

FOREWORD

The 7th Turkana District Development Plan (DDP) for the period 2002-2008 was prepared by the District Departmental Heads of various Ministries under the coordination of the District Commissioner (DC) assisted by the District Development Officer (DDO) and members of the District Planning Team. The Plan is a product of broad-based consultations among various stakeholders undertaken in each of the sixty-nine districts in the country. It has been prepared in the backdrop of the theme of the 9th National Development Plan, which is "*Effective Management for Sustainable Economic Growth and Poverty Reduction*".

The Turkana DDP articulates medium term policies and objectives, which are further translated into short-term strategies and programmes to be implemented under the Medium Term Expenditure Framework (MTEF). The latter is part of the budgetary reforms undertaken to strengthen the linkage between policy, planning and budgeting.

The Rural Planning Department of the Ministry of Finance and Planning provided the overall guidance through seminars and training workshops and was responsible for the formulation of guidelines, editing and publication of the Plan.

The Plan is divided into four chapters as follows:

- Chapter One: Provides the background description of the district in terms of its area, administrative divisions, main physical features, settlement patterns, as well as a summary of data essential for making informed choices while planning.
- Chapter Two: Provides a review of the performance of the 6th Turkana District Development Plan for the period 1997-2001 and insight into the major development challenges and cross cutting issues to be tackled during the 2002-2008 Plan period.
- Chapter Three: Forms the core of the Plan and is prepared along the lines of the MTEF sectors. It indicates the priorities, strategies and programmes proposed to overcome the constraints identified in Chapter Two. The proposals are in line with the people's aspirations as outlined during the Poverty Reduction Strategy Paper District Consultation Forums.
- Chapter Four: Introduces implementation, monitoring and evaluation mechanisms for the 7th Turkana DDP. It outlines the institutional framework for monitoring and evaluating the implementation of the 7-year Plan, the indicators and instruments to be used and sets out clear roles for all stakeholders.

District Planning is the cornerstone of the District Focus for Rural Development Strategy (DFRD). This strategy is currently being revamped to ensure that an effective bottom up delivery system that facilitates two-way communication between the community and development partners through the administrative hierarchy in the district as well as at the national level is established. In order for this Plan to be more effective than before,

process: from selection, implementation, monitoring and evaluation. However, this requires huge investments in training and capacity building, particularly on participatory methodologies for the communities, and effective delivery of services closer to the people. In this regard, district information systems will be put in place, with District Information and Documentation Centre (DIDC) and District Planning Unit (DPU) playing a central role in the process. This will be actively pursued by the Rural Planning Department through the office of the DDO in collaboration with development partners.

