Work improvement teams have been formed by various health sectors in the district. The main aim is to improve productivity at work places and effective delivery of services.

10.1.2.3 National AIDS Coordinating Agency (NACA)

NACA was established in 1999 and its main aim was to coordinate and facilitate implementation of HIV/AIDS programmes in the country, strengthen institutional capacity at national, district and community levels. It also aims at monitoring and evaluating programs and strategies geared towards eliminating and eradicating HIV/AIDS at various levels. NACA has also prepared the National Strategic Plan in consultation with various health sectors in Chobe District.

10.1.3 Role of the private sector

The private sector is one of the stakeholders in the provision of health services to the community at large. Services provided are preventative, promotive, curative and rehabilitative. Some private sectors have and continue to play a major role in addressing the HIV/AIDS scourge Committee. The district has a Multi Sectoral Committee that comprises of various stakeholders located in Chobe. Home based care volunteers also take part in dissemination of information pertaining to

HIV/AIDS. The private sector also has the importance of improving disease surveillance throughout Chobe district

Chobe has two private medical practitioners both located in Kasane. Other villages in the district also benefit from services by the private practitioners. There are a number of traditional doctors and spiritual healers in Chobe. The exact number of spiritual and traditional herbalists is not known.

The Tebelopele Voluntary and Counseling Centre is also one of the initiatives of the private sector to help fight and reduce HIV/AIDS prevalence in the district. The center aims at providing quality, accessible, confidential and user friendly voluntary counseling and testing services. The Centre also provides community mobilization through outreach programmes, distribution of outreach programmes, condom education and distribution, initiating referrals to other services such as clinical care, psychosocial support and TB preventive therapy.

The center is perceived in Chobe as a learning center and empowering center for those that are already infected with HIV/AIDS. Such clients/patients are taught to live positively and accept their condition.

10.1.4 Health Consultation Priorities

The main objective of consultations is to ensure that development projects are planned, owned and utilized effectively by the communities. During the consultation process, the communities have raised several issues that the plan needs to address, The following are some of the issues; increase in the prevalence of HIV/AIDS, Lack of transport in the clinics, shortage of medical personnel in the form of nurses and doctors, indiscriminate dumping of solid waste especially papers and beer cans. Other issues raised by communities include high unemployment rate in the district, shortage of land for settlement purposes and agricultural purposes.

Malaria was also reported to be on the increase in the District. Communities also proposed the following projects for inclusion in DDP6; mobile health stops, health posts, clinics and clinics with maternity.

10.2 National Policies and Legislation

10.2.1 National Policy on HIV/AIDS

The national policy on HIV/AIDS prevention and care outlines the national response to the epidemic in Botswana. It describes the role of national leaders, various government ministries, community-based organizations, and persons living with HIV/AIDS and individual community members in the national response. The policy also stresses the importance of coordination of the National HIV/AIDS programs and activities of national AIDS council.

The policy forms the basis upon which the national strategic plan will be developed. The National strategic plan gives provision various departments, organization to prepare their respective sectoral plans and projects for implementation. The policy in regards to traditional medicine aims at fostering mutual respect and cooperation between traditional and modern health system. The Ministry Health also encourages and supports research into traditional herbal medicines and other modes of treatment.

In response to this policy Chobe district has formed a District Multi Sectoral committee (DMSAC), made of various head of departments, parastatals, and non-government Organisations). The committee meets four times a year to formulate strategies to curb the spread

of HIV/AIDS in the district. Among other strategies adopted by this committee is to train peer educators and HIV/AIDS counselors, thus in line with this policy there is cooperation between various sectors in the health sector in Chobe.

10.2.2 National Health Policy

The Botswana National Health policy has been produced to guide health workers in their decision-making and to make members of the public aware of government policy in relation to the provision of health care. The policy outlines the role of government and other agencies in health care thus making it easy for the ministry of health to carry out some of the functions especially those on policy and supervision of all health care.

The National Health Policy further emphasizes the need to develop and have appropriate staff and to have a management and support team to coordinate, plan and provide practical guidance in the district. It also gives each District the mandate to determine the organizational structure of its District Health Team and including the selection of its head

During the implementation of DDP 6 the objective of the National health policy will be addressed through; training and equipping health staff with relevant skills in order to be able to meet various challenges in the district. Improvement and upgrading of health facilities will be addressed during the plan period.

Private sector role will be encouraged through privatization of waste collection in various settlements in the district. The main aim is that by 2009 solid waste collection should have been privatized in the entire district.

10.2.3 Health Strategy and Plans

The main aims of the Health strategy and plans are to establish internal control systems for all health services and ensure that their services and activities are planned, executed and maintained in accordance with generally accepted technical and professional standards and legislation and any such guidelines as may be formulated and issued by the Ministry of Health from time to time. Such health services include health services supported by government such as Christian missions, private hospitals, and public health services operated by government or by district Councils.

In Chobe all government health services and private ones operate within the confines of the established regulations and relevant legislation as passed by the Ministry of Health.

10.2.4 Waste Management Act

The Waste management act was enacted in 1998 with the principal aim being to regulate manage and control of waste in order to prevent harm to human, animal and plant life as well as to minimize pollution of the environment. In order to facilitate this goal the Chobe District is taking environmental health as one of its top priorities, the district through environmental health team plans to educate the communities on waste management. Enforcement of those sections dealing with indiscriminate littering will be enforced.

10.2.5 Public Health Act

The Public Heath Act provides a framework for control of diseases, makes provision for prevention of diseases into Botswana, regulate sanitation and housing, provides for protection of foodstuffs and water supplies, regulates the use of cemeteries and the general provision for public health.

Enforcement of this act and other related council by laws will be a priority in the district to make sure that public health is achieved in the district. Other Acts related to Public Health are:

- Food Control Act. The Act provides for protection of food stuffs and empowers enforcement offices to seize and destroy such food stuffs that have been found to be unfit for human consumption. In order to enforce provisions of this Act, Council will continue to sensitize all food handlers on the importance of safety and consumers health. Accelerated inspections and spot checks of food handlers and street venders will continue to be undertaken as a priority.
- **Building Control Act.** This act together with other development regulations like the Urban Development Standards, Development Control Code, stipulate type of structures that may be erected in urban areas or areas declared as planning areas. Among other requirements of this regulations include lighting, ventilation and other sanitary facilities. To achieve the goals of this Act all other departments that deal directly or indirectly with building aspects will work together as a team in ensuring adherence and compliance to the requirements of the Building Control Act and the Development Control Code
- Factories Act. The Factories Act makes provision for regulation of the conditions of employment in factories and all other industrial undertakings as regards safety, health and welfare of people employed in those establishments. The Act also provides for inspections of certain plants and machinery to ensure that they do not pose any risk to the users. Periodic inspections by the Department of Environmental Heath will continue to be undertaken in order to make sure that the Factories Act is being complied with.

10.3 Health

10.3.1 Environmental Health

The Environmental Health Department of the Chobe District deals generally with pest control, waste management, water and food quality inspection in the entire district. Specific Objectives for environmental health in the district are:

- To prevent and control the outbreaks and spread of communicable diseases.
- To control solid and liquid wastes so as not to present environmental health nuisances that are associated with vermin breeding and transmission of diseases.
- To ensure safe food supplies to the community through food inspections and collection of food samples.
- To ensure safe water supplies and basic sanitation to the community.
- To educate, inform and communicate to the general public on health-oriented messages so as to promote community involvement and participation in environmental health

10.3.1.1 Waste Management

Sewerage disposal/ Human Waste

Disposal of sewerage in Chobe is carried out through various methods. Within the Kasane – Kazungula planning areas water borne sewerage and septic tanks are used. In the rest of the district septic tanks, pit latrines and the bush are used. The sewerage system in Kasane covers only 32km although only few plots are connected to it.

The key problem with sewerage in Kasane and Kazungula is that most of the urban activities occur too close to the river and therefore a gravity supported sewer system is not possible without directly emptying into the river. There are 16 pumping stations in Kasane/Kazungula. Sewer reticulation covers Kasane SHHA area, commercial center and the Plateau area. In Kazungula sewer reticulation covers only the industrial areas. The council Water and Waste Water Department has revealed that the existing treatment ponds have reached their capacity and as such plans are already underway to expand them. At house hold level the village socio economic survey has revealed that the majority of the villagers do not have any form of sanitary facility. Out of 3317 households in the district only 41% had either a flushing toilet or pit latrine. The rest used the bush method of defecation. (GoB/CSO 2001)

Under the DDP 5 a total of 135 latrine structures were planned for construction and only 35 latrines were constructed on a pilot basis. The rest of the remaining 130 will be constructed during DDP 6.

Solid Waste Management

Littering has been an area of concern during DDP 5. Various methods of solid waste disposal are used in Chobe and these are: burying, burning, back yard dumping and conventional collection by council as is the case with major villages in the district. In villages where waste is collected by the council, it is gathered in plastic bags and put by the road side for collection by council trucks. Council and all other institutional housing are provided with dust bins. The council collects solid waste twice in a week. Solid waste from Kasane and Kazungula is collected and dumped at a disused borrow pit site located to the south of Kasane Village.

Currently due to indiscriminate littering, management of plastic bags and tins is a problem. Tins and plastics are thrown all over the villages where sometimes they attract vultures. Clinical waste from various clinics and health post are transported to Kasane Primary hospital, which further transports them to Nyangabwe hospital for incineration.

Strengthening of the Litter Action Committee will continue during DDP 6. With the provision of the Waste Management Act, the aims and objectives of the act will be fulfilled by enforcement from the stakeholders. The council is also in the process of developing a waste management plan for the district. The plan has provided best options to deal with various wastes in the district as follows:

10.3.1.2 Land fill

The district has operated for a long time without a landfill site and solid waste continues to be a problem in the District. However a district landfill site was identified in the Kasane plateau area. Construction of the landfill is planned to commence in 2004. The landfill will help in waste management in the district.

10.3.1.3 Abattoir services

There is currently no abattoir in the district. The supply of beef for Chobe is mainly from the Botswana Meat Commission in Francistown. In rural areas meat is sold without any inspections. During DDP 6 the district will construct a district abattoir in Kasane. The abattoir will have a

post mortem examination facility in it. This will ensure that fresh and healthy meat is supplied to residents of Chobe.

10.3.2 <u>Hospital Services</u>

Kasane Primary Hospital provides referral services for all the satellite facilities. Services offered at the hospital include: x-ray services, out patience consultation, admissions, mortuary services and diagnostic and therapeutic services. Referral cases are sent to Francistown Although Kasane is a primary hospital, it is located in a small piece of land such that any expansion is difficult. Its medical facilities also need to be improved so that it offers better facilities.

According to statistics obtained from the Kasane primary hospital in July 2003, there were 3 doctors, thirty one (31) nurses and 31 beds. Bed occupation rate as of July 2003 was 126 against 31 bed spaces available. This shows overcrowding of patients at the hospital. This situation needs to be addressed before it is too late

The relocation of the hospital to a new site in the Plateau area is envisaged to lead to an improvement in service delivery. There are no private hospitals in Kasane except private two clinics.

10.3.3 District Health System

Health posts and a system of clinics provide first contact with patients in the district. The clinics and health posts do not have inpatient facilities; they are only able to offer out patient services together with preventive health support to the villages

There are seven health posts in the district located in the villages of; Kasane, Kazungula, Mabele, Satau, Parakarungu, Lesoma and Kavimba. Two clinics with maternity are located in Pandamatenga and Kachikau. Clinics are manned by nurses, laboratory technicians, pharmacy technicians and family welfare educators. Emergency links between Kasane hospital and the clinics can be done through radio calls and flying mission services.

Because of long distances from villages to Kasane and poor public transport system especially from the enclave area, there is growing demand for inpatient facilities closer to the villagers. To address the above problems the Northwest District Council will during DDP6 upgrade three health posts at Parakarungu, Kazungula and Kasane to clinics. Table 10.1 Reveals that most villages in the district are supplied with health facilities in the district

Table 10.1 Chobe District Health Facilities

Village	Health Post	Clinic	Primary Hospital	Staff Housing
Kasane	1	0	1	15
Kavimba	1	0	0	1
Mabele	1	0	0	1
Satau	1	0	0	1
Parakarunga	1	0	0	1
Lesoma	1	0	0	1
Kazungula	1	0	0	1
Pandamatenga	0	1	0	3
Kachikau	0	1	0	3
Total	7	2	1	27

Source: Chobe District Settlement Strategy 2002

10.3.4 Primary Healthcare

Primary Health Care includes family planning, reproductive health, health education, school health, testing and counseling, diagnosis and treatment of common diseases, laboratory tests, home based care and T.B follow-ups. All of the above activities are the responsibility of the Council. The Chobe District has a District Health Team which is responsible to carry out this activities.

Table 10.2 Home Based Care Statistics (Chobe) 2001/2002

No. of Volunteers and Clients	2001	2002
Volunteers	78	76
Clients	96	90

Source: District Health Team (Chobe) 2002

From table 10.2 it is clear that the number of volunteers decreased from 78-76 or decreased by only 3 % in 2001 to 2002. The decrease can be attributed lack of equipment like vehicles and some complain that the money given to volunteers (P100,00) is very little.

10.3.5 Control of Pandemic Diseases

10.3.5.1 <u>HIV/AIDS</u>

The district has a Multi Sectional Aids Committee and its associated sub committees whose responsibilities are to help to curb the spread of HIV/AIDS in the district. Other programs available in the district include; Prevention of mother to child transmission of HIV infection and the Home based care programe which is aimed at reducing the spread of HIV/AIDS. The Homebased care programme is currently faced with the problem of lack of transport. The ARV programme doesn't yet exist in Chobe. This is due to a shortage of health personnel.

Several programmes have been put in place to try to combat the impact of this scourge. Community sensitization and creation of awareness is continuing throughout the district.

Tebelopele Voluntary Counseling and Testing Centre was opened in June 2001 and this has encouraged more people to go for testing.

Table 10.3 HIV/AIDS Statistics in Chobe July 2001/2002

Year	No of people tested	No of people tested negative	No of people tested Positive
2001	153	95	58
2002	344	165	179

Source: Chobe District Health Team (2003)

The Ministry of Health is also committed to combating the Pandemic and so far at a district level the following programs have been put in place to combat the AIDS scourge; I) Prevention of mother to child transmission (PMTCT) and the Home Based care programme. PMPTC programme started in September 2001 in Chobe.

Table 10.4 Prevention of Mother to Child Transmission statistics in Chobe 2001/2002

Variable	2001	2002	Total
New Ante natal Clients	170	495	665
Pre test counseled	80	329	409
HIV tested	46	190	236
HIV positive	14	65	79
Women on AZT	2	36	38
Infants on AZT	0	26	26
Infants on Formula	1	47	48
Total			

Source: District Health Team - Chobe

Other programme like Isoniazid Preventive Therapy (IPT) and Anti Retro Viral Therapy have not yet started in the district mainly because of a shortage of trained personnel and equipment.

10.3.5.2 Tuberculosis control

Cases of tuberculosis have increased and this is mainly due to its association with HIV/AIDS. Contact tracing is still a major challenge in preventing transmission of tuberculosis. In Chobe District the age most affected is 20—39. About 7% of the reported cases in the district are children between the ages of 1-5. The district has made relative progress in combating TB in the district. The treatment completion rate of TB in the District is about 65%. An intensification of contact tracing and follow ups of defaulters has been put in place. Problems facing this system are that some patients are not committed in taking their treatment and some give wrong addresses.

Table 10.5 Tuberculosis Cases by Age and Sex in Chobe 2001/2002

Age	Year 2001		Year 2002		
	Male	Female	Male	Female	Total
0-4	6	2	7	3	18
5-9	3	3	4	3	13
10-19	2	2	2	1	7
20-29	10	24	12	20	66
30-39	17	13	16	19	65
40-49	14	6	16	7	43
50-59	5	7	3	3	18
>60	4	5	4	2	15
Total	61	64	62	58	245

Source: Chobe District Health Team

According to table 10.5 shows that the most affected group is ages between 20-29 and 30-39. This is the youth and most active group as such measure should be put in place to reverse this trend.

10.3.5.3 Malaria control

Chobe district is a malaria prone area. The core activity of malaria control is prompt detection of cases and treatment followed by vector control through insecticidal indoor spraying. Malaria remains a major environmental health problem in Chobe due to the fact that it is endemic and cases normally increase with increased rainfall. Methods of prevention such as Malaria vector spraying and insecticide treated bed nets have been successful during DDP 5. Such methods of control will continue under DDP 6.

Table 10.6 Malaria cases in Chobe 2001/2002

Year	Confirmed Cases	Deaths	Unconfirmed cases	Deaths
2001	1228	3	9306	0
2002	368	0	5533	0

Source: Chobe District Team 2002

Table 10.6 shows a decrease in Malaria deaths in 2002. The decrease can be attributed to the efforts undertaken in the district to fight malaria. Such efforts include bed net spraying campaigns and education workshops and campaigns like rolling malaria out of Chobe has helped to combat malaria

10.4 Health Sector Goals and Objectives

Table 10.7 Health sector goals and objectives

Goals (Clinics)	Objectives
To improve the quality of life and access to health facilities	Upgrading of health post to clinics in Kazungula, Kasane and Pandamatenga
	Train and equip health personnel with relevant skills needed to make them respond positively to patients

Goals (Clinics)	Objectives
	needs
	To provide relevant and necessary equipment in all health facilities
	Conduct seminars and workshops on behavioral change and encouragement of people to know their status
2Environmental Health	
To ensure proper solid waste management in the district	Provision and construction of refuse collection bays in all the villages
	Speed up construction of a land fill site in Kasane
	Intensify public education on the need for a clean environment
	Privatization of waste collection in the district
	1 Provision of all the necessary medicines for killing rodents
To reduce the spread of bubonic	
Diseases	Construction of a slaughter house in Kasane by 2004
Ensure safety of food provided	

10.5 Strategies to Achieve Health sector goals and objectives

Table 10.8 Strategies to Achieve Health sector goals and objectives

Construction of the Sanitary Landfill Purchasing of 1 double cab vehicle and I vacuum tanker Purchasing of 3 refuse skips	-Environmental impact assessment already undertaken during consultancy *None None	*Closure and rehabilitation of existing landfill None	*1 Landfill Manager *1 Landfill Supervisor *12 Industrial class employees	*1L andfill compactor *1Skip removal truck *1Tipper truck *1Front end loader	*Land *Building plans
double cab vehicle and 1 vacuum tanker Purchasing of 3 refuse skips			Supervisor *12 Industrial class employees	truck *1Tipper truck *1Front end	pians
refuse skips	None				
		*Frequency collection of wastes *Institution of proper waste	*2drivers	*1Refuse truck	
Construction of a slaughter house		management capacities *Rehabilitation of burrow pits			
	*Excavation of construction materials resulting in burrow pits	*Use of protective clothing and equipment			
Construction of 160	*Noise pollution from construction works *Deforestation	*Replanting of trees Controlled mining of sand and gravel			*Land *Building plans
Construction of 14 refuse collection	*Excessive mining of sand and gravel	*Controlled mining of cand and	*1 Meat Inspector		pians
Purchasing of 1420- 210 L refuse bins	*Excessive mining of sand and gravel * Deforestation	gravel *Replanting of trees	*1Assistant Meat Inspector	equipment *Cold room	
Construction and expansion of clinics	*Unpleasant odours *Pests breeding	*Frequency collection of wastes		· i rieezei ioom	*Standard building plan
	Air pollution *Noise pollution	renaomitation of oonlow pits	*2Environmental Health Technicians		Standard building plan
Codry Corel ba Pu 21	onstruction of 160 y compost latrines onstruction of 14 fuse collection uses urchasing of 1420- 0 L refuse bins	*Excavation of construction materials resulting in burrow pits *Noise pollution from construction works *Deforestation *Excessive mining of sand and gravel *Deforestation *Air pollution	*Rehabilitation of burrow pits *Excavation of construction materials resulting in burrow pits *Noise pollution from construction works *Excavation of construction works *Use of protective clothing and equipment *Replanting of trees Controlled mining of sand and gravel *Controlled mining of sand and gravel *Controlled mining of sand and gravel *Excessive mining of sand and gravel *Trequency collection of wastes *Frequency collection of wastes *Frequency collection of borrow pits Air pollution *Noise pollution	*Excavation of construction materials resulting in burrow pits *Excavation of construction materials resulting in burrow pits *Use of protective clothing and equipment *Replanting of trees Controlled mining of sand and gravel *I Meat Inspector *I Meat Inspector *I Assistant Meat Inspector *I Assistant Meat Inspector *Tequency collection of wastes *Unpleasant odours *Pests breeding Air pollution *Noise pollution *Noise pollution *Noise pollution	*Rehabilitation of burrow pits *Excavation of construction materials resulting in burrow pits *Excavation of construction materials resulting in burrow pits *Use of protective clothing and equipment *Replanting of trees Controlled mining of sand and gravel *I Meat Inspector *I Meat Inspector *I Meat Inspector *I Abattoir equipment *Abattoir equipment *Cold room *Texcessive mining of sand and gravel *Excessive mining of sand and gravel *Theat Inspector *1 Meat Inspector *1 Abattoir equipment *Cold room *Trequency collection of wastes *Pests breeding Air pollution *Noise pollution *Noise pollution

10.6 Resource Requirements for DDP 6

Table 10.9 Resource requirement for environmental health sector

Implentation Period I	n Years				
2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
1 x Construction of a Sanitary Landfill for Kasane	1 x Vacuum tanker for Kasane	3 x Refuse collection bases for Kachikau	460-210L Refuse bins for Kasane and Kazungula	Dry compost latrines 10 for Satau 10 for Mabele 10 for Lesoma 10 for Kazungula	Refuse collection bases 2 for Satau 2 for Kavimba 3 for Pandamatenga
250-210L Refuse bins for Kasane	1 x Slaughter house for Kasane	250-210L Refuse bins for Kasane		250-210L Refuse bins for Kasane	
1 x Double cab vehicle for staff	1 x Refuse skip for Kasane	1 x Refuse skip for Kasane		250-210L Refuse bins for Kazungula	
1 x Skip removal truck	1 x Refuse collection vehicle				
1 x Refuse skip for Kasane	Dry compost latrines 10 for Satau 10 for Mabele 10 for Lesoma 10 for Kazungula		Dry compost latrines 10 for Kavimba 10 for Kachikau 10 for Parakarungu 10 for Pandamatenga		
250-210L Refuse bins for Kazungula	2 x Refuse collection bases for Mabele	250-210L Refuse bins for Kazungula			
Dry compost latrines 10 for Kavimba 10 for Kachikau 10 for Parakarungu 10 for Pandamatenga	1 x Double cab vehicle for staff	2 x Refuse collection bases for Lesoma			
2 x Refuse collection bases for Parakarungu					

Table 10.10 Costing of Environmental Health Projects for DDP 6, LG 1108

Project Name	No. Of Projects	Estimated Cost (P)	Estimated Total Costs
Sanitary Landfill	1	13 523 600	13 523 600
Double cab Vehicle	1	240 000	
Refuse collection truck	1	290 000	290
Skip removal truck	1	350 000	350
Slaughter House	1	200 000	200 00
Dry Compost Latrines	160	4 500	720 000
Refuse Collection bays	14	7 000	98 000
Refuse skips	3	20 000	60 000
210 L refuse skips	1500	190	285 000
Vacuum Tanker	1	360 000	360 000
TOTAL	-	-	161 266 00

<u>NB</u>. Machinery and equipment are included in the funds for the landfill construction.

Table 10.11 Proposed projects and resource requirements for health (Clinics) DDP6

	Location	03/04	04/05	05/06	06/07	07/08	08/09	P(,000)
Upgrading of	Parakarungu		1					360
health post to a clinic	Kazungula			1				310
	Kasane						1	1000
Rehabilitation	Plateau		1					50
/Extension of health	Kavimba			1				150
Facilities	Kasane	1						200
	Kachikau	1						150
	Satau						1	150
	Lesoma						1	150
Staff Houses	Pandamatenga		1					300
	Kachikau		1					300
Vehicle D. Cab	DHT	1						200
TOTAL	-	-	-	-	-	-	-	3320

10.6.1 Plan Monitoring Programme

Progress of the proposed projects will be undertaken through; production of quarterly reports to the Ministry of Health, Council committees like the Health and Planning will report to the chief executives and budget review will form part of the monitoring systems.

CHAPTER ELEVEN

11 CULTURE AND SOCIAL SERVICES

11.1 Introduction

11.1.1 Institutional Framework

The Ministry of Labour and Home Affairs plays an important role in that it performs the following functions. It aims at creating and maintaining national harmony, social welfare and justice, preservation and promotion of national culture as an important factor for unity development, democracy and socio-economic upliftment. The Government of Botswana through various programmes and strategies put in place by various Ministries aims at promoting and strengthening, social, family and individual welfare in the country.

There are various departments that work together as a unit to carry out various functions of the Ministry of Labour and Home Affairs. The under listed departments which are represented at district level perform the following functions:

- Labour and social security. The Department of Labour and social Security provides for mediation of Labour disputes, provision of work permits, apprenticeship training and testing and for workers compensation.
- **Immigration and citizenship**. This Department provides for people movement in and outside the country, residence permit and citizenship
- **Botswana Library Services.** Botswana Library Services was established to perform the Following function; to provide appropriate and timely information to the public. This function is carried out through provision of informal education, leisure and recreational, cultural information and for self-development purposes.
- **Department of Civil Registration**. The department provides for registration of births, deaths, marriages, societies and names as permanent records for the purpose of planning and legal needs.
- **Department of Culture and Youth.** The department has the responsibility of implementing all National Youth Policy, which is the framework for youth development in the country.

In an effort to build **a Moral and Tolerant Nation** the district encourages spiritual empowerment and upliftment through establishment of various religious organization that are found in the district. Chobe District as a tourist hub and migration centre for various people does not discriminate anyone on the basis of gender; religion; creed; colour; national or ethnic origin. The presence of cultural and youth groups in various villages has helped to promote and preserve local cultures and traditions.

11.1.2 <u>Strategic Plans for Respective Ministries</u>

11.1.2.1 Ministry of Labour and Home Affairs.

The Ministry of Labour and Home Affairs is committed to uphold national pride, identity, security, harmony and social balance in line with Vision 2016. The mission of the Ministry of Local Government is to create an enabling environment for community development. The district

also believes in promoting popular participation in development and thus it fully supports the two ministries' strategic plans.

The Ministry provides cultural services through the National Library Services; National Museum; Monuments and Art gallery; National Archives and Culture and Youth.

Other Ministries' departments responsible for social services are Labour and social security; Sports and recreation; Civil Registration; National Industrial Court and Women's Affairs.

At district level, the Ministry of Labour and home Affairs is represented by the immigration department, whose main aim is to process permits for citizenship, residence permits, issue passports to citizens and ensure that movement out of the country is authorized.

The National Library Services, culture and youth department whose responsibility is to empower the youth through several projects like sports and recreation are also represented in the district.

11.1.2.2 <u>Ministry of Local Government</u>

The Ministry of Local Government provides basic physical and social infrastructure, through provision of education facilities like schools that are learning centres that complement library services. Social Welfare in theChobe District is provided by the Social and Community Development, this in particular addresses needs of the youth and other vulnerable groups by providing them with necessary help.

11.1.2.3 <u>Ministry of Trade, Industry, Tourism, Wildlife and Environment.</u>

The Strategic plan for the ministry addresses the following goals:

- Improvement of citizens with emphasis on women by issuing permits or trading licenses.
- Support development and implementation of entrepreneurial support programmes. Thus by this programs the ministry of Trade and Industry furthers some goals of the Ministry of Labour and Home Affairs by encouraging empowerment of marginalized groups like women and youth. At the district level of the MTIWAT the functions are expressed through committees like the local licensing committee. This deals with issuing of trade hawking licenses. This enhances the local communities through economic empowerment.

11.1.3 Culture and Social Consultation Priorities

During the time of community consultation the community raised the following concerns as relates to Labour and Home affairs.

- Lack of entrepreneur skills
- Lack of recreational facilities i.e. Open spaces and cultural villages, sport stadia and multi youth centres.
- High unemployment rate in the district.
- High HIV/AIDS prevalence in the district.
- Late payment of pension to the beneficiaries.
- Shortage of land/serviced plots for tourism activities.

• Inadequate funding for youth projects.

11.2 National Policies and Legislation

11.2.1 Introduction

Policies relating to the sectors are geared towards the empowerment of youth and women to participate fully in issues of national development. The Government is vigorously pursuing a strategy of bottom-up planning and citizen empowerment in an endeavor to involve communities in the development process through various policies and legislations.

11.2.2 Community Based Natural Resource Management Policy (Draft)

This is a policy that derives its inspiration from the Rural Development Policy. The Rural Development Policy seeks to empower the local community to utilize the available local resources to improve their standard of living. The draft Community Based Resource Management Policy calls for transfer of management over some natural resources to the local communities, this will economically empower the local communities. The policy advocates for restoration of degraded renewable resources and concentration of all major ecosystems.

In the Chobe District the Department of Wildlife and National Parks has leased out concession hunting and photographing areas to various communities as a way of empowering them and compensating them for destruction done by animals on their crops and domesticated animals. The Department of Forestry is currently considering opening forest reserves for communities to harvest veldt products and use the resources in the forest reserves to better their incomes and improve their standard of living. This programme is earmarked to start during the plan period

11.2.3 Sports and Recreation Policy

The Policy mainly focuses on provision of guidelines for utilising all possible resources, human, material, financial and others to ensure that sport contributes positively to the development of the country. At district level (Chobe) sports and recreation facilities are not well developed due to a number of factors. Some of them are; the shortage of land for development purposes.

11.2.4 Youth Policy

The thrust of the National Youth Policy is to involve young people in national development issues through active youth participation. The policy emphasizes on educating young people in order to empower them with relevant skills. Other important issues touched by the policy include educating the youth on sports and creation, young people and gender and child abuse.

There is a youth department in the district which helps young people to initiate their own projects. The district youth coordinator has indicated that most youth do not have the necessary skills to start their own projects, and the shortage of land is another impediment towards empowering the youth.

11.2.5 Women and Development

In 1996, Botswana parliament adopted a policy on women and development. The aim of the policy is to integrate gender issues in the development process with specific focus on poverty reduction among women, economic empowerment, education opportunities and training, health, the girl child and gender based violence.

Whilst the government is pursuing this policy with vigor and utmost commitment, there still exists critical gaps in areas of concern in the district as far as decision making is concerned, status and position in regard to cultural and socio economic empowerment is concerned, and the status and position in regard to women. This is due to some reasons including historical, cultural and socio-economic factors that affect even the whole nation.

11.2.6 <u>National Library Services Act</u>

The main objective of the Library Act is to bring information and literacy to the Communication. This helps to complement other efforts undertaken by various departments in the district to educate the community.

11.2.7 National and Civil Registration (1986)

The National Registration Act of 1986 calls for registration of all citizens aged sixteen years and above. It also caters for those who become citizens through registration or naturalization for the purpose of issuing them with national identity cards (Omang). Civil registration also registers births, deaths, marriages, societies, trade unions and employees There are a few problems facing the issuing of identity card, this is mainly because processing and production is done in Gaborone and district offices are only distribution centres or depots. The district has an office falling under the District Administration.

11.2.8 <u>Information and Broadcasting (1986)</u>

The Department of Information and Broadcasting is a fully-fledged department in the office of the president. It was established through a policy directive issued in 1969. The main aim of the policy is to disseminate information and educate the nation.

In 1998, Broadcasting Act was established to free the airwaves for commercial and community broadcasting. Introduction of commercial broadcasting has seen establishment of commercial and private radio stations in the country. Chobe does not however, have any private radio or TV station.

11.2.9 Disability Policies (1996)

The National Policy on People with Disabilities was passed and adopted by parliament in 1996. The thrust of the policy is to promote welfare of people with disabilities by giving guidance to all stakeholders in disability issues. The policy outlines the complementary roles of various government ministries, departments, agencies as well as the private sector, community based organizations (CBOs), community members and people living with disabilities.

At district level services for the disabled are carried out through community based rehabilitation services (CBR). The aim of the CBR is to promote preventive and rehabilitation services in line with primary health care concept. The District heath team in Chobe carries out these responsibilities.

11.3 Labour, Culture and Social Services

11.3.1 Sports and Recreation

The District Sports Committee is the main body that seeks to promote sport for both leisure and competitive purposes. It has successfully hosted a number of successive district sports festivals.

The Botswana Football Association through its Chobe Affiliate facilitates competitive football in the district. Social soccer has also taken root as an alternative leisure and recreational activity. Recreation and sport in Chobe are limited by the unavailability of facilities. It is expected that the planned integrated sports facility and the youth multi-purpose centre will enhance access to sporting and recreational facilities.

Other means of recreation are 4B clubs, agricultural shows and youth rallies. Recreational facilities are non-existent in the district. The Chobe river frontages which can be utilized as a means of recreation is not developed because of lack of a policy on the development of open spaces and the Chobe river frontage. It is hoped that during 2003/2004 a policy on development of open spaces will be developed.

Currently there is a plot allocated for a stadium and a multi purpose youth centre but the two plots are not developed because of lack of funds.

There is an acute shortage of recreational facilities in Chobe; this is attributed to the fact that there is a shortage of land especially in the planning area of Kasane and Kazungula. There are no designated recreational parks in the district and as such lack of these features has compounded other social problems like increased alcohol intake, and casual sex is taken as a form recreation hence the high prevalence of HIV/AIDS in the district. There is a number of football clubs located in the various villages in the district.

11.3.2 Social Welfare

The S&CD Department of Council is responsible for carrying out welfare activities in the district. Such activities are to ensure that families, individuals and other vulnerable groups are cushioned against effects of drought, the department also coordinates home economics activities. All of the above activities are meant to raise the standard of living of the people of Chobe.

Destitute, orphans and home care patients are supplied with food and other household commodities. Other social services include the Old Age Pension scheme and war veterans services. The Labour intensive Public works programme through respective VDC is another programme meant to cushion affected groups from poverty. However, the VDC seems to be failing in its duties because it lacks skills like financial management skills and Project management skills.

11.3.3 Culture and Youth

The National Action Plan for youth is an instrument which guides all youth programmes in the country. The Youth Policy in particular identifies the Department of Culture and Youth as the core player in implementation of youth policies and programmes.

The primary goal is to promote culture and the participation of youth in the development process. The National Youth Policy recognizes the role of youth in development. The Department of Culture and Youth together with the Botswana National Youth Council through District Youth Councils play an important role in implementing youth programmes and initiatives. Youth empowerment came out as a key issue during the consultation process.

The Department of Culture and youth has an office in Kasane, which is responsible for coordinating all youth activities in the district. There is currently one youth officer in Chobe who is responsible for coordination of all activities in the entire district. This obviously translates to shortage of manpower in this section. The district youth officer has revealed that training on matters relating to youth empowerment is a requirement if the Department has to run efficiently.

The Youth Department is planning to carry out the following activities as a means of fulfilling the objectives of the strategic plan for the ministry:

- Intensify Training of youth to acquire knowledge and skill
- Disseminate information to the youth on HIV/AIDS
- Engage the Youth in cultural shows and activities

The department is embarking on a multi sectoral approach towards youth development. Structures and customized projects are being developed for the benefit of the youth. The department continues to prepare ground for the proliferation of youth groups and activities through provision of funding.

11.3.4 Women and Development

DDP6 recognizes the important role played by women in the district development and thus seeks to accelerate their integration into the district development framework. The absence of the Women's Division in the district means that most women's programmes are implemented by proxy. The Social and Community Development department has been active in facilitating and coordinating most of the women's activities. There is need to intensify efforts to mobilise and empower women in the district. This calls for decentralisation of the department to the local level and encouragement of women's groups and NGOs to establish offices in the district. At the district level there still exist some gaps as far as economic empowerment of women is concerned. Women empowerment is lagging behind because of lack of access to factors of production like land and finances; this is due to historical, cultural and socio-economic factors.

11.3.5 Library Services

The department stands to enhance the literacy levels through promotion of a culture of reading and provide a source of information for purposes of research, education, and recreation. The service provided through the Kasane public library to the communities are; two village reading rooms in Pandamatenga and Kachikau, and six book box service to schools and a postal service. The current library provides for 3000 readers in and around Kasane. In order to extend its services to the rest of the district population, there is need to extend the library and ablution facilities, upgrade the reading materials and provide a vehicle and additional staff.