**RURAL PLANNING DEPARTMENT
MINISTRY OF FINANCE AND PLANNING**

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LIST OF ABBREVIATIONS

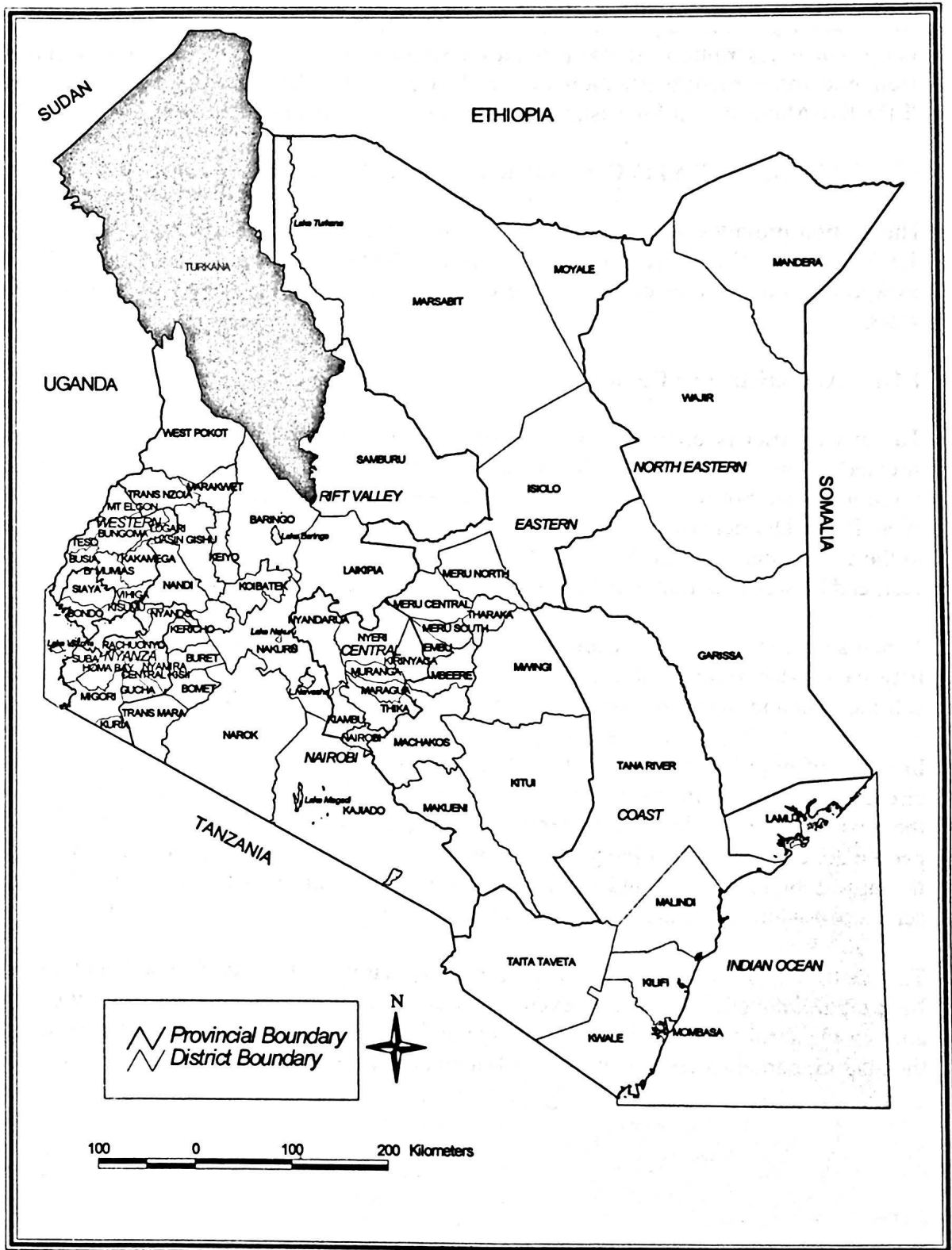
| | |
|-------|---|
| AIDS | Acquired Immune Deficiency Syndrome |
| ASAL | Arid and Semi-Arid Lands |
| CAHNs | Community Animal Health Workers |
| CHWs | Community Health Workers |
| DAEO | District Adult Education Officer |
| DALEO | District Agricultural and Livestock Extension Officer |
| DDC | District Development Committee |
| DDO | District Development Officer |
| DDO | District Development Officer |
| DDP | District Development Plan |
| DEO | District Education Officer |
| DFO | District Fisheries Officer |
| DFRD | District Focus for Rural Development Strategy |
| DIDCs | District Information Documentation Centres |
| DMEC | District Monitoring and Evaluation Committee |
| DPU | District Planning Unit |
| DVO | District Veterinary Officer |
| DWE | District Trade Development Officer |
| EIA | Environmental Impact Assessment |
| HIV | Human Immuno-Deficiency Virus |
| IMCI | Integrated Management of Childhood illness |
| KTBH | Kenya Top Bar Hive |
| M & E | Monitoring and Evaluation |
| MTEF | Medium Term Expenditure Framework |
| NFE | Non-Formal Education |
| NGOs | Non-Governmental Organisations |
| NPEP | National Poverty Eradication Plan |
| PRA | Participatory Rural Appraisal |
| STI | Sexual Transmitted Infection |
| TBA | Traditional Birth Attendants |

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CHAPTER ONE
DISTRICT PROFILE

LOCATION OF TURKANA IN KENYA



Prepared by CBS, 1999 Pop. Census

This map is not an authority over administrative boundaries

1.0 INTRODUCTION

This chapter provides a profile of the district in terms of the administrative, geographic and physical description. It also provides a detailed fact sheet on the physical, social and economic infrastructure situation of the district within the context of the plan theme "Effective Management for Sustainable Economic Growth and Poverty Reduction".

1.1 ADMINISTRATIVE, GEOGRAPHIC AND PHYSICAL DESCRIPTION

The section provides details of the district profile and gives background information on the location of the district, the main physical features, settlement patterns and other background information critical to the overall development strategy for the next seven years.