11.3.6 Information and Broadcasting

Radio transmission in Chobe is limited in coverage and it mostly covers the eastern part of the district. The western part does not have radio coverage and as such people in the west listen to other foreign radio stations. In an effort to increase radio coverage in Chobe the Department of Information and Broadcasting has planned to install a medium wave transmitter at Muchenje/Mabele village 2003/2004 to increase radio coverage in the district.

11.4 Labour, Culture and Social Sector Goals and Objective

Goal 1.

To promote and preserve culture through various youth activities

Objectives

- Form cultural and traditional groups in various village
- Promote school youth competition and annual sports festival activities in the district
- Hold commemoration of cultural day

Goal 2

To improve information dissemination to various groups in the district

Objectives

- Increase radio transmission coverage in the district through installation of transmitters.
- Promote utilization of district library by providing mobile libraries

Goal 3

To promote the development of sports and recreation facilities in the district

Objective

- Construct a multi purpose youth centre in Kasane by 2004
- Construct a stadium in Kasane by 2006
- Provide relevant equipment conducive for sporting activities in schools and public open spaces
- Encourage development of private recreational facilities

Goal 4

- To Promote Youth and women participation in district development activities
- Enhance and promote skill development in women and youth through access to financial institutions and land

11.5 Framework for Strategic Environmental Assessment

Table 11.1 Framework for strategic environmental Assessment

Sectoral Goal	Objective	Environmental Key Issues
To promote and preserve culture through various youth activities	Form cultural and traditional groups in various village Promote school youth competition and annual sports festival activities in the district Hold commemoration of cultural day	None
2. To improve information dissemination to various groups in the district	Increases radio transmission coverage in the district through installation of transmitters. Promote utilization of the district library services by providing mobile libraries	None
Goal 3 To promote development of sports and recreation facilities in the district	Construct a multi purpose youth centre in Kasane by 2004 Construct a stadium in Kasane by 2006 Provide relevant equipment conducive for sporting activities in schools and public open spaces Encourage development of private recreational facilities	Land Degradation Increased extraction of river sand and gravel
4. To Promote Youth and women participation in district development activities	Enhance and promote skill development in women and youth through Access to Financial institutions and land	None

11.5.1 Evaluation of Sector Policies and Programmes

11.5.1.1 National Youth Policy

The policy aims at promoting empowerment of the youth with necessary skills to develop themselves. The policy also strongly advocates for development of sports and recreational facilities. In pursuing this policy the is likely to be some negative environmental impacts like pressure on water resources, excessive sand and gravel extraction. Other negative impacts include noise pollution and air pollution.

11.5.1.2 Community Based Home care Programmes

The policy calls for proper caring of terminally ill patients at their respective homes, this will in turn help to relieve the congested medical facilities. The likely negative impacts are; Mishandling

of clinical waste that may end up being thrown /disposed carelessly all over and end up in the Chobe river.

11.5.1.3 Sports and Recreation

This policy promotes development of recreational facilities in terms of sports clubhouses, stadia and multi purpose youth centers.

In pursuing this policy there is likely to be some negative environmental impacts like pressure on water resources, excessive sand and gravel extraction. Other negative impacts include noise pollution and air pollution.

11.6 <u>Strategies to achieve Labour, culture and social service sector goals and Objective.</u>

Table 11.2 Strategies to Achieve Labour, culture and social service sector Goals and Objectives

Goal	Objective	Key Environmental Issue	Proposed Activity/Projects	Mitigation
1. To promote and preserve culture through various youth activities	- Form cultural and traditional groups in various village - Promote school youth competition and annual sports festival activities in the district - Hold commemoration of cultural day	Indiscriminate disposal of solid waste in the form of papers and tins	Cultural Competitions	Provide receptacle bins
2. To improve information dissemination to various groups in the district	- Increases radio transmission coverage in the district through installation on of transmitters Promote utilization district library services by providing mobile libraries	Loss of vegetation	Construction of radio transmitters	Planting of trees

Goal	Objective	Key Environmental Issue	Proposed Activity/Projects	Mitigation
3. To promote development of sports and recreation facilities in the district	- Construct a multi purpose youth centre in Kasane by 2004 - Construct a stadium in Kasane by 2006 - Provide relevant equipment conducive for sporting activities in schools and public open spaces - Encourage development of private recreational facilities	Noise pollution Land degradation and loss of biodiversity	Construction of stadium and multi purpose centre in Kasane	EIA SEA
4.To Promote Youth and women empowerment in district development activities	- Enhance and promote skill development in women and youth through access to financial institutions and land	None		EIA SEA

11.7 Resource Requirement for DDP6

Table 11.3 Proposed projects and budget allocation

Proposed Project		Target	Year	Budget (Millions)	Performance Indicator
1.Level stadium	II	Kasane	2005/2006	15 000 000	Constructed stadium

11.8 Plan Monitoring and Program

Monitoring of the plan and proposed projects will be undertaken through the relevant consultative committees like the District Development Committee and Plan Management Committee which will address the problems and set backs in the plan and come up with suggestions on how such problems may be overcome.

CHAPTER TWELVE

12 MINERALS, ENERGY AND WATER

12.1 Introduction.

Chobe is known for its varied natural resource base. These include the unique forest reserves, bird-life, wildlife, and water resources. However, very little is known of its mineral wealth. Its potential for energy production is also virtually non-existent. With the Chobe district increasingly gaining local and international recognition for its tourism, it becomes very important to plan water and energy requirements of the district.

12.1.1 Institutional Framework

The Ministry of Minerals, Energy and Water Resources (MMEWR) is responsible for the policy formulation, planning and implementation of the ministry's activities.

In the absence of any known mineral deposit of significance in the Chobe district, the Department of Mines does not have an office in the district. Its operations are done from the head office in Gaborone. The Department of Water Affairs (DWA), with a station office in Kasane, is responsible for water supply in Kasane and Kazungula while the rest of the district is supplied by the Council Water department. The Botswana Power Corporation (BPC) in conjunction with the Department of Electrical and Mechanical Services (DEMS) provides electricity to the district. BPC and DEMS have station offices in Kasane. For prospecting purposes, depending on the land tenure, either the Land Board or the Department of Lands issues surface rights.

12.1.2 Strategic Plans for Respective Ministries

12.1.2.1 <u>Ministry of Minerals, Energy and Water Affairs</u>

The ministry aims to:

- Provide adequate and safe water. Despite the Chobe district having substantial surface water resources, many parts of the district are still relying on groundwater for their potable water needs. Even though the groundwater has been declared suitable for human consumption, it has a bad smell and taste. However, the Department of Water Affairs is engaged in a project to supply Chobe west villages from the Kasane water supply pipeline. Kasane draws water from the Chobe river and is treated before use.
- Optimise the exploitation and utilisation of renewable and other resources. In the Chobe district, only water can be optimally exploited and utilised for the benefit of the community. Even though the Chobe River is perennial, it is not clear whether the resource itself is renewable, this in view of perennial rivers that ultimately went dry. Besides, large scale utilisation of the water of the Chobe-Zambezi river system requires international agreements which are not always easy to come by. Studies should be conducted to determine whether the geographical position of Chobe puts it in a good position to harness solar energy for lighting and other activities.

• Satisfy customer needs by provision of efficient services. The extent to which Chobe will contribute towards achieving this target depends greatly on the quality and commitment of the staff of DWA and DEMS in Kasane. It should be noted though that provision of power to Kasane has serious problems of constant power cuts. This is one area the ministry should seriously work on for it to achieve its noble objective of customer satisfaction.

12.1.2.2 <u>Ministry of Local Government</u>

The ministry's targets are:

- Efficient service delivery and infrastructure provision. If the two ministries of Local Government, and Minerals, Energy and Water Resources could coordinate their activities on the Chobe west water supply project, as well as the on-going project to supply electricity to Chobe west, then this target could be realized; after all, both ministries have the same target of customer satisfaction through efficient service delivery.
- Community quality of life. The provision of electricity to the Chobe west communities and the on-going water supply project to the area are indeed meant to imporve the quality of life of the said communities. With efficiency in the operations of the two schemes, Chobe would be in a favourable position to contribute towards the achievement of the target.

12.1.2.3 <u>Ministry of Works, Transport and Communications</u>

The ministry's targets are to:

- Satisfy customers and stakeholders. Provision of electrical and mechanical services for government building projects has always been an issue of contention between the customer and the ministry. The Department of Wildlife and National Parks camps staff in the Chobe National Park are not happy that their electrical gadgets under the responsibility of DEMS have never satisfactorily functioned. There is not even an effort to explain the problem to the customers.
- Deliver works infrastructure and services with minimum impact on the environment. In an ecologically sensitive area like Chobe, it is necessary that all infrastructural works cause as little ecological impacts as possible. This is particularly so in the sector of energy and water which if poorly handled could lead to untold environmental and social consequences. As a result, due care should be exercised to ensure that infrastructural works are conducted in a manner that will not be self-defeating in the end.

12.1.3 The Role of the Private Sector

In the Chobe district, the private sector plays a minimal role in the provision of energy or water. BPC has a contract with power authorities from Namibia, Zambia and Zimbabwe for power supply in the district. Private companies are also responsible for supply of fuel such as diesel, petrol, paraffin, and gas. In the mineral sub-sector, private individuals or companies prospect for the type of mineral they are interested in and if mining permission is granted, they do the mining themselves. Currently, there is a company that is operating two quarry mining projects at Pandamatenga and Lesoma.

12.1.4 Consultation Priorities

Issues raised during consultation meetings with the communities and the public officers included the following:

- Poor water quality in Chobe west.
- Need to reticulate power to all villages in Chobe.
- Shortage of space in the existing DWA premises.
- Need to investigate the cause of declining levels of the Chobe river.
- Need to identify areas for extraction of building materials.
- Chobe river pollution from Kasane Old SHHA pit latrines.

12.2 <u>National Policies and Legislation</u>

12.2.1 Vision 2016

Botswana's Vision 2016 advocates for A Prosperous, Productive and Innovative Nation with a diversified economy deriving substantial input from mining, agriculture, industry, manufacturing, services and tourism. Furthermore, renewable resources will be used at a rate that is in balance with their regenerative capacity and capital from non-renewable resources will be invested in productive ventures. The contribution of Chobe district to this goal in the field of minerals, energy and water resources will be minimal because virtually, Chobe does not have significant deposits of exploitable minerals, nor does it have any energy sources of significance. The district is blessed with water resources but the nature and topography of flow does not favour hydroelectric power production. The water can only be used for investment in agricultural production and other economic activities, with the agreement of other riparian states in some cases.

12.2.2 Mines and Minerals Act

The Act regulates the granting, renewal and termination of mineral concessions, as well as payment of royalties and other related matters. In the absence of significant mineral deposits in Chobe, the application of this Act has only been with respect to quarrying. However, should an economically exploitable mineral be discovered in the district, the provisions of the Act will apply, even though a balancing act would have to made with regard to the wilderness of Chobe which is being marketed locally and internationally.

12.2.3 Environmental Impact Assessment Act (Draft)

The Act seeks to define the scale and nature of projects or activities that need an Environmental Impact Assessment (EIA) before implementation. The Chobe district is waiting anxiously for the passing of this Act to protect its unique environment. Projects in the Minerals, Energy, and Water sectors are inherently destructive to the environment and as such should be rigorously subjected to the provisions of the proposed Act.

12.2.4 National Energy Master Plan

The plan gives guidance on the exploitation of energy resources. The main theme of the plan is sustainability of resource use. Chobe does not have much to do regarding sustainability of the use of electricity as it imports power from neighbouring countries. Similarly, fuel is imported from

neighbouring countries and from observation, chances are very low that fuel could be misused. The exploitation of fuel-wood does not seem to be excessive in the district, perhaps because of a relatively low population. Efforts should however be made to reduce reliance on fuel-wood by exploring the feasibility of using solar power and hydro-epectricity for some of the energy requirements.

12.2.5 Forestry Policy

The draft Forestry Policy seeks to open up forest reserves for community use. Currently, anybody who wants to collect firewood in the forest reserves applies for a permit to do so. The new policy is likely to designate specific areas for different uses, collection of firewood included. This would help in management and decision making, especially with regards to identifying areas undergoing degradation and the possible causes of such.

12.2.6 National Water Master Plan

The plan provides guidance on how the scarce water resources in the country could be more meaningfully and sustainably utilised. It introduces an element of water pricing. The plan observes that water tariffs, especially in rural areas are below cost recovery, a factor that acts as an incentive to misuse water. With most of the settlements in Chobe likely to be relying on water from the Chobe river in the near future, an impression might be created that this is free water and could be misused. It is therefore important that the tariffs are set such that they are a disincentive to misuse of water.

12.3 Mining, Energy and Water

12.3.1 Mining Sector

12.3.1.1 <u>Water consumption</u>

There is no mining activity going on in Chobe except for two small scale quarrying projects at Pandamatenga and Lesoma, and scattered extraction of sand and gravel. In all these, there is no consumption of water except for drinking.

12.3.2 Energy Sector

12.3.2.1 Government Buildings

Government buildings in Kasane, Kazungula, Pandamatenga, Ngoma use mains power supply. Other villages are still being connected to the mains supply and all government buildings will be reticulated. The private sector also uses electricity in the offices.

12.3.2.2 <u>Alternative Energy Sources</u>

Alternative energy sources are fuel-wood, paraffin, candle and gas. The feasibility of using solar power has not been explored.

12.3.2.3 Energy Demand and Supply

Chobe district's power supply comes from three countries, Namibia, Zambia, and Zimbabwe. Chobe West comprising Muchenje, Mabele, Kavimba, Kachikau, and Satau get power from a 33 KV supply from the Namibian Power Corporation at Ngoma bridge. The 33 KV is stepped down to 11 KV and down to 0.4 KV/400 V for consumption. The monthly consumption for Chobe west is 0.2 megawatts.

Kasane, Kazungula, and Lesoma get 66 KV power supply from ZESA network of Zambia. The 66 KV is stepped down to 11 KV for distribution and further stepped down to 0.4 KV/400 V for consumption. The monthly consumption is 2.82 megawatts.

Pandamatenga village gets 33 KV supply from ZESA Hwange, Zimbabwe. The 33 KV is stepped down to 11 KV for distribution and further stepped down to 0.4 KV/400 V for consumption. The monthly consumption is 0.278 megawatts.

12.3.3 Water Sector

12.3.3.1 Water sources and use

There are two water sources in Chobe. Kasane, Kazungula, and Lesoma use surface water from the Chobe river and are supplied by DWA. Parakarungu, Satau, Kachikau, Kavimba, Mabele, and Pandamatenga use groundwater and are supplied by Council. However, Chobe west villages are being connected to the Kasane pipeline and this will leave Pandamatenga as the only settlement in Chobe still using groundwater. The quality of water is good except at Kachikau, Satau, and Parakarungu where the water is saline and has a bad smell.

Besides domestic use, water is used in commercial activities like horticulture, tourism projects, livestock watering and commercial arable farming. In Kasane, there is a viable horticultural project that uses water from the river for irrigation. In the Chobe west villages, arable farmers make use of the receding floods to plant crops, a system known as *molapo* farming. Pandamatenga commercial farms do not make use of water from the river because of the distance from Kasane to Pandamatenga, which is about 100 km.

12.3.3.2 Water supply and demand

Tables 12.1 and 12.2 show the water consumption and supply for settlements supplied by Council and those supplied by DWA respectively.

Table 12.1 Water supply and consumption in Council supplied areas for July 2003

Settlement	Supply (cubic meter per day)	Consumption (cubic meter per day)
Pandamatenga	203	170
Lesoma	60	45
Kachikau	192	150
Mabele	80	65
Kavimba	72	65
Satau	100	80
Parakarungu	84	75

Source: Department of Water and Waste Water NWDC-Chobe

Table 12.2 Water supply and consumption in DWA supplied areas (Kasane and Kazungula for January 2003 to June 2003)

	Jan	Feb	Mar	Apr	May	Jun	Average per month	Average per day
Supply (M3)	54281	44158	46239	60671	61593	51514	53076	1769
Consumption (M3)	51750	41629	43874	58743	59490	48817	50717	1690
Losses (M3)	2531	2529	2365	1928	2103	2697	2359	79
Losses %	5	6	5	3	3	5	5	-

Source: Department of water affairs

12.4 Sector Goals and Objectives

Table 12.3 Sector goals and objectives

Goals	Objectives
To improve the quality of life in the rural areas	To supply adequate quality water from Chobe river to Chobe west villages by 2005 To supply power to Chobe west villages by 2003
To promote investment opportunities in rural areas	To supply adequate quality water from Chobe river to Chobe west villages by 2005 To supply power to Chobe west villages by 2003
To secure enough office space for DWA	To construct office block for DWA
To facilitate integrated management of international river systems	To prepare a Zambezi river basin management plan by 2007
To facilitate economic and efficient use of water resources	To assess the feasibility of utilising Chobe river waters to supply other parts of the country

12.5 Framework for Strategic Environmental Assessment

12.5.1 Evaluation of Sector goals and objectives

Goal 1

To improve the quality of life in the rural areas

Environmental impacts include disturbance of biodiversity in the Park through which the pipeline will go. Disturbance to bird and wildlife movement during the construction phase will also occur. Destruction of the artifacts, especially around the Ngoma area where some artifacts have been discovered is also a possibility. Mortality of small animals due to being trapped in the open gullies during construction is likely to take place. Waste may also be poorly disposed leading to wildlife and livestock eating undesirable substances.

Goal 2

To promote investment opportunities in rural areas

In addition to the impacts under goal 1, investment in Chobe west will lead to land uptake in an area where already there is no communal land available. Excessive mining of building materials is likely to take place as well.

Goal 3

To secure enough office space for DWA

Construction of an office will lead to noise and dust pollution, and possible washing of building rubble into the river.

Goal 4

To facilitate integrated management of international river systems

No impacts are anticipated.

Goal 5

To facilitate economic and efficient use of water resources

No impacts are anticipated.

12.5.2 Evaluation of Policies and Programs

- Mines and Minerals Act. Exploitation of minerals leads to environmental pollution and some mine operations generates gases which in the long term are harmful to a person's health. The infrastructure that goes with large scale mining leads to excessive extraction of building materials in some cases. However, mining is regulated under this Act so that some if not all of the foregoing concerns are addressed before project inception.
- National Energy Master Plan. The plan itself does not pose serious environmental impacts as it emphasises sustainability. That notwithstanding, provision of power which is also central to the Master Plan, entails major infrastructural works which have potential impacts. These include displacement of people, mortality of rare bird species in areas rich with bird-life, excessive water use for hydro-electricity, or coal for coal driven power production, and environmental pollution from emission of gases. However, the Master Plan emphasises a shift to other sources less damaging to the environment like wind and solar power where feasible.
- National Water Master Plan. Provision of water inevitably requires construction of pipeline channels and storage tanks. Construction of these facilities in Chobe will potentially lead to loss of flora and fauna, diversion of animal movements, and possible destruction of archaeological artifacts. Abundance of water in the district may also give the impression that the resource is for free and can be wasted. However, the Master Plan calls for raising of water tariffs to match the costs associated with its extraction and supply.

12.6 Strategies to achieve Sector goals and objectives

Table 12.4 Strategies to achieve sector goals and objectives

Goal	Projects	Negative impacts	Mitigation
To improve the quality of life in the rural areas	Connect Chobe west to Kasane water pipeline Connect Mabele, Kavimba, Kachikau, Satau to power grid	Poor waste disposal, loss of biodiversity in the Park, disruption to animal movement, wildlife mortality.	SEA, EIA, AIA, movable toilets, land rehabilitation
To promote investment opportunities in rural areas	Connect Chobe west to Kasane water pipeline Connect Mabele, Kavimba, Kachikau, Satau to power grid	Poor waste disposal, loss of biodiversity in the Park, disruption to animal movement, wildlife mortality, excessive mining of building materials.	SEA, EIA, AIA, movable toilets, land rehabilitation
To secure enough office space for DWA	Construct DWA office block	Noise and dust pollution, washing away of rubble into the river	Wall between construction site and the river
To facilitate integrated management of international river systems	Prepare Zambezi basin management plan	Nil	Nil
To facilitate economic and efficient use of water resources	Assess feasibility of supplying water to Boteti, Maun from Kasane	Nil	Nil

12.7 Resource Requirements for DDP 6

12.7.1 <u>Issues and strengths</u>

For the Ministry of Minerals, Energy and Water Resources to achieve its target goals, it will have to come to agreement with their partners in Namibia, Zimbabwe, and Zambia to find a lasting solution to the frequent power cuts that occur in the district. Otherwise, the customer will not be satisfied as envisioned. On a positive note, the ministry is driving towards the realisation of its target by the commencement of the two major projects of water reticulation to some villages in Chobe West and the power transmission to Chobe west, though with the exception of only one village, Parakarungu. The district is further favoured by the relatively short distances between settlements, and the small size of the population, which though could be a disincentive on the market side, makes services reach almost everybody in a short time.

12.7.2 <u>Performance targets and Monitoring for DDP 6</u>

Table 12.5 Performance targets and monitoring

Goal	Projects	Start date	End date	Monitoring
To improve the quality of life in the rural areas	Connect Chobe west to Kasane water pipeline Connect Mabele, Kavimba, Kachikau, Satau to power grid	2003 2002	2005 2003	Quarterly reporting to DDC, DWA, BPC, Council
To promote investment opportunities in rural areas	Connect Chobe west to Kasane water pipeline Connect Mabele, Kavimba, Kachikau, Satau to power grid	2003 2002	2005 2003	Quarterly reporting to DDC, DWA, BPC, Council
To secure enough office space for DWA	Construct DWA office block	2005	2006	Reporting to DDC, DWA
To facilitate integrated management of international river systems	Prepare Zambezi basin management plan	-	-	Quarterly reporting to DDC, NCSA, Council, DWA
To facilitate economic and efficient use of water resources	Assess feasibility of supplying water to Boteti, Maun from Kasane	-	-	Quarterly reporting to DDC, NCSA, Council, DWA

12.7.3 <u>Development Budget for DDP6</u>

Table 12.6 Development Budget for DDP 6

Project Title	Objective	Target	Funding
International Water Planning and Development MR 301	To facilitate an integrated management of international river systems	Zambezi River Basin Management Plan developed	P 5 959 000
National Water Planning and Development MR 302	To facilitate economic and efficient use of water resources	Feasibility study	P24 093 000
Water Affairs Buildings MR 316	To provide adequate office accommodation	Kasane Office Block	P 7 888 000
Major Villages Water Development MR 337	To promote access to quality drinking water	Kasane-Kazungula Water System Extension	P 735 000
Electricity Reticulation to Chobe west	Promote investment in Chobe West	Chobe west minus Parakarungu	-
Grand Total Allocation			P38 675 000

CHAPTER THIRTEEN

13 WORKS TRANSPORT AND COMMUNICATION

13.1 Introduction

The Chobe District has a semi developed communication system. It is linked to the Ngami Land and Central districts by tarred roads. It is also linked to the neighbouring countries of Zambia, Zimbabwe, Namibia and Angola by other means of communication like waterways and airport. Internal roads in the district are of gravel standards. Telecommunication links are available in Kasane and the neighbouring settlements of Kazungula, Lesoma, Pandamatenga. The rest of other villages do not have telecommunication facilities and instead use radio or two-way communication system (*Roja-Roja*)

Other major providers of infrastructure in the country include both Parastatals and private Organisations. The most outstanding ones include the following; Botswana Railways, Botswana Telecommunication Corporation, Botswana Power Corporation, Botswana Post, Mascom Wireless and Orange Cellular Network

In an effort to build a prosperous, innovative and productive nation as espoused in vision 2016, Chobe DDP 6 has planned to upgrade and construct a system of access roads to link various settlements in the district. This is in recognition of the fact that a road system provides socioeconomic linkages between settlements. To ensure a safe and secure nation distribution and circulation of road user safety materials to the district will be accelerated. Drivers Testing Centres will be constructed in the Kasane – Kazungula Planning area during the Planning period (DDP 6). The main aim is to improve quality of drivers in the district.

13.1.1 Institutional Framework

13.1.2 The Ministry of Works Transport and Communications.

The ministry of Works Transport and communications is mandated with the responsibility of providing infrastructure services throughout the country. The Ministry also formulates policy guidelines for infrastructure development. There are several departments within the ministry which are responsible for execution of various functions within the ministry, these Section/Departments are; Architecture and buildings, Civil Aviation, Electrical and Mechanical Services, Roads, Roads, Transport and Safety, Central Transport Organisation and the Department of Meteorological Services. All of the above mentioned departments are found in chobe.

Department of National Transport and communication is responsible for all National roads and formulation of road policies including vehicle registration and licensing, safety transport regulation and promotion. The department of Civil Aviation is responsible for construction and operation of airports and oversees all aviation standards. Air Botswana provides air services on commercial basis.

The Botswana postal services provides standards for postal services in the country while communities provide postal agencies

The Botswana Telecommunication Corporation provides national and international telecommunication services.

13.1.3 Strategic Plans for Respective Ministries

13.1.3.1 <u>Ministry of Works Transport and Communications</u>

The main responsibility of the Ministry is to provide: safe and secure transport, communication, building, meteorological and electrical infrastructure in order to improve the quality of life for Batswana. For the ministry to achieve these goals it has set the following key result areas.

- Customer satisfaction
- Delivery of services and products within a set time and budget
- Provide safe and secure and accessible infrastructure

At district level the Ministry will address these key result areas by constructing a 65km road from Ngoma to Kachikau in 2004/2005. The ministry will furnish the road with all relevant road signs and other road furniture. Construction of a bridge at the Kazungula bridge will also be undertaken during DDP 6. The exact starting date for this bridge is not yet determined as other issues need to be ironed with the neighboring countries of Zimbabwe and Zambia.

13.1.3.2 <u>Ministry of Local Government</u>

The statutory responsibilities of the ministry of Local Government include primary health care. Primary health care is run through the Council health department of clinics and environmental health. Other responsibilities of the Ministry of Local Government include provision of physical infrastructure and social services. The major goals of the Ministry of Local Government are:

- Provision and maintenance of infrastructure facilities
- Human resource development and management
- Effective Policy implementation
- Productivity and organizational effectiveness

The North West District Council will continue to address and uphold the goals of the ministry through provision of the necessary infrastructure during DDP 6. The Council is currently undertaking the servicing of 563 residential plots in Kasane plateau, 20 industrial plots in Kasane and 51 commercial plots in Kazungula. Pandamatenga Infrastructure development is earmarked to start in 2004/2005 planning period.

13.1.3.3 <u>Ministry of Lands and Housing</u>

The Ministry of Lands Housing aims at improving the quality of life for Batswana through provision of services as well as management and development of land. The ministry also ensures that the environment is well protected.

To achieve the goals of the ministry at district level various development plans have been prepared for various settlements in the district. The Kasane-Kazungula Development Plan final draft is finished and only waiting the approval of the minister. The plan has made provision for 5000 plots which will be serviced and allocated during 2004/2005. The Chobe District Settlement Strategy is completed, it was in fact used as a guiding tool to derive most of the projects now proposed in the DDP 6. The Physical Planning section will also prepare settlement plans for the villages of Satau, Parakarungu and Mabele during the financial year 2003/2004.

13.1.4 Consultation Priorities

During the process of consultation various communities in the district have raised some issues that needs to address as follows:

- The communities indicated that construction of a tarred road from Ngoma to Parakarungu through the Chobe National park should be taken as a priority in the district
- Poor maintenance of existing roads in the district especial in the Chobe enclave area
- Poor maintenance of public infrastructure especially schools, clinics and other public buildings
- Some communities have indicated that government vehicles take too long at the CTO workshop and Council workshop
- To a lesser extent vandalism of Public phones was cited as one of the issues

13.1.5 National Policies and Legislation

There are a number of policies and legislations enacted by the government to regulate the function and operations of the various sectors offering transport services in the country. The most important ones include the following;

13.1.5.1 Road Traffic Act (Draft)

The main objectives of the Act are:-

- To ensure public safety through inspection of the standards, conditions of vehicles, crews and operations of both passenger and freight services.
- To ensure proper allocation of investment funds between road transport and other modes of transport
- To promote private ownership of public transport services and review public transport subsidies.

In an attempt to fulfill the objective of this Act the council will construct internal roads to required standards and timely maintain and service all vehicles. This will be undertaken through manpower budgeting and financial budgeting. Currently the council runs a mini bus which transports workers from the Plateau area. The North West District Council stopped this service to its workers in order to encourage and promote Public transport in the township of Kasane.

13.1.5.2 Road Safety Policy

The main thrust of this policy is to reduce road accidents and fatalities throughout the country. During implementation of DDP 6 the District Roads Department will under take proper road designs which discourage over speeding and provision of adequate road signs along all major and internal road systems to ensure safety of pedestrians and motorists.

13.1.5.3 Civil Aviation Policy

The policy emphasizes the need to recover an increasing proportion of the cost of infrastructure provided by the government of Botswana. Its main thrust is ensuring safety and efficiency of the field of civil aviation. In this regard the government has also made a commitment to provide where necessary the required civil aviation infrastructure and to maintain it. In pursuance of the provisions of this policy the Department of Civil Aviation will expand the Kasane Airport to international level to take larger aircrafts.

13.1.5.4 Telecommunications Policy (2001)

This is a relatively a new policy developed in 2001. The policy provides for liberalization of the market and the establishment of a regulatory authority. One of the major aims of the policy is to create a conducive atmosphere for competition between service providers and timeous response to the needs of customers. The introduction of this policy has led to the birth of the Botswana Telecommunication Authority and has also seen the abolition of the Botswana Telecommunication Corporation's monopoly in providing telecommunications infrastructure. Through this policy, services such as cellular phones were introduced in the country. The Government of Botswana during DDP 6 will continue to provide services to rural areas. To this end the government will continue to provide funds to BTC to carry out the servicing of rural areas.

13.1.5.5 <u>Postal Services Policy</u>

The policy aims at providing standards for provision and location of postal services in the country. Provision of such services is based on the population criteria. The policy states that every recognized and gazetted settlement with a population of 5000 and above can be provided with a post office facility. Based on the population criteria it will not be possible to provide any additional post offices in the district. In the light of the above criterion the district will continue to encourage proper maintenance of existing post offices.

13.2 Works Transport and Communication

13.2.1 District Roads

The Chobe district has two-tarred primary roads i.e. Kasane – Francistown and Kasane – Ngoma roads. The other internal roads that exist in the district form a feeder road system that give seasonal access to various settlements in the district. The road from Francistown also links Botswana with other neighbouring countries like Zambia and Zimbabwe. The Kasane – Ngoma road located on the western side of the district links Chobe to Namibia and Maun through a secondary road cutting through the national park. Although the road forms a major link to the west it is mostly inaccessible during the rainy season. The other road that exists in the district is the Parakarungu - Kachikau – Kataba road. The road covers about 110 km linking Chobe enclave and other settlements. The road is however nor passable during rainy seasons. There are plans to upgrade this road during DDP 6, Plans are at an advanced stage to tarmac it up to Kachikau and the rest will be graveled.

13.2.2 Public Transport Modes

The most prevalent inter district mode of transport is public transport which include long distance buses and mini buses. The commonly used route is the Francistown - Kasane route. This route is also used to transport goods to the entire district and across Botswana to the neighbouring countries of Namibia, Zimbabwe, Zambia and Angola. There are 12 mini buses operating between

Kasane and Kazungula. The average trip generation to Kazungula and back in a day is about 8 trips. There are presently 4 long distance buses operating between Kasane and Francistown. Long distance buses make three trips to Francis town daily. Public transport is highly unreliable as trips are made in the morning; and in the afternoon there are no buses to Francistown.

There is also no reliable transport to the Chobe enclave areas. Travelers to the enclave use either private vehicles or government / council vehicles. Public support facilities are also lacking in the district. Kasane as a district headquarters does not have a proper bus rank. Public transport uses the shopping parking space next to Center Bar in the mall. There are plans to construct a proper bus rank for Kasane during DDP 6 (2004/2005).

13.2.3 Civil Aviation

Air transport is the most convenient mode of travel to the Chobe District. It also facilitates speedy movement of goods and people to Kasane and the district at large. Air Botswana operates three scheduled flights a week otherwise travelers have to use charter flights.

Currently Kasane airport can only land limited aircrafts due to its size. Night landing cannot also be undertaken due to the fact that the airport doesn't have night landing facilities. Key users of the airport are presently tourists, businessmen and government officials on official trips. The airport has a 2 km runway, which means that large aircrafts

like Boeing 373 cannot land on the airport. This has negative impacts on the tourist industry in Chobe. Bigger airplanes prefer to land in the neighboring Victoria Falls town of Zimbabwe hence denying Chobe such an important economic activity. Plans are also underway to upgrade Kasane airport to international standard.

13.2.4 Water Transport

The most important surface water resource for the district is the Chobe River, which runs in the northern border of Botswana, Namibia, Zimbabwe and Zambia. The most common type of vessels used in the river are engine boats, *mekoro* and the ferry at Kazungula which provide a link to the countries north of Botswana. Motorboats are used to transport tourists for leisure, game viewing, and recreational purposes. *Mekoro* is used by locals to transport their goods to other parts of the district. The ferry is used to carry trucks/lorries/cars and people across the Chobe river. Despite the usage of both *mekoro* and engine boats these facilities do not have a proper parking facility. During the execution of DDP 6 construction of a jetty will be undertaken. A bow bridge at the ferry point in Kazungula is proposed. The exact date for commencement of construction is not yet known as there are some issues to be resolved between Botswana and Zimbabwe.

13.3 Communication Network

13.3.1 <u>Telecommunications</u>

Botswana Telecommunication Corporation is the main provider of telecommunication infrastructure in the country. However with Chobe District sparsely distributed and vast of the areas occupied by the National Parks and Forest reserves provision of telecommunication infrastructure is not that easy. Concentration is this infrastructure is currently in Kazungula Kasane and Pandamatenga. There were 1559 active telephone lines in the district by January 2001.

Apart from BTC, Mascom wireless and Orange companies operate cellular network services in the district. In areas where telephones are not available such areas are reached through radio transmission signal located in various council clinics and police stations. Other types of telecommunication systems available in Chobe include electronic communication systems like fax machines and telex facilities, which are mostly found in Kasane. There are no plans to expand the telecommunication infrastructure to the Chobe Enclave.

Table 13.1 Telecommunication connection and demand in Chobe 2000

Location	No. Of Telephone connections	Total Public call Box	Waiting list as per Jan 2000
Kasane	1316	50	103
Kazungula	175	0	32
Pandamatenga	64	0	39
Ngoma	4	0	3
Lesoma	0	0	15
Mabele	0	0	2
Kachikau	0	0	1
Satau	0	0	1
Parakarungu	0	0	0
Kavimba	0	0	0
Total	1559	50	204

Source: Chobe District Settlement Strategy 2002

Table 13.1 reveals that the telecommunication system is mainly concentrated in Kasane, Kazungula and Pandamatenga. The rest of the villages in the district have no telecommunication services. There is a need to distribute this facility to those villages that do not have this facility.

13.3.2 Postal Services

Botswana Postal Services is responsible for provision of all postal infrastructures in the country. There are currently two post offices in Chobe located in the villages of Kasane and Kavimba. The Kavimba post office caters for Chobe enclave villages while the post office in Kasane caters for the whole district. There are also two postal agencies located in the villages of Satau and Parakarungu.