1.1.1 Administrative Boundaries

Turkana District is one of Kenya's ASAL (Arid and Semi Arid Lands) districts. It is situated in the North Western Kenya to the west of Lake Turkana. The district borders Ethiopia to the northeast, Sudan to the northwest, and Uganda to the west, Baringo and West Pokot Districts to the south, Samburu District to the southeast and Marsabit District to the east as indicated on Map No. 1. It is situated between longitudes $34^{\circ} 0'$ and $36^{\circ} 40'$ east, and between Latitudes $10^{\circ} 30'$ and $5^{\circ} 30'$ north. It is the largest district in Kenya.

Turkana district comprises of seventeen divisions, fifty-six locations and one hundred and fifty six sub-locations. Table 1.1 shows the area of the district by division, locations and sub-location and Map No.2 shows the administrative units of the district.

In terms of population settlement, it should be noted that the Turkana people in normal circumstances settle in the plains. However, due to the dictates of weather, very few of them settle in one place permanently. During and shortly after the rains the Turkana people are concentrated at the plains. However, as the drought starts they move mostly to the high mountain areas and even to neighbouring countries of Uganda and Sudan in search of pasture and water for their livestock.

The district has two local authorities, namely Turkana County Council and Lodwar Municipal Council. There are seventy-two electoral wards in Turkana County Council and six electoral wards in Lodwar Municipal Council. There are three constituencies in the district, namely Turkana North, Central and South respectively.

TURKANA DISTRICT (Administrative Boundaries)