Facilities offered at these post offices are basic including; mail posting, fax transmission, and money order. The absence of this facility in other villages is an indication that communication links in Chobe has not been enhanced. In the eastern side of the district the average distance covered to reach a post office is about 70km. This works out to a cost of about P20-00 per trip, which is outrageous. There are currently no plans to build any new post office in the district. The Kasane Post office will be expanded and relocated to a new plot next to the Library

13.4 Transport and communication Goals and Objectives

Table 13.2 Transport and communication Goals and Objectives

Overall Goal	Objectives	
Improve communication System in the District through Provision of appropriate infrastructure	Improve and strengthen links between various settlements in the district Construct to gravel standard all access roads Upgrade sandy roads to gravel standard by 2005 Provide internal road system in Pandamatenga by 2005	
Improve transport Status in the district and driving skills.	Improvement and extension of Kasane airport by 2005 Construction of bow bridge at Kazungula Build drivers testing Centre in the district Tarring of Ngoma-Kachikau road by 2004/5	
3) To improve telecommunication network in district	Improve and expand telecommunication net work to other parts of the district	

13.5 Resource Requirements for DDP 6

Table 13.3 Proposed Projects & Budget Estimates

Project Title	Objective	Target/date	Funding (P,Millions)
1.Tarring of Ngoma Kachikau Road	To Provide necessary infrastructure	2004 - 2005	P51 622 600
2. Construction of Ngoma weigh Bridge	To Provide necessary infrastructure	2003/2004	P 1 547 000
3. Construction of Kazungula Bridge	To Provide necessary infrastructure	2004 -2009	P 450 000 000
4.Expansion and Upgrading of Kasane airport	To Provide necessary infrastructure	2004 - 2006	P210 660 000
5.Construction of Office space for meteorological services(Kasane office Block and 12 houses at Pandamatenga)	To improve service delivery.	2004 - 2006	P5 714 000

13.5.1 Planning Monitoring Program

The Chobe District has in place relevant committees, which are responsible for evaluating and monitoring of various projects and programmes. These include committees such as the DDC and PMC. Project Managers in association with relevant ministries will also design and oversee plan implementation and monitoring of these programs. Annual plans and quarterly reports will be prepared and presented to relevant authorities like the District Development Committee and Plan Management Committee.

CHAPTER FOURTEEN

14 LAW, JUSTICE AND SECURITY

14.1 Introduction

14.1.1 Institutional Framework

Matters of security are a prerogative of the various institutions mandated with the responsibility of maintaining justice and order in the country. These institutions include some of the following: The Parliament, which is the highest body, mandated with the responsibility of making laws in the country. The office of the Ombudsman implements and administers the Ombudsman's Act which prevents maladministration in the affairs of Government. The Attorney Generals Chamber is also responsible for criminal prosecution to the exclusion of any other authority. The Auditor General ensures that all stipulated laws, instructions and directives related to public monies are observed.

The Botswana Police service, Prisons service, Immigration and Citizenship Departments are among other departments that exist in the district and are responsible for maintenance of law and order

In an effort to realize vision 2016's pillar of having a secure and safe nation, the Botswana Police service has a Police station in Kasane. A Drivers Testing Centre will be built in the next financial Year(2004/2005); this will also address the goal of reducing serious injuries and deaths resulting from irresponsible use of vehicles.

14.1.2 Strategic Plans for Respective Ministries

14.1.2.1 Ministry of Local Government

The strategic Plan for the ministry of Local Government aims at achieving the following objectives; Improving the quality of life for Batswana through coordination and provision of basic infrastructure facilities, timely delivery of services and; Provision of public education to the community for enhancement of participatory planning at district and community/village levels. In line with the goals of the strategic plan for the Ministry of Local Government the Chobe District through the Tribal administration administers customary law through the Kgotla system. There is a police station in Kasane, which is responsible for community policing, traffic, and CID. Other Police stations in the district are located at Pandamatenga, Kazungula, Kasane, Kasane Airport and Kavimba

14.1.2.2 Ministry of Presidential Affairs

The ministry of State President exists to; provide overall national leadership and direction on all matters of national importance, to effectively coordinate, monitor and evaluate at national level the interrelated ministerial policies and operation and optimal utilization of all resources to attain national goals and objectives., to coordinate effective national security and stability through which the much desired national progress can be attained and to facilitate the development and maintenance of sound internal relations policies which foster national progress and international peace and security

- **Botswana Police service.** The strategic Plan for the Police service aims at eliminating serious and violent crimes and illegal possession of firearms as well as distribution and use of addictive drugs
- **Botswana Prisons service.** The strategic plan for the Botswana Prisons department specifically calls for safe custody, humane treatment and rehabilitation of offenders in all Botswana Prisons

14.1.2.3 <u>Ministry of Labour and Home Affairs (Department of Justice)</u>

The Department of Justice in the Ministry of Labour and Home Affairs ensures safe custody of offenders and protects rights of individuals in relation to freedom of association as provided for in the constitution of Botswana.

The Role of Private Sector

The role of the private sector is to complement the work of the law enforcement officers and they help in maintenance of Law and Order. There are a number of private security companies in Chobe. Most of them are engaged in guarding various premises.

14.1.3 <u>Law, Justice Security Consultation priorities</u>

Communities in the district have raised some issues that would need to be addressed during the planning period. These are

- Increased incidences of house breaking
- Inadequate resources for the police force in the form of housing.
- High cross border crime

14.2 National Policies and Legislation

14.2.1 Botswana Police Act

The Botswana Police Act was in acted in 1969, the act describes the duty of the police service as to protect life and property, prevent crime, repress internal disturbances and to maintain security and public tranquility and generally to maintain peace.

14.2.2 <u>Immigration and Citizenship Act</u>

The immigration and Citizenship Act cap25:02 was introduced mainly to regulate people entering and leaving the country. The implementation of this act at the district has managed to regulate people entering the Kazungula and Botswana Zimbabwe boarder posts

14.3 Law Justice and Security

14.3.1 Administration of Justice

The duty of the Department of administration of justice is to maintain, sustain and develop an efficient judicial system that disburses justice impartially, expeditiously fairly and to uphold human rights, democracy and the rule of law in accordance with the constitution of Botswana. The rule of law is upheld through a system of magistrate courts. A Grade II Magistrate court services Chobe district. Court officials are based in Francistown City. The Magistrate Court in Kasane is located in a small area in which any expansion is impossible. There are plans to relocate the magistrate court to a spacious place in the Plateau area

14.3.2 Customary Law and Courts

14.3.2.1 Tribal Administration

Tribal Administration is the institution responsible for running and presiding over customary courts as well as provision of traditional guidance in various customary matters. The forum of deliberations, which is the Kgotla, serves as a meeting point for policy formulation, project initiation, consensus building, implementation, monitoring and evaluation at the basic grassroots level. The institution is composed of Sub Chiefs, Court and Deputy Court Presidents, Head Man and Deputy Headman and local Police. The duty of the Local Police is to restore law and order at community level. The Tribal Administration in the district is faced with various problems which include, inadequate office space accommodation, shortage of personnel etc

14.3.3 Prisons and rehabilitation Department

The department aims to provide custody for convicted prisoners and cultivate a culture of acceptance of rehabilitated offenders back into the mainstream community.

The Prisons Service has widened its services from just being an area of incarceration. Rehabilitation of inmates also constitutes a primary focus for the department. As such the department is putting efforts into imparting business and production skills to inmates. It provides counseling and coping mechanisms, which are essential for attitudinal change. All these constitute towards rehabilitation of offenders. The Kasane prison reports to the Divisional Commander North based in Francistown.

One major key result area for the department is to de-stigmatise ex-convicts and promote integration to mainstream society. However, the promotion of integration is limited by the curtailment of the department's jurisdiction beyond the prison and on completion of sentence. The key strategy towards achieving social acceptance is to work closely with all the stakeholders in educating the community. It is imperative that the mindset of the public must be changed to accept ex-prisoners as free citizens with full rights and in the majority of cases as reformed individuals capable of leading a normal life. In light of the above, departments will be called upon to prepare prisoners for life outside prison through lectures on government schemes and other entitlements upon release.

Release of prisoners on extra-mural grounds must be diligently administered to curb the problem of breeding hardened criminals and also to speed up rehabilitation.

14.3.4 Immigration and Citizenship

The main objective of the department is to facilitate movement of travelers in and out of the country as well as issuance of traveling documents. The department structure is made up of a Regional Office based in Kasane, six border posts and two passport district offices. Entry points are located at Pandamatenga, Kazungula Road, Kazungula Ferry, Ngoma Bridge, Kasane Airport and the Regional Office. The Department does not operate to its maximum potential because of a shortage of personnel and vehicles. The pouring of illegal immigrants into the district is a problem .

14.3.5 Botswana Police Service

The Botswana Police service has four police stations in Chobe District located in Kasane, Kavimba, Pandamatenga and Kazungula. The main aim of the police service is to protect people

and their property and offer various community services. The police in Chobe are engaged in various community activities like crime prevention committees, disaster relief services, and border patrols. In an effort to reduce an office space shortage in the district the government has constructed additional ninety offices in the district. A total of 32 housing units will be built in Chobe(Kasane) during the planning period. Another office and housing accommodation will be built in Kachikau during the planning period.

Chobe District being located at a meeting point of four countries (Botswana, Namibia, Zambia and Zimbabwe) experiences a lot of crime. Table 14.1 reveals the type of crimes committed in Chobe over a number of years.

Table 14.1 Crime statistics by type and years in Chobe District

Type of crime	Year			
	2000	2001	2002	2003 (Up to March)
Accidents	198	233	222	56
Deaths	13	3	13	1
Murder	4	3	2	0
Common Assaults	153	146	182	27
Unlawful wounding	20	20	27	0
Robbery	1	2		3
Butlery and Theft	83	106	102	15
House Breaking	33	35	34	14
Rape	16	12	8	-
Motor Vehicle theft	2	0	8	0
Common Theft	168	186	234	38
Habit Forming Drugs	25	49	35	7
Total	2520	2635	3060	204

Source: Botswana Police Service - Kasane

14.3.6 Fire Services

Despite the fact that Kasane is a township with a lot of industrial, commercial and office accommodation the district does not have any fire fighting services. Fire fighting services are sourced from Francistown, which is about 480 km away. This kind of arrangement is not healthy for the district. There are no plans to establish a fire Department in the district.

Table 14.1 reveals that crime in the district is on a steady increase. From year 2000 to 2001 crime increased by 115 cases, whereas from 2001 to 2002 crime increased from 2635 cases to 3060 cases an increase of 425 cases or 85%. This is a situation that the police service in Kasane needs to address seriously.

The Police service in Chobe faces some problems in their operations. Some of these problems include: shortage of office space, shortage of housing for officers and shortage of transport.

14.4 <u>Law, Justice and Security Goals and Objectives</u>

14.4.1 Botswana Police Service

Goal 1

To reduce the incidence of crime in order to promote peace, safety and security in partnership with the community by 10% annually.

Objectives

- To improvement of crime prevention committees
- To further development of the community policing concept
- To implementation of Traffic management Strategy
- To promote crime prevention initiatives

14.4.2 Immigration.

Goal

To promote a good image of the country through facilitating smooth movement of travelers in and out of the country.

Objectives

- Developing and assisting in the implementation of policies and regulations pertaining to immigration, passport and citizenship matters.
- Minimise delays in issuance of residence permits and traveling documents through computerisation.
- Conduct regular joint clean-up campaigns
- Mount regular border patrols
- Conduct quarterly stakeholders meetings
- Conduct public information dissemination

14.4.3 Administration of Justice

Goal 1

To dispense timely justice through an efficient Magistrate and Traditional Courts system.

Goal 2

To promote access to legal systems for all Chobe residents.

Objectives

- Increase the number of magistrates in the district
- Construct additional customary court Offices in Plateau by 2004

14.5 Framework for Strategic Environmental Assessment

Table 14.2 Framework for Strategic Environmental Assessment

Sector Goal	Objective	Environmental Key Issue
1. To reduce the incidence of crime in order to promote peace, safety and security in partnership with the community by 10% annually	Through improvement of crime prevention committees Through further development of the community policing concept Through implementation of a Traffic management Strategy Through increased crime prevention initiatives	None
2. To promote a good image of the country through facilitating smooth movement of travelers in and out of the country.	Developing and assisting in the implementation of policies and regulations pertaining to immigration, passport and citizenship matters. Minimise delays in issuance of residence permits and traveling documents through computerisation Conduct quarterly stakeholders meetings Conduct public information dissemination	None
3.To dispense timely justice through efficient Magistrate and Traditional Courts system.	Increase the number of magistrates in the district Construct additional customary court Offices in Plateau by 2004 Construction of a new magistrate court in Kasane	Destruction of vegetation Increased pressure on water sources Excessive mining of sand and gravel for construction

14.6 Strategies to Achieve Law. Justice and Security Sector Goals and Objective

Table 14.3 Strategies to Achieve Law, Justice and security sector Goals and Objective

Goal	Objective	Issues	Proposed projects	Mitigation Measures
1. To reduce the incidence of crime in order to promote peace, safety and security in partnership with the community by 10% annually	Improvement of crime prevention committees Further development of the community policing concept Implementation of Traffic management Strategy Through increased crime prevention initiatives	None	None	None
2. To promote a good image of the country through facilitating a smooth movement of travelers in and out of the country.	Developing and assisting in the implementation of policies and regulations pertaining to immigration, passport and citizenship matters. Minimise delays in issuance of residence permits and traveling documents through computerisation Conduct quarterly stakeholders meetings Conduct public information dissemination	None	None	None
3.To dispense timely justice through an efficient Magistrate and Traditional Courts system	Increase the number of magistrates in the district Construct an additional customary court Offices in Plateau by 2004 Construction of a new magistrate court in Kasane	Destruction of vegetation Increased pressure on water sources Excessive mining of sand and gravel for construction	Construction on Kasane New Court Construction of Plateau Customary Court	EIA,SIA

14.7 Resource Requirement for DDP 6

Table 14.4 Proposed Projects and their Budget Estimates

Project Title	Objective	Target	Year	Estimated Cost
Improvements to Prison HA301	To improve facilities	Kasane	2003/0 4	P7 614 254
Kachikau Police Station Housing Component	To provide adequate office and housing space	Kachikau 1HC,5MC, 30LC	2003/0	P34 000 000
Police Housing	To improve access to housing for officers Improvement to existing houses	Kasane 6HC,5MC, 20LC, 14LC	2003/0 4 2003/0 4	P11 489 000 P1 400 000
Digitalization of Analogue System (Nata/Panda/Kazungul a/Kasane)	To facilitate improved telecommunic ations	Nata/Panda/Kazun gula/Kasane Area	2003/0	P5 500 000
UHF/VHF Bands	To facilitate improve transmission of RB1&2 and BTV Signals	Kasane Pandamatenga	2003/0 4 2003/0 4	P230 000 P1 145 000
Gab Filler	To improve signal detection	Nata/Panda	2003/0	P1 145 000

14.7.1 Plan Monitoring

Respective agencies are responsible for implementing their projects and monitoring their progress through out the whole planning period. Project reviews will also be under taken as a tool for plan monitoring. Quarterly reports and annual plans will form part of the plan monitoring tools.

CHAPTER FIFTEEN

15 CONTINGENCY PLANNING

15.1 Introduction

Contingency Planning refers to various efforts, measures and plans put in play to counteract any unexpected event/s that may occur. Such occurrences may be sudden, slow, man-made or natural disasters. The Chobe District in particular is susceptible to such occurrences because nearly all the villages are located along the river and most subsistence ploughing is undertaken along the Chobe River. Chobe also receives the highest rainfall in the country i.e. between 550mm and 750mm per year. This makes the Chobe District more vulnerable to natural disasters like flooding, malaria and cholera outbreaks.

The occurrence of disasters both natural and man-made has made it imperative for the Planning System to embrace an aspect of adaptability and expeditious response. In view of this, mechanisms and institutions have been developed to address such situations should the need arise. The National Policy on Disaster Management and the Drought Relief Programme constitute the main strategies for contingency planning in the district.

Vision 2016 states that by the year 2016, Botswana will have well planned systems in place to counter the effects of natural disasters such as drought, outbreaks of animal diseases, floods and fire. In an effort to address this aim the district has put in place a District Disaster Management Committee to manage disasters at district level. Adherence to building standards and development control standards is taken as a priority in the district.

15.1.1 Institutional Framework

At national level disaster management is the portfolio responsibility of the office of the President. The office of the President manages and coordinates all disaster management activities. Its major responsibility is to ensure high level of preparedness.

The National Council on Disaster Management (NCDM)

The Council is the principal body for coordination and policy formulation for all disaster activities. The Permanent Secretary in the office of the president chairs the council. Other stakeholders who are members of this committee include the following; permanent secretaries to key responsible ministries, police commander, non governmental organizations, representatives from the Botswana chamber of commerce, Botswana Defense Force, commissioner, Botswana Police Force, Director of the Botswana Red Cross, Central government Departments and local government departments and the UNDP representative.

At district level the District Disaster Management Committee is charged with all the responsibilities of disaster management activities. It is a multi sectoral committee composed of heads of departments and other stakeholders. The District Commissioner chairs this committee.

15.1.2 Strategic Plans for Respective Ministries

15.1.2.1 <u>Ministry of Local government</u>

The strategic Plan for the ministry of Health aims at achieving the following objectives;

- Improving the quality of life for Batswana through coordination and provision of basic infrastructure facilities
- Timely delivery of services and;
- Provision of public education to the community for enhancement of participatory planning at district and community/village levels.

In line with the goals of the strategic plan for the Ministry of Local Government, the Chobe District monitors all drought relief projects to make sure that they are started and completed as envisaged. Public education and workshops on HIV/AIDS are conducted to sensitise communities on HIV/AIDS prevalence in the district. HIV as a national disaster will also be managed and monitored through the implementation of the HIV/AIDS Management Strategy in accordance with the objectives on the National Policy on HIV/AIDS

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15.1.2.2 Water Utilities Corporation

Water Utilities Corporation aims at ensuring that developments undertaken by the corporation do not adversely affect the environment upon which human life is dependent. The Corporation aims at providing safe and potable water at an affordable price to the urban communities. In Chobe provision and supply of potable water is the responsibility of the Department of Water Affairs. This is mainly because Kasane, which is the district headquarters, is not yet a fully-fledged town.

15.1.2.3 Ministry of Lands and Housing

The aims of the strategic Plan for the Ministry of Lands and Housing are;

- Promotion of citizen home ownership through provision of SHHA loans to eligible citizens. The SHHA programme started in Kasane in 1981 and so far about 5000 plots have been allocated under this programme. Other measures to be undertaken to realize this objective include availing of serviced land to SHHA Department through Layout Plans.
- Preparation of land use plans to guide development. Preparation of land use plans for various settlements will also help to avert land use conflict thereby shaping the built up environment
- The SHHA Policy promotes the use of permanent and durable building materials, thus ensuring that most structures developed in the district are resistant to fire, excess heat and strong winds.

15.1.3 Disaster Relief Sector Priorities

Disaster Relief programmes are undertaken by various sectors at district level including Central government/ local Government departments, various District committees like Drought commitee, DDC, DMSAC etc.

15.1.3.1 Drought and Food Relief Management

Draught relief at district level is the responsibility of various sectors such as the District Council for labour intensive based programme, and the Department of forestry under the Ministry of Agriculture

The intensive labour based programme in Chobe employs about 396 people of which 133 are men and 266 are women. There were a total 114 projects in the district and 105 of these were finished by the end of 2001/2003 drought period. Reasons given for the delay of completion of projects include non-availability of resources like sand in the district, and late delivery of materials from supplies. Apart from the above-mentioned problems, drought projects suffer from poor maintenance as most of them are usually handed to VDC after completion. The VDCs in most cases do not have the capacity and financial muscle to carryout regular maintenance of these projects.

During the implementation of DDP 6 maintenance of these projects will be handed to the District Council for maintenance. Adherence to construction schedules will be improved

15.1.3.2 Forestry Department

The department is charged with the responsibility of implementing agricultural schemes, construction and maintenance of firebreaks. During the plan period the Department intends to construct additional 3 firebreaks and maintain all existing firebreaks in Chobe.

15.1.3.3 <u>Council clinics (Supplementary Feeding Program)</u>

This programme is carried out and implemented every drought year, the purpose of which is to provide malnourished children with basic food supplements. During the implementation of DDP 6 data collection on the number and location of malnourished will be intensified. Priority is to reduce malnutrition by at least 10% by 2005.

15.1.4 Role of Private Sector

Although the role of the private sector is not that clearly defined, the private sector in Chobe usually helps with tents, clothing, finances and other resources. A combined effort between the private sector and the public sector will be encouraged as a means of combating disasters in the district during the Plan period.

15.1.5 National Policies and Legislation

15.1.5.1 National Disaster Management Plan.

The policy is still at draft stage. However, it states that each district will have a disaster management plan officer who will act as the secretary to the District Disaster Management Committee. This will help to speed up response to disasters in the district.

15.1.5.2 <u>The National Policy on Disaster Management</u>

The Policy seeks to establish optimum systems for handling disaster issues and ensure that they are incorporated into the development process. The Policy has contributed significantly towards welfare promotion and rendered assistance to the needy and most vulnerable groups. The policy also emphasizes the need to identify and map all areas of high risks including vulnerable population, and the collection of relevant data for establishment of an effective database. The policy calls for the establishment of village /ward level disaster management committees. The Chobe District Development Plan 6 will endeavor to make provisions of this policy a reality in the implementation of this plan through production of relevant maps to identify high-risk areas. Location of settlements in areas that might be identified, as high-risk areas will be avoided.

15.2 Contingency Planning for DDP 6

15.2.1 Drought and Food Relief Management

In order to achieve the goals of the programme, it is imperative to strengthen the coordination of the implementation mechanisms. Community participation constitutes a key aspect that must be enhanced. Delivery systems in the form of transport and storage facilities will be kept to satisfactory and health compliant standards.

15.2.2 Disaster Relief

In accordance with the dictates of the Policy, a comprehensive disaster management programme will be developed to address and to guide programmes, activities and measures aimed at addressing national disasters. The District will consolidate all sectoral activities into a Disaster Management Action Plan. Community education and mobilization constitutes a major activity to foster the concept of partnership in development and reduce dependency. The District Action Plan will identify all requirements and strategies for addressing disasters.

Safety awareness both in the workplace and household level will be highly publicized and promoted. Variously public safety campaigns will be undertaken to drive the message home. Public education material will be conspicuously posted.

15.2.3 Floods

Disaster mitigation measures will be undertaken in the form of proper location of settlements, adherence to building plans and regulations. Other programmers will include; conducting of workshops and seminars to sensitise communities on the dangers of locating settlements too close to areas prone too flooding

15.2.4 Veldt fires/Wild fires

During implementation of the DDP 6 necessary mitigation measures to reduce Veldt fire outbreaks in the Chobe District including; upgrading of existing firebreaks and construction of new ones where necessary. Public education and increased awareness on the dangers of lighting wildfire and enforcement of necessary legislation will be a priority in the district

15.3 Frame work for Strategic Environmental Assessment.

Table 15.1 Strategies for Strategic Environmental Assessment

Sector Goals	Objectives	Key Environmental Issues			
To put in place relevant structures to deal with natural disasters at district level	To reduce poverty levels at district level through engaging vulnerable groups in drought projects	Uncontrolled soil extraction for building projects			
To promote sustainable use of the environment	To promote environmental health education in the district	Littering/ Poor solid waste Management			

15.4 Contingency Plans, Negative impacts and Mitigation Measures.

Table 15.2 Summary of Contingency Plans, Negative Impacts and Mitigation Measures.

Proposed Activities	Negative impacts	Mitigation Measures	
1.Construction and maintenance of firebreaks	Land degradation Loss of vegetation and indigenous trees	Land reclamation Plant indigenous tree Conduct EIA and SEA	
2. Spraying of houses with anti malaria medicines	Could lead to health problems (breathing)	Be vigilant with the types of chemicals used	
3. Construction of houses and other drought projects	ses and other Loss of vegetation and indigenous		
4.Identify and map all high risk areas	No negative environmental impact anticipated	None	
Public Education on importance of putting out Wild fires	No negative environmental impact anticipated	None	

15.4.1 Resource Requirements for DDP VI

Resources for contingency planning are provided for under specific sectors and organisations that deal with natural calamities.

15.4.2 Plan Management and Monitoring

District Disaster Management Committees will do monitoring through relevant departments like the Agricultural Resources Board, Department of Wildlife and National Parks, Drought committee. Other support agencies include the Botswana Defence Force and Botswana Police Service, which usually spot checks of wild fires and are usually put on alert during such occurrences.

CHAPTER SIXTEEN

16 LOCAL GOVERNMENT

16.1 Introduction

Local Governance is carried out at district level through local units called District Councils/Town Councils. These are decentralized units of the Ministry of Local Government. The Ministry of Local Government is responsible for provision of basic services in both rural and urban areas. These services include: Primary education, Primary health, Water, Sanitation Tertiary Roads, Social and Community services and Remote area Development.

Vision 2016 states that by the end of 2016 Botswana will be a community-oriented democracy with strong decentralized Institutions. In trying to achieve this pillar further decentralization of Chobe from North West is in Progress. It is hoped that by the end of the planning period Chobe would be a fully-fledged District Council.

16.1.1 Institutional Framework

There are four local institutions operating to coordinate developments at a district level. These are; Land Board, District Administration, Tribal administration and District Council. Although the Ministry of Local Government is the principal provider of services it works in conjunction with other Ministries to bring about developments in the district. The ministry of education provides for manpower training and the development of education syllabus while the District Council provides education infrastructure. The two ministries are also working together to promote preventive, promotive, rehabilitative and curative health care services at the district.

The Ministry of Lands and Housing in conjunction with the Ministry of Local Government, Department of Lands and the Chobe Land Board provide land for development. The Tribal Administration is composed of Chiefs, Sub chiefs, Headmen, Administrative staff and local Police. The Tribal Administration takes part in the local communities as it maintains law and order in the villages and also supports developments at community levels.

16.1.2 Strategic Plans for Respective Institutions

Local Authorities have not yet developed their own strategic plans but contribute to and implements the strategic plans of their parent ministries. Ideally Local Authorities should have completed their strategic plans by the end of the plan period (2003-2009).

16.1.2.1 Ministry Of Local Government

The Ministry of Local Government strategic plan intends to address the following concerns:

- Customer satisfaction, through timely implementation and delivery of services
- Social Protection; by improvement and delivery of food to vulnerable groups and individuals. It also continues to provide counseling services to the community.
- Provision of Physical and Social Infrastructure through construction of and maintenance of infrastructure, i.e. school, clinics, hospitals and internal roads the district

• Policy Implementation and effective delivery of services, through timely submission of project memorandum and preparation of tenders

At district level coordination and commitment of each of the four local authorities is a prerequisite if the above are to be realized. The Chobe District in particular will make an effort to make sure the aims are addressed through, timely delivery of services, construction and maintenance of physical infrastructure, and provision of serviced land to facilitate economic development of Chobe as a District.

16.1.2.2 Ministry of Lands and Housing

The Strategic Plan for the Ministry addresses the following:

- To manage land and facilitate national housing development
- Promote sustainable use of the environment
- To facilitate home ownership by providing SHHA loans to legible citizens

For the district to achieve the above goals the Chobe Land Board, the Department of Lands, and the Council Physical Planning Section have to work together to avail land use plans and layout plans for housing delivery and other development purposes.

16.1.2.3 Ministry of Health

Primary Health Care is one of the functions of the Ministry of Health. Primary health is managed through a two-tier system viz; Hospital services and Clinics. The Ministry of Health aims at ensuring that all Batswana have access to essential health care as well as to ensure equitable distribution and utilization of health care services in the country.

At local /District level proper coordination between various institutions is needed in order to realize this objective and for better service delivery. Efficient delivery of services will be undertaken through construction of various facilities like hospitals and clinics

16.1.2.4 Ministry of Minerals and Water Affairs

The Ministry aims at providing safe and sufficient potable drinking water to all villages. The strategic Plan for the Ministry also addresses conservation and protection of water sources and protection of the environment at large. The responsibility of potable water provision is shared between the Ministry of Local Government and that of the Minerals Energy and Water Affairs. In Major villages like Kasane and Kazungula the Department of Water Affairs provides potable water whereas in smaller villages in the district the North West District Council (Water and Waste Water Department) supplies the water.

16.1.2.5 Ministry of Labour and Home Affairs

The Ministry aims at maintaining social harmony in the country through implementation of relevant policies and provision of social services like sports stadiums, recreational facilities and promoting law and order through the local police service.

Effective implementation of the strategy for the Ministry of Labour and Home Affairs would be made possible through working together with other stake holders in the district like the Botswana

police service to enforce various laws including council by-laws. The provision of land for various activities rests with the Land Board, Department of Lands.

During DDP 6, proposed projects for the Ministry Labour and Home affairs include construction of a multi purpose youth centre and a stadium.

16.1.2.6 <u>Ministry of Works Transport and Communication</u>

The strategy for the ministry provides for the development of road design standards and policy formulation, while Council is responsible for construction of tertiary and internal roads

The Kachikau- Ngoma road is to be constructed during 2004/2005 financial year. Internal servicing of roads in the Kasane plateau area and Pandamatenga areas is earmarked for 2004/2005.

16.1.3 The Role of the Private Sector

The private Sector continues to play a major role in the provision of those infrastructure services not provided by the government. Through private sector initiative the Council has already privatised solid waste collection in the district. This will help in timely delivery of services. Private garages are also used to service government vehicles. It is hoped that further decentralization of other activities like cleaning services will be undertaken during 2004/2005. The supply of foodstuffs for the school feeding programme is done by the private sector. All these are expected to continue during DDP 6.

16.1.4 Local Government Consultation Priorities

During consultations with various communities in Chobe the following were raised as major problems/issues affecting the residents of Chobe;

16.1.4.1 Insufficient compensation of farmers by Government

Farmers who have had livestock loses and crop damaged by wild life due to location of their settlements close to the national park and forest reserve are dissatisfied with the level of compensation (Pula 900.00) which is far less than the market rate and of the fact that such compensation is only given when only big game like an elephant is involved. Furthermore no compensation is given when a person is killed by wildlife. The communities have proposed that minimum compensation should be at least P1500

16.1.4.2 Weak agricultural extension service

Various communities have expressed that most government schemes do not reach them in time because of a lack of agricultural extension service in the form of distribution of seeds and fertilizers. Further to this issue the Agricultural Master Plan has revealed that, agricultural extension in Botswana is largely weak and ineffective. It is therefore necessary to revamp this service along the lines proposed by NAMPAAD. In this regard strong support should be given to mixed farming in Chobe. The community have proposed an increased number of agricultural demonstrators to be sent to Chobe.

16.1.4.3 <u>Inadequate Infrastructure Development</u>

Infrastructure that supports tourism in Chobe is fairly developed in terms of access by road and air. However the settlements between the eastern and the western parts of the district have poor access especially during the rainy season. The communities have proposed that the road through Chobe enclave to Maun be made an all-weather road and, if possible be tarmarked. This recognizes the fact that the Chobe and the Okavango Delta are one continuum of special wildlife/tourist life within Botswana.

16.1.4.4 <u>Land Shortage in the District</u>

The shortage of land for settlement, farming and other purposes has been a major constraint towards development of the district. For the past five years no allocation has been done in the Kasane area because of the shortage of land. Land for specific uses like tourism activities is in high demand. The lack of serviced land tends to defeat efforts by government to involve Batswana in the tourism industry. However, presently efforts are being made to provide settlement plans for all villages in the district. As seen above, the Kasane -Kazungula Development Plan has been completed and is only awaiting the approval by the Minister.

16.1.4.5 Decentralisation

The Chobe District is administratively a full district in its own right with its headquarters in Kasane while within the local authorities arrangement, it is a Sub-District with its headquarters in Maun, a distance of 610 km away. This has caused dissonance in the provision of services to Chobe. Major decisions affecting Chobe are made in Maun. This makes it costly in the long run to implement policies regarding the district and also robs it of the benefit of immediate action and close supervision of the implementation of decisions. It also makes private operation more expensive because people, whether as private individuals or as business representatives, have to travel or commute far to seek for decisions and action on their problems. Consequently, private businesses find it less attractive to locate in the district faraway from where decisions affecting them are made. The district if further robbed of potential jobs and development arising from private sector investments.

Communities have argued that in order to facilitate decision-making and infrastructure provision, Chobe needs its own council.

16.1.4.6 <u>HIV/AIDS</u>

During discussions with various communities concern was raised about the high prevalence of HIV/AIDS especially among the youth. Coupled with that the problem of teenage pregnancy/motherhood was said to be rising and so is the problem of single parent household as well as the number of orphaned children. Further teenage mothers drop out of school early and most of them cannot resume schooling primarily because they have nowhere to leave their babies. The avenue of education, which will give them the opportunity to improve their lives, is blocked at an early stage. All this is likely to keep the villagers in a cycle of poverty trap from which it will be difficult to escape. The villagers suggested that existing medical facilities should continue to be strengthened. The villages also felt that an all out campaign against HIV/AIDS should continue to be mounted.

16.1.4.7 Physical Planning and the Environment

It came out clearly during consultation that some areas, especially along the Chobe river front is experiencing some tourism development pressure and as such nearly all people who are allocated

long the river want to block access to the river frontage. This can be abated by ensuring that environmentally friendly physical planning in the settlements of Kasane and Kazungula is instituted immediately. In this respect the Physical Planning office will carryout enforcement of development control in Chobe and preparation of local area development plans.

16.2 National Policies and Legislation

16.2.1 <u>District Administration</u>

District Administration was established in 1965 by an Act of Parliament and was declared a fully-fledged Department in 1994. The District Commissioner who is the head of all central government departments at district level heads the Department of District Administration. The main responsibilities of District Administration are to coordinate all developments in the District and implement all District Development Plans. Other functions performed by the District commissioner are to allocate pool houses in the district and to advice council and tribal Administration on district administration matters.

The District Commissioner also performs quasi judiciary functions.

District administration in Chobe has few problems facing it. These are lack of housing and office space for government employees. Lack of information on development programmes.

16.2.2 Township Act/ District Act(1965)

The Township act was passed in 1965 and it provided for establishment and regulation of towns and cities in Botswana. The Unified Local Government Act of 1973 provided for the establishment of the Unified Local Service which is the employer of local service employees.

The Unified Local Government Act empowers the council with responsibilities of providing the necessary infrastructure, and the provision of community development services through the social and community development and remote area development. It also ensures provision of supply of potable water to all recognized settlements and implementation of the SHHA programme.

The above functions performed by the council are also inline with provisions of other Acts and regulations like; the Rural Development Policy, Revised National Policy on Education, Road Traffic Act and the National Settlement Policy.

The National Settlement Policy provides for preparation of Development Plans for settlements in the country. In Chobe the Kasane-Kazungula Development Plan was prepared and finished in 2003. A district Settlement Strategy for the district is also finalized.

16.2.3 <u>Tribal Land Act (1968)</u>

The Land Board was established under the Tribal Land Act of 1968 revised in 1977. The Chobe Land board is the main custodian of tribal land and holds the land in trust for the people of Chobe and benefit of citizens of Botswana at large. The major functions of the Land Board are:

- Granting of rights on the use of land
- Cancellation of the grant of any rights to use a piece of land
- Imposing restrictions on the use of communal land
- Authorizing any change of use of communal land
- Authorizing any transfer of communal land

The Chobe Land Board does not have a subordinate Land Board due to the small size of the district. Any appeals related to land matters are lodged with the Land Tribunal. The lack of enough trained personnel and inadequate accommodation are problems facing the Chobe Land Board.

16.2.4 Social Welfare Programme

At the district Level social welfare is the responsibility of the District Council and it is the primary function of the Department of Social and Community (S&CD) Development. Services provided by the S&CD are: Child Welfare and rights, Orphan services, Destitute Programme, Community Home Based Care and Home Economics, Juvenile and after care services.

The main thrust of the social welfare programe is to assist disadvantaged groups, individuals and communities with necessary resources with the whole aim of improving their standard of living.

16.2.5 Waste Management Act (1998)

The Act was passed in 1998 with the main being to regulate and control waste disposal. The Act also facilitates implementation of advanced systems for regulation of waste management. Under this act district Councils are mandated to collect and dispose household waste in their area of legal jurisdiction

In Chobe collection of waste faces the following problems: Lack of enough vehicles, lack of landfill and lack of enough funds to purchase dustbins/receptacles.

16.3 Local Government

16.3.1 Sanitation and Waste Management

At Council level sanitation and waste management is the responsibility of the Department of Environmental Health. The department provides the following services: Pest control, water and food quality monitoring ,refuse and liquid waste disposal and vetting of building plans. Collection of solid waste is done twice a week. Sanitation management is a problem due to a lack of proper sanitation facilities. Presently there are no facilities for handling of clinical waste at the district. Clinical waste from various clinics is transported to Nyangabwe Hospital in Francistown where they are incinerated. During the implementation of DDP 6 construction of a district landfill will be undertaken as a priority. Public education and littering campaigns will be carried as a means of educating the public on the importance solid waste management

16.3.2 Social welfare

16.3.2.1 Community Development

The Department of S&CD also deals with community development issues. The main aim is to enhance local institutions capacity building and good leadership quality at the district level and promote community participation community projects. There are currently 11 VDCs in Chobe two of which are in Kasane. These VDCs engage in various income-generating activities so that they generate money to fund some village projects and maintenance of VDC houses.

16.3.2.2 Home Economics

The main thrust of the economics section is to enhance quality of lives of individuals, families and the community by empowering or imparting skills and knowledge through which they can use to embark on income generating activities and play a role in child care and development.

The home economics section held two workshops in Kachikau and Parakarungu. The workshop was aimed at teaching people basic skills in attern making, tie and die, food preservation, garment manufacturing and basic hand stitches. The workshop was considered a success as all attendants got the intended skills

16.3.2.3 Day Care Centres

The Chobe District has 9(nine) day care centres, three of which are privately owned while the other six are community run. Three of the community run Day Care Centres located in Satau, and Kasane are not functioning properly because of the following reasons:

Lack of funds to pay teachers ,Lack of teaching materials and the Day care center in Kasane plateau, is not habitable because of bad smell from bats

16.3.3 Infrastructure Provision

Provision of infrastructure facilities is a combined responsibility of various departments of council. Concerned departments include: Water and Waste water, dealing with provision and supply of water to villages, Roads, dealing with construction of internal roads and tertiary roads, Physical planning- dealing with provision of physical plans, and Architecture- dealing with inspection and production of plans. Infrastructure provision is not carried out as envisaged due to inadequate funding and poor implementation of projects and lack of trained personnel to supervise the intended projects.

16.3.4 Water Supply

According to findings of the Chobe District Settlement Strategy 2002 (P.22), Chobe has adequate underground water lying less than 5m below the surface. The quantity of water supplied to all the village is said to be enough even beyond the planning period.

The water in the villages of Kachikau and Parakarungu is said to be saline and has a sulphur odor. Residents of the Enclave have expressed the need to have their villages connected to the water supply from the Chobe River. However the cry of the villagers has been answered as currently a private company has been engaged to supply the Enclave with water from the Chobe River. This project is earmarked to be completed by the end of September 2003. The water quantity is said to be enough even beyond the planning period. In June 2003 there were 116 stand pipes in the district. The majority of them (51) or 44% were located in the Kasane – Kazungula planning area. (Details for projected water demand and supply are in chapter 12.

16.3.5 <u>Tribal Administration</u>

The Tribal Administration is the institution responsible for running and presiding over customary courts as well as providing of traditional guidance in various customary matters. The forum of deliberations which is the Kgotla, serves as a meeting point for policy formulation, Project initiation, consensus building, implementation, monitoring and evaluation at the basic grassroots level.

The institution is composed of Sub Chiefs, Court and Deputy Court Presidents, Head Man and Deputy Headman

16.4 Local Government Goals and Objectives

Goal 1

To provide access to quality education to all district residents

Objectives

- Delivery of relevant teaching materials in time to all schools
- Construct one school per each school in Chobe by the end of 2004
- Construct a primary school at Kazungula during 2004/2005 financial year
- Construct library facilities in all Chobe primary schools by 2006

Goal 2

Provide Strong Communication links between various settlements in the District

Objectives

- Upgrade to passable standard all internal roads joining various settlements by 2006
- Construct to bitumen standard the Kachikau Ngoma road
- Construct all access roads in the various settlements

Goal 3

- To Provide basic infrastructural services for home ownership in the district
- Avail serviced land and layout plans

Goal 4

To facilitate access to a health care system by all district citizens

Objectives

- Construct and expand existing health posts
- Upgrade 3 health centres to clinics during 2003 2006
- Equip all heath services with relevant personnel and necessary skills
- Mount an all out campaign and provide community education on HIV/AIDS

Goal 4

To ensure a roper solid waste management handling and food safety

Objectives

- Provide refuse receptacles at strategic points in various villages
- Speed up construction of the District Land fill in Kasane
- Construct a slaughter house in Kasane by 2005

• Speed up finalization of the district management plan

Goal 5

Reduce Poverty levels in the district by 10% by 2009

Objectives

- To enhance employment creation through provision of basic skills
- To speed up timely implementation of social safety policies
- Engage communities in income generating activities

Goal 6

To reduce negative environmental impacts of all proposed projects

Objectives:

• To subject all projects to Environmental Impact Assessment and Strategic Environmental Assessment by 2009

Goal 7

To avail serviced land / improve access to factors of production

Objective

- To Provide 6000 serviced plots by 2004 2009 in the Kasane Kazungula Planning areas
- To Provide village layout plans for all settlements in the district by 2005

Goal 8

- To Increase Public Access to safe and potable drinking Water in the district by 2005
- Extend village water supply system from the Chobe river to all enclave villages

Goal 9

- To Increase public awareness through health education/information dissemination
- Mount at least 2 workshops annually on community education throughout the district

Goal 10

- To improve efficiency in service delivery in Chobe through timely completion of proposed projects
- To construct Kgotla offices at Plateau in Kasane by 2005
- To Construct a Land Board Chamber by end of 2004

16.5 Framework for Strategic Environmental Assessment

Table 16.1 Environmental Key Issues with Sector Goals and Objectives

Goal	Objective	Environmental Key Issue1
1 To provide access to quality education to all district residents	Delivery of relevant teaching materials in time to all schools Build enough school in the district Construct a primary school at Kazungula during 2004/2005 financial year Construct libraries in all primary schools by 2006	None Loss of vegetation Noise and Dust Pollution Increase dumping of construction rubble
2. Provide Strong Communication links between various settlements in the District	Upgrade to passable standard all internal roads joining various settlements by 2006 Construct to bitumen standard the Kachikau – Ngoma road Construct all access roads in the various settlements	Indiscriminate/ excessive mining of sand and creation of borrow pits Contamination of underground water sources
3: To Provide basic infrastructural services for home ownership in the district	Avail serviced land and layout	None
4 : To ensure Proper Solid Waste Management Handling and food safety	Provide refuse receptacles at strategic points in various villages Speed up construction of the District Land fill in Kasane Construct Slaughter house in Kasane by 2005 Speed up finalization of district waste management plan	Noise Pollution and dust pollution during construction Indiscriminate dumping of ruble
5 : Reduce Poverty levels in the district	Employment creation through provision of basic skills Timely implementation of social safety policies Engage communities in income generating activities	None
6. To Reduce negative environmental Impacts of all Proposed Projects	Subject all projects to Environmental Impact assessment and Strategic Environmental Assessment	None
7 : To Avail serviced land /	Provide 6000 serviced plots by	Loss of vegetation

Goal	Objective	Environmental Key Issue1
Improve access to factors of production	2004 – 2009 in the Kasane Kazungula Planning areas	Indiscriminate/ excessive mining of sand and
	Provide village layout plans for all settlements in the district by 2005	Creation of borrow pits Contamination of under groundwater sources
8 : Increase Public Access to safe and potable drinking Water	Extend village water supply system from the Chobe river to enclave villages	Loss of vegetation
9 : Increase public awareness through Health Education/Information Dissemination	Mount workshops on community education	None
10. Improve efficiency in service delivery in Chobe through timely completion of proposed projects	To construct Kgotla offices at Plateau in Kasane Construction of Land Board Chamber in 2004	creation of borrow pits Contamination of under groundwater sources Noise and dust Pollution

16.5.1 Evaluation of Sector Policies and Programmes

Table 16.2 Evaluation of Sector Policies/ Programmes and Issues

Policy/Programme	Aims to achieved	Environmental Issues
1.Tribal Land Act	Describe powers of Land and relevant duties	None
2.Waste Management Act	Makes provision for waste management and facilities for disposal of waste	None
3.Revised National Policy on Education	Makes provision for education facilities	Loss of Vegetation Noise pollution Excessive sand and gravel mining
4.Labour Intensive works	Generate employment for affected groups by using labour intensive methods of building	Loss of Vegetation Noise pollution Excessive sand and gravel mining
5.District Roads Construction	Improve access to various parts of the district	Loss of Vegetation Noise pollution Excessive sand and gravel mining
6.Community Projects	Improve social welfare and economic status of various communities/individuals	Loss of Vegetation Noise pollution Excessive sand and gravel mining

16.6 <u>Summary of Contingency Plans, Negative Impacts and their Mitigation Measurers</u>

Table 16.3 Summary of Contingency Plans, Negative Impacts and their Mitigation Measurers

Proposed Activity	Negative Impacts	Mitigation Measures
LG 101 Local Authority Infrastructure Maintenance and construction	Los of vegetation leading to soil erosion Uncontrolled collection of sand and gravel Pressure on Natural resources such as water for construction purposes	SEA&SEA Tree planting District (DLUPU) to identify specific sites for sand and Gravel extraction
Computerization of Local Authorities	None	None
LG 104 Fleet Development	None	None
LG 301 Storage & Distribution Facilities(Warehouse Construction)	Los of vegetation leading to soil erosion Uncontrolled collection of sand and gravel Pressure on Natural resources such as water for construction purposes	SEA&EIA Tree planting District (DLUPU) to identify specific sites for sand and Gravel extraction
LG 901 Customary Court/ Office Construction	Los of vegetation leading to soil erosion Uncontrolled collection of sand and gravel Pressure on Natural resources such as water for construction purposes	SEA&EIA Tree planting District (DLUPU) to identify specific sites for sand and Gravel extraction
Electrification of Offices	None	None

16.7 Resource Requirements for DDP 6

Table 16.4 Proposed Projects for Local Authorities and Budget Allocation

Project Title/Activity	Project Components	Target/location	Year	Estimate Cost '000
LG 101 Local Authority Infrastructure Maintenance	Internal roads	District road systems	2003/2005	P28 887
LG 103 Computerisation	2x PC per LA Systems Networking	All LAs RAC	2004/05	P240 P500
LG 104 Fleet Development	2x Double Cab 2x 7Ton Trucks	DA	2003/04	P1 555.5
	Double Cab	TA	2005/06	P500
	2x 7Ton Trucks 2x Double Cab	Council	2003/04	P1 555.5
LG 301 Storage & Distribution Facilities	Construction Food Relief Warehouse	Kasane	2004/05	P4 857
LG 901 Customary Court/ office Construction	Upgrading of office to type II	Kasane Kachikau	2003/04 2004/05	P500 P500
	Type III	Plateau	2005/06	P7 500
Electrification of Offices	Wiring and connection of staff housing and offices			P500

16.7.1 <u>Plan Monitoring Programme</u>

For successful completion of all projects there has to be a mechanism put in place for proper implementation of programmes.

Physical reports in the form of gaunt charts showing proposed activities and proposed time of completion will be produced to show the actual progress of the projects. Project review meetings will be held between districts and the Ministry to review progress of implementation and the difficulties faced and all the mitigation measures required.

Mid term review exercises which are usually held midway through the plan period will also help to assess the progress and the relevance of the plan.

CHAPTER SEVENTEEN

17 PLAN MONITORING AND EVALUATION

17.1 Introduction

17.1.1 Institutional Framework

Plan monitoring and evaluation is the responsibility of the District Development Committee and its sub-committees. The DDC is comprised of all development related heads and is charged with ensuring that plan activities, schedules, objectives and targets are attained. Sub-committees are responsible for the day-to-day implementation of projects and programmes and report quarterly to DDC. Other institutions responsible for coordination and monitoring of development projects in the district are; Village development committees, CBO and NGOs. These institutions have the mandate sometimes to change implementation priorities as long as it remains within the approved ceilings.

17.1.2 Plan Management

The Chief Executive Officers of the four Local Authorities and their planners constitutes the Plan Management Committee. The PMC is an action-orientated committee that serves to attend to urgent matters that cannot await regular DDC meetings. It helps to direct development efforts in the district

17.1.3 Annual Plans

Plan managers committee, quarterly progress reports and annual plans will be used to monitor progress of the DDP 6. If any changes are anticipated they will be communicated to the respective ministries. Based on the annual plans that will be prepared by the user departments, plan managers then report to the DDC on the progress of the project outlining constraints and any other positive progress and the possible corrective measures to be undertaken incase the plan has deviated from the original course

17.1.4 Various Local Committees

Village Development committees are other local institutions that help to monitor and manage the progress of District Development plans through monitoring various projects in their villages. Any delay is usually reported to the local counselors or Ministers visiting the area.

17.1.5 Mid Term Reviews

A Mid-Term Review exercise scheduled for 2006/07 provides another window for the District to take stock of implementation of the DDP6 and NDP9. This will also provide an opportunity to readjust district goals and priorities.

17.2 Environmental Monitoring Activities

A number of technical committees have been instituted to oversee sustainable and environmentally sound utilization of all natural resources. A District Land Use Planning Unit provides the main mechanism for environmental monitoring. Land use plans, studies, and

community workshops constitute the major tools for environmental monitoring. Integrated land use work plans comprising of all activities affecting the environment are produced annually and used to for monitoring purposes.

17.3 Financial and Personnel Constraints

Local Authorities continue to operate under both personnel and financial constraints. The centralization of Council financial management at Maun leaves Chobe at a disadvantage as often projects planned and approved in the DDPs are subjected to further reappraisal together with priories of the entire North West District. The Chief Executive in Maun whose portfolio stretches across the entire district also controls personnel. As a result often staff is relocated from Chobe to other parts of the North West District where it is felt the need is more pressing at the expense of the former. There is a need to decentralize some function from the centre

Generally other institutions enjoy a relatively better position in terms of personnel and financial status. However, the transport situation in the other institutions remains precarious despite the assertions by CTO that there is underutilisation of vehicles. The Land Board is not able to timeously replace vehicles and most vehicles under the DA are in bad condition.

17.4 Proposed Plan Monitoring Activities

Annual Plans, Project Reviews, Progress and Departmental Reports constitute the major tools for plan monitoring. Annual Plans draw from the DDP and enable the District to keep focus of project implementation. Progress and Departmental Reports are important tools that bring into focus the implementation of projects and the general performance of departments in the delivery of their regular activities. These activities allow for early diagnosis of problems and the development of intervention measures.

Annual Project Reviews on the other hand bring together District Authorities and the Ministerial planners. Such allows for sharing of information between the center and the district. Through these, Districts are able to gain insight into the general performance of national programmes, expenditure trends and make adjustments to their project proposals.

Apart from the above mentioned activities it is important that people's attitude towards work be addressed to improve productivity. During DDP 6 a number of PMS workshops will be undertaken to address people's attitudes and commitment towards work. This will in turn help people meet their targets and implement projects with the proposed time framework.

APPENDIX A: Projects Suggested by Communities

A. KASANE CENTRAL

- 1.Administration Blocks
- 2. School classrooms
- 3.Staff houses
- 4. Sports grounds
- 5. Training of more personnel (Teachers)
- 6.Senior secondary school
- 7. Technical college
- 8.24 hour clinic for Kasane and provision of more nurses
- 9.Increase refuse collection fleet
- 10. Hire private individuals for litter collection
- 11. Public education on littering
- 12.improve the sewerage system and extend it to Plateau
- 13.Recycling of waste water

B. KASANE PLATEAU

- 1.VDC market and public toilets
- 2.Kgotla offices
- 3.Land servicing
- 4.15 LA2s VDC
- 5.Community hall
- 6.New primary school
- 7.13 Teachers quarters
- 8.New cemetery
- 9.Up grading of roads 90km
- 10. Nurses houses 4
- 11.Infrastructure development
- 12. Admin block primary
- 13.Library
- 14. Fencing and grading around school
- 15.Bus rank and public toilets
- 16.Up grading clinic
- 17.Sports stadium

C. KAZUNGULA

- 1.Land servicing
- 2. School and community sports ground
- 3. Grazing area
- 4.Gravelling internal roads
- 5. Sewerage system
- 6.Day Care Centre
- 7. Cooperative agency
- 8.Postal agency
- 9.Street lights
- 10.VDC market
- 11.Dustbins
- 12. Public phones
- 13. Senior secondary school
- 14. Non formal education office
- 15.New primary school
- 16.Up grade the brigade

D. PANDAMATENGA

- 1.Community grazing land
- 2.Local police vehicle
- 3. Agricultural demonstrators office
- 4.5no. teachers houses
- 5. Tarring of internal roads
- 6.1no. classroom block
- 7. Sports ground
- 8.Post office
- 9. Service the industrial and the commercial centers
- 10.6no. public stand pipes
- 11. Verterinary office
- 12.4no. houses for extension staff
- 13.3no. houses for tribal staff
- 14. Dumping site
- 15. Non formal education office, storeroom, and a classroom
- 16. Electrification of immigration offices
- 17.Bus shelter
- 18. Fencing of cemetery
- 19. Expansion of Kgotla office
- 20. Public toilets
- 21. Mobile stop, second ambulance and a nurses house
- 22.Day care center
- 23. Fencing of all firms

E. LESOMA

- 1. Tarring of road
- 2. Public phones
- 3. Police station
- 4. Community grazing area

- 5.Postal agency
- 6.Community hall
- 7. School sports ground
- 8. Cooperative agency
- 9.Day care center
- 10.Kgotla shelter
- 11.Gravelling internal roads
- 12.Recreation center
- 13. Upgrading of health post to a clinic
- 14.VDC market
- 15.Street lights
- 16.Street dustbins
- 17. Non formal education office
- 18.Library
- 19. Water pump and tank at Sesheke
- 20. Wildlife office
- 21. Street lights

F. SATAU

- 1. Electrification of the village
- 2. Public phones
- 3. Non formal education office and shelter for literacy groups
- 4. Up grading of health post to a clinic
- 5.Stand pipe at the cemetery
- 6. Gravelling internal roads
- 7. Toilets at the day care center
- 8. Senior secondary school
- 9. Disposal site
- 10. Satau lay out plan

G. KACHIKAU

- 1. Tarring Ngoma Kachikau and Kachikau Maun road
- 2. Senior secondary school
- 3. Youth counseling center
- 4. Artificial insemination center
- 5. Police office
- 6. Public phones
- 7. Wildlife offices
- 8. Tribal administration offices
- 9.Community hall
- 10. VDC market stalls
- 11.Guest house
- 12.Library
- 13. Community grazing land
- 14. Gravelling of internal roads
- 15. Additional stand pipes
- 16. School kitchen and storeroom
- 17. Fencing of old teachers houses
- 18.Bus stop
- 19. Fencing of cemetery, toilets and stand pipe

H. MABELE

- 1. 3no. Teachers quarters
- 2. School classrooms
- 3. Village library
- 4. Tarring of Ngoma Kachikau road
- 5. Public toilets
- 6. Completion of community hall
- 7. Electrical installation to government offices and houses
- 8. Public phones
- 9. Provision of dustbins
- 10. Hostels and schools
- 11. Additional stand pipes

I. KAVIMBA

- 1. Classrooms, teachers quarters and administration block
- 2. Electricity at the school
- 3. School sports ground
- 4. Stamping shelter and cooking area
- 5. Up grading of a health post to a clinic and additional staff houses
- 6. Night watchman's shelter
- 7. Poultry project for 4B club
- 8. Fencing of fields
- 9. Shelter for night watchman and old age pensioners at the post office
- 10. Tribal admin offices
- 11.2no. La2 houses VDC
- 12.Kitchen and showers at the community hall
- 13. Gravelling internal roads
- 14.Up grading of market stalls
- 15. Additional stand pipes
- 16. Tarring of Ngoma Kachikau road

J. PARAKARUNGU

- 1. Gravelling Kachikau Parakarungu road
- 2. Village electrification
- 3. 2no. x 2 classroom blocks
- 4. 4no. teachers quarters
- 5. Up grading of a health post to a clinic
- 6. Up grading of tribal houses
- 7. School library
- 8. 11no. stand pipes
- 9. Community hall
- 10.Sports ground
- 11.Gravelling internal roads
- 12. Public phones
- 13. Agricultural extension offices
- 14. Technical college
- 15. Youth workshops

APPENDIX B: District Development Planning Matrix

The District – Ministry Matrix is comprised of spreadsheets designed to show the details of DDP6/ NDP9 financial allocations for each project, from each ministry, to each district. It is a detailed breakdown of the NDP 9 financial allocations by district, disaggregated both by components of specific projects, and where possible into the six annual phases of the plan period. The matrix data contained in the spreadsheets is at two levels:

- Ministry allocations per district for all relevant projects.
- District allocations within particular projects by component and annual phasing, where applicable, over the six year plan period.

These sets of matrices provide an effective reference document for all projects and components, during the implementation and monitoring stages of the plan period.

The matrices indicate that the specific ministry will implement (or make funds available to the district to implement), projects under the relevant project number, within the administrative boundaries of the district.

The matrices in this plan are directly linked to the national matrices, therefore every effort has been made to ensure that the data in the district matrices is accurate, based on the inputs from the ministries and district. They have been revised and updated to match the NDP 9 ceilings as approved by parliament.

MINISTRY OF LOCAL GOVERNMENT

	Budget Allocations in P'000								
Project Title	03/04	04/05	05/06	06/07	07/08	08/09	DDP 6 TEC	National/ Unallocated	
LG 101 Local Auth. Infrastructure Maintenance	7 082	11 805	10 000				28 887		
LG 102 Social Welfare and Development									
LG 103 MLG Computerisation									
LG 104 Fleet Development	1 354		1354		451	451	3 611		
LG 301Storage and Distribution Facilities		4 857					4 857		
LG 801 Local Authorities Training									
LG 901 Customary Courts	1 805	1 088	1 088	993	903		5 877		
LG 1101 Local Authority Planning and Management									
LG 1102 Primary Education	5 416	4 514	4 514	4 514	117		19 074		
LG 1103 Recreational Facilities	200	200	200	350	150		1 000		
LG1104 Primary Health Facilities	2 181	2 867	2 248	3 000	2 000	1 309	13 605		
LG 1105 Rural Administration Centres									
LG 1106 Remote Area Development Programme									
LG 1107 Labour Intensive Public Works	1 805	583	583	903	611	805	5 290		
LG 1108 National Rural Sanitation Programme	6 319	6 3 1 9	3 160	587	181	45	16 610		
LG 1109 Community Projects	275	911	1 000	1 040	602	750	4 578		
LG 1110 Dist. Council Water Supply & Sewerage	13 000	15 000	15 000	7 000			50 000		
LG 1111 Village Infrastructure	4 613	18 452	12 531	5 534			41 129		
LG 1112 Municipal Services	361	1 805	1 805	1 805	1 805	1 805	9 388		
LG 1113 Urban Land Servicing	298	1 228	11 031	13 487			26 043		
LG 1114 Urban Sewerage									
LG 1115 Rural Roads	632	451	632				1 715		

PRIORITIESED PROJECT PROPOSALS

MINISTRY OF LOCAL GOVERNMENT

LG 1101: LOCAL AUTHORIT	Y PLANNING AND	MANAGEN	MENT	TEC	1					
	Location	03/0	04/0 5	05/0 6	06/0 7	07/0 8	08/0	Tota l	Average cost per unit (P'000)	Total cost in current prices (P'000)
Computers & accessories	Council	2					1	2	20	60
Computers & accessories	Dist. Adm.	2		1				2	20	60
Computers & accessories	Landboard		1		1			2	20	60
Computers & accessories	Tribal	1		1				2	20	60
Systems Networking	RAC								500	500
										740
LG 1102 : PRIMARY SCHOOL	FACILITIES	T	EC							
New school	Kazungula		1					1	7 500	7 500
	Kasane					6		6	300	900
	Kachikau						2	2	350	350
	Plateau	2		2				4	350	700
Classrooms	Paras				2			2	350	350
	Panda			2				2	350	350
	Mabele		2					2	350	350
	Lesoma				2			2	350	350
Teachers quarters	Plateau	8						8	300	3 000
	Kasane							1	750	750
Administration blocks	Kavimba		1		1			1	775	775
	Plateau	1						1	750	750
School toilets	Satau	4						4	27	27
SCHOOL WHEIS	Paras	4						4	27	27

			1	1	1	1	1			1
	Panda			2				2	20	20
	Mabele	4						4	27	27
	Kavimba			4				4	27	27
	Lesoma		4					4	27	27
School Bus	Chobe		1						700	700
										16 980
LG 1103: RECREATIONAL FACIL	ITIES TE	C:								•
	Location	03/0	04/0 5	05/0 6	06/0 7	07/0	08/0 9	Tota l	Average cost per unit (P"000)	Total cost in current prices (P'000)
Discourse de	Kasane		1					1	250	250
Playgrounds	Kazungula			1				1	250	250
Seboba	Kasane		1						500	500
										1 000
LG 1104 : PRIMARY HEALTH FAC	CILITIES	TEC:								•
	Paras		1					1	360	360
Up grading of a health post to a clinic	Kazungula			1				1	310	310
Cimic	Kasane						1	1	1 000	1 000
Extension of health post	Plateau		1					1	50	50
	Kavimba			1				1	250	150
	Kasane	1							200	200
Rehabilitation/ Extension of health post	Kachikau	1						1	250	150
hoor	Satau						1	1	250	150
	Lesoma						1	1	250	150
Ct. CC1	Panda		1					1	300	300
Staff houses	Kachikau		1					1	350	300
Vehicles – D cab	Kasane	1						1	200	

										3 120
LG 1105 : RURAL ADMINISTI	RATION CENTRE	TEC	C:	•	•		•	•		
RAC landscaping	Kasane		1					1	250	
DHT offices	Kasane			1				1	12 000	
Extension of Parking Area	RAC	1						1	500	
LG 1107 : LABOUR INTENSIV	E PUBLIC WORKS	TEC:								
Mobile stop	Panda		1					1	20	20
	Paras	1			1			2	300	600
	Panda		1	1				2	300	600
Teachers quarters	Mabele	1	1					2	300	600
	Kavimba		2					2	300	600
	Lesoma			1				1	300	300
Construction of classroom	Kavimba						2	2	350	350
School toilets	Lesoma					4			27	27
										3 097
LG 1108: RURAL SANITATIO	N PROGRAMME	•		•	•			•		
	Location	03/0	04/0 5	05/0 6	06/0 7	07/0	08/0	Tota 1	Average cost per unit P'000	Total cost in current prices P'000
Construction of landfill	Kasane	1						1	13 000	13 000
Slaughter house	Kasane		1					1	200	200
Refuse skips	Kasane	1		1			1	3	20	60
	Kavimba	10			10			20	4.5	90
	Kachikau	10			10			20	4.5	90
Dry compost latrines	Paras	10			10			20	4.5	90
	Panda	10			10			20	4.5	90
	Satau		10			10		20	4.5	90

	Mabele		10			10		20	4.5	90
	Lesoma		10			10		20	4.5	90
	Kazungula		10			10		20	4.5	90
	Paras	2						2	7	
	Mabele		2					2	7	
	Kachikau			2				2	7	
Refuse collection bases	Lesoma			2				2	7	
	Satau						2	2	7	
	Kavimba						2	2	7	
	Panda						2	2	7	
Vacuum tanker	Kasane			1				1	360	360
500 2101 f 1:	Kasane	150		150		150		450	190	85.5
500-210L refuse bins	Kazungula	150		150		150		450	190	85.5
										13862.5
LG 1109: COMMUNITY PROJE	CTS TEC:									·
Fencing of cemetery	Kachikau	1						1	20	
	Paras			1				1	250	250
Community hall	Lesoma		1					1	250	250
	Kasane	1						1	250	250
Day care centres	Kazungula			1				1	250	250
Kgotla shelter	Lesoma	1						1	250	250
	Paras				1			1	250	250
VDC LA2 H	Kavimba					1		1	250	250
VDC LA2 Houses	Kasane				1			1	250	250
	Plateau					1		1	250	250
Cemetery toilet & standpipe	Kachikau	1						1	20	20
New cemetery	Kasane	1						1	30	30

Poultry project	Kazungula		1						250	250
S&CD offices	Panda			1					250	250
S&CD offices	Kachikau			1					250	250
										3 050
LG 1110: WATER AND SEWERAG	E TEC:	•	•	<u> </u>				<u> </u>		
	Location	03/0	04/0 5	05/0	06/0	07/0	08/0	Tota 1	Average cost per unit (P'000)	Total cost in current prices (P'000)
Rehabilitation and upgrade of water scheme	Chobe Enclave	1						1	5 000	5 000
	Kazungula		1					1	1 000	500
He was die a vesten nationalation	Lesoma			1				1	650	300
Upgrading water reticulation	Kasane							1	1 000	500
	Panda			1				1	650	300
Rehabilitation and extension of	Kasane	1						1	15 000	15 000
sewerage scheme	Kazungula	1						1	15 000	15 000
Water unit office & w/shop	Kasane		1					1	5 000	5 000
										41 600
LG 1111: VILLAGE INFRASTRUCT	TURE TE	EC:					•			
Infrastructure upgrade design and construction	Kazungula	1	1					1	20 600	10 000
	Kasane	1	1					1	20 600	40 000
									41 200	50 000
LG 1112: MUNICIPAL SERVICES	TEC:	•	•		•	<u>.</u>	•		•	•
	Location	03/0	04/0 5	05/0	06/0 7	07/0	08/0	Tota 1	Average cost per unit (P'000)	Total cost in current prices (P'000)

CTU Workshop	Kasane		1	1				1	4 000	4 000
Fire fighting vehicle	Kasane	1						1	400	400
Design constn of bus rank	Kasane		1	1					4 000	4 400
Public jetty	Kasane		1						1 000	1000
										9 400
LG 1113: URBAN LAND SERVICIN	IG TEC:		•		•			•		
Cadastral surveying	Kasane	1							2 500	2 500
Infrastructure design and construction	Kasane		1	1					18 000	18 000
										26 000
LG 1115: DISTRICT ROADS	TEC:		•		•			•		
Tipper truck	Chobe		1					1	500	500
Grader	Chobe	1						1	700	700
Front end loader	Chobe			1				1	700	700
Internal Roads Gravelling	Chobe	1	1	1	1	1	1			2800
										4700
LG 901 CUSTOMARY COURTS	TEC:									
Type III Office Constn	Plateau	1							5 000	5 000
Ext. of offices to Type III	Kasane		1						1 000	1 000
	Kavimba					1			1 000	1 000
Ext. of offices to Type II	Kachikau				1				1 000	1 000
	Panda			1					1 000	1 000
	Paras			1					200	200
Vehicles Land Cruiser 4.2	Kachikau			1					200	200
	Panda			1					200	200
	Panda								100	100
Electrification of Offices	Kazungula								100	100
	Mabele								100	100

	Kavimba								100	100
	Kachikau								100	100
	Lesoma								10	10
Radio Communication	Kavimba								10	10
Radio Communication	Kazungula								10	10
	Kazungula								10	11 000
LC 101 LOCAL AUTHORITIES IN	(ED A CEDILICELLE)	E MAINT	TENIA NICE		TEC					11 000
LG 101: LOCAL AUTHORITIES IN	FRASTRUCTUR	T	1	1	TEC:		1	1	T	
	Location	03/0	04/0 5	05/0	06/0 7	07/0	08/0	Tota I	Average cost per unit (P'000)	Total cost in current prices (P'000)
LG 104: FLEET DEVELOPMENT	TEC:							<u>.</u>		
Council									1 605	1 605
Tribal									400	400
DA									1 605	1 605
LG 301: STORAGE AND DISTRIBU	JTION FACILITI	ES T	EC:							
Food relief warehouse	Kasane	1						1	4 857	4 857

Ministry Of Agriculture											
	Budget Allocation in P'000										
	03/04	04/05	05/06	06/07	07/08	08/09	Total				
AG 101 Livestock Marketing Facilities	69	36	74	0	0	0	179				
AG 102 Livestock Water Development	60	60	60	60	60	60	360				
AG 103 MoA Computerisation	9 990.557						9 990.557				
AG 109 Res. & Office Accom. Farm Mgt	140.164	0	354.8	123.196	0	0	618.86				

AG 200 Fleet Development	1 350	750	375	437.5	85	2 625	5 622.5
AG 201 Animal Disease Emerg. Control	12 545	10 505					23 050
AG 206 SLOCA	1 569.33	1 976.656	469.33	569.33	569.33	569.33	5 723.306
AG 301 Arable Lands Devt Programme	700	100	200	180	100	100	1 380
AG 315 Devt Of Extension Services	325.01					413.25	738.26
AG 354 Horticulture Development	100	12.5					112.5
AG 358 Soil Conservation	100	150	322 6	200	210	147.2	1 129.8
AG 359 Forestry & Apiculture Devt	168	217.97	200	1 004			1 589.97
AG 360 Pandamatenga Development	3 200	11 262	11 262	6 130			31 854
AG 423 Agricultural Research	1 745	10 454.89	3 802.797	5 116.404	4 284.9	2 231.7	34 285.7
AG 501 Cooperatives Development			1 656.199		2 822.6	1 033.2	5 511.999
MR 301 Intl Water Planning & Devt	5 702	19 200					24.002
MR 301 Intl Water Planning & Devt MR 302 National Water Planning & Devt MR 315 Water Affairs Facilities MR 337 Major Villages Water/ Sanitation Devt	5 703 735	18 390 2 317	5 517				24 093 7 888 735
MR 302 National Water Planning & Devt MR 315 Water Affairs Facilities	735		5 517				7 888
MR 302 National Water Planning & Devt MR 315 Water Affairs Facilities MR 337 Major Villages Water/ Sanitation Devt	735		5 517				7 888

Project Title	03/04	04/05	05/06	06/07	07/08	08/09	Total
Devt. of Trade & Consumer Affairs							
Office Construction							2 595.427
Construction of Staff Houses							1 310.793
Development of Tourism							
Refurbishment of Offices				3 000			3 000
Tourism Walking Trails			200				200
Construction of Recreational Park				700			700
Development of DWNP							
Staff Houses – Pandamatenga (3)			600				600
- Savuti (2)					400		400
- Kachikau (4)				800			800
Office Blocks - Pandamatenga			3 000				3 000
- Kachikau				3 000			3 000
Electrification of Camps - Ngoma			200				200
- Savuti			200				200
Street Lights - APU Kasane			250				250
Recreational Facilities - CNP			500				500
Ablution Blocks - Ngoma			1 000				1 000
Boreholes - Linyanti				1 000			1 000
- Ghoha				1 000			1 000
Aviation & Boats - Savuti		5 000					5 000
Community Private Sector Support							
Conservation Initiatives							70
CBNRM							100

MINISTRY OF LANDS AND HOUSING

							<u> </u>
MINISTRY OF STATE PRESIDENT							
			Budget Allocat	ion P'000			
Project Title	03/04	04/05	05/06	06/07	07/08	08/09	Total
UHF/VHF Bands - RB1 & 2 and TV							230
Police Station - Kachikau							34 000
Police Housing - Kasane							11 498
Improvements to houses -Kasane							1 400
Digitalisation of existing analogue microwave between Nata, Panda, Kazungula & Kasane							
							5 500
			T				
MINISTRY OF WORKS, TRANSPORT AND	COMMUNICA	TIONS					
BTC 103 BTC Finances	9 468.292	1 093.446					10 561.738
WT 334 DABS Buildings	684.36	379.36					1 063.720
WT 509 Ngoma-Kachikau rd Construction	1 710.900	29 637.500	20 474.200				51 822.600
WT Ngoma W/Bridge Offices& Houses							1 547.000
WTKazungula W/B Offices & Equipt.							626 800
WT703 Devt of Meteorology Services							5 714.000
WT334 Upgrading Kasane Depot							920 000
WT605 Kasane Airport Improvements							205 660.000
WT DCA Institutional Housing							5 000.000
WT510 Kazungula Bridge Project	5 000.000	45 000.000	100 000.000	1 000 m	100 000.000	100 000.000	450 000.000
WT502 Nata-Kazungula Rd Improvmt							59 365.000

N. 10.5 D. 1						50,000
MD 405 Primary Hospital						50 000
MINISTRY OF EDUCATION						
ED 242 Technical College Design						5 000
ED 903 Upgrading Kasane Edu. Centre						1 000
ED 801 Extensions of CJSS						
Chobe CJSS						1 598.050
Liswani CJSS						2 807.825
	1	П	l		<u> </u>	1
MINISTRY OF LANDS AND HOUSING						
MINISTRY OF LANDS AND HOUSING		T	T	1		