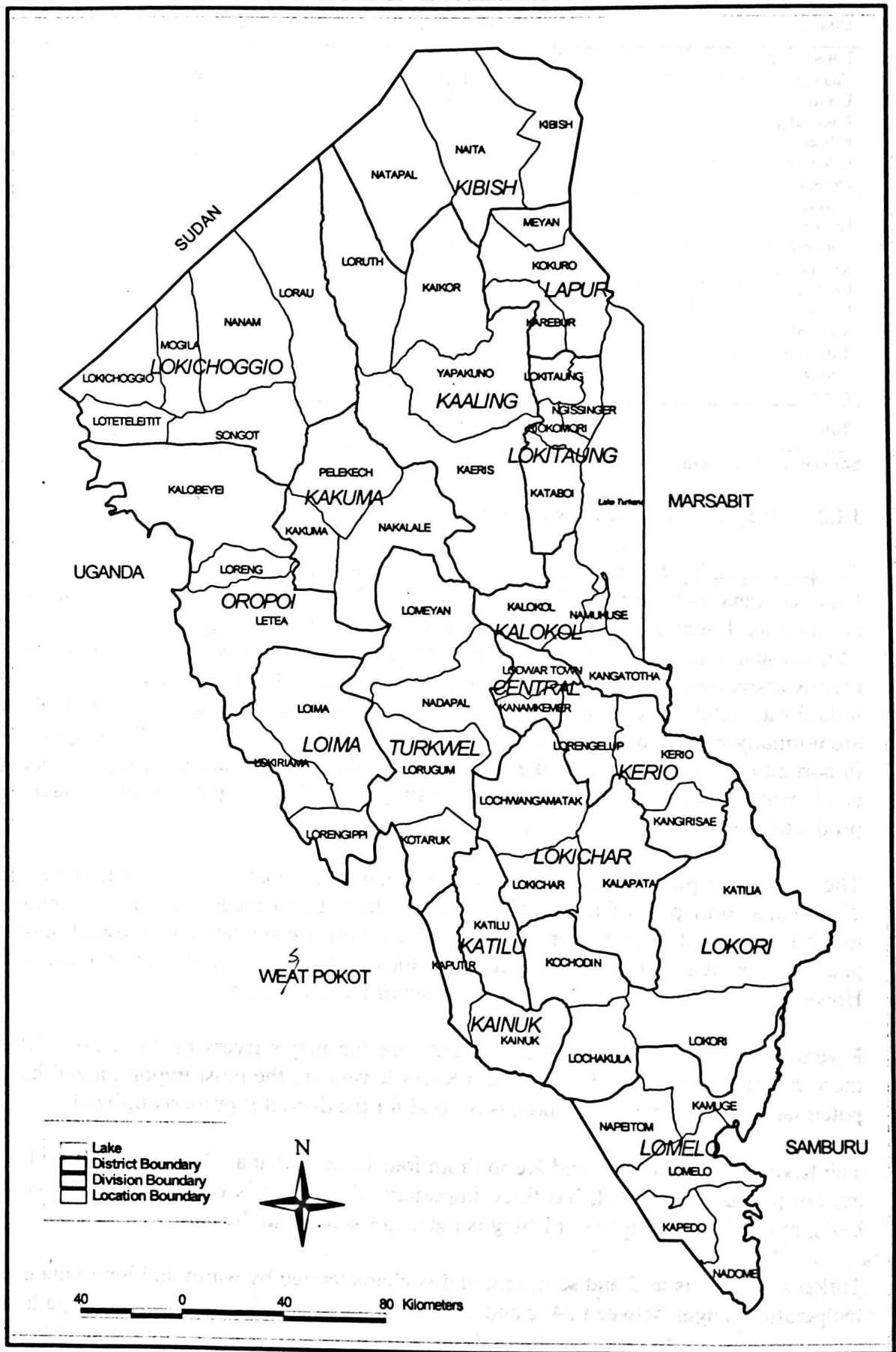


Table 1.1 Area of the District by Division, Location and Sub-Location

| Division | Area (Km ²) | Locations | Sub- Locations |
|--------------|-------------------------|-----------|----------------|
| Lokichogio | 9126 | 6 | 13 |
| Kaaling | 10,830 | 4 | 13 |
| Lopur | 4652 | 3 | 7 |
| Lokitaung | 5208 | 4 | 11 |
| Kibish | 5127 | 3 | 7 |
| Lokichar | 2913 | 3 | 7 |
| Oropoi | 5348 | 3 | 11 |
| Lokori | 5008 | 4 | 11 |
| Lomelo | 5962 | 5 | 9 |
| Katilu | 1187 | 1 | 4 |
| Kainuk | 2504 | 2 | 6 |
| Central | 2099 | 2 | 5 |
| Kerio | 2703 | 3 | 8 |
| Kalokol | 3470 | 3 | 8 |
| Turkwell | 3093 | 4 | 14 |
| Loima | 2174 | 3 | 12 |
| Kakuma | 5596 | 3 | 10 |
| Total | 77,000 | 56 | 156 |

Source: District Commissioner's Office Lodwar, 2001

1.1.2 Physiographic and Natural Conditions

The physiographic features in the district include low lying open plains, mountain ranges, Lake Turkana and the river drainage patterns. The main mountain ranges of the district are Loima, Lorengippi, Lokwamoru, Lorionotoma, Loriu, Suguta, Silale and Songot, Mogilla and Kailongkol. The altitude of the mountains ranges between 1500 and 1800 metres above sea level in the east reaching the peak at Loima, which forms undulating hills for a stretch of some 65 km². The mountain ranges, because of their high elevation are normally green, covered with dense bushes and high woody cover. The ranges support important economic activities like honey production, grazing during the dry season, water catchments sources, gum arabica harvesting, small rain fed shambas, and wood production.

The open lying plains consist of the Central Plains, Kalapata Plains and Lotikipi Plains. The plains form part of the arid area in the district and receive the lowest amount of rainfall of around 180mm per annum. These plains are dominated by dwarf shrub and grassland, which provide forage for livestock during and shortly after rainy season. However, this forage dries rapidly at the onset of the dry season.

Rivers Kerio, Turkwel, Tarach and Suguta are the major rivers in the district. Most of these rivers are seasonal. Turkwell and Kerio Rivers are the most important and have the potential of producing large amounts of food for the district if properly utilized.

The Rivers Omo, Turkwel and Kerio drain into Lake Turkana. The Lake, situated on the eastern part of the district, has three important islands and is endowed with a variety of birds, crocodiles and hippos. Fishing is the major activity in the lake.

Turkana District is arid and semi arid and is characterized by warm and hot climate. The temperature ranges between 24° c and 38° c with a mean of 30° c. The rainfall pattern and distribution is erratic and unreliable both with time and space. There are two rainfall

seasons. The long rains usually occur between April and July and the short rains between October and November and ranges between 120 mm and 500mm. The driest periods are January, February and September. The rainfall is distributed on an east-west gradient with more rainfall in the western parts and other areas of higher elevation. The rain falls in brief violent storms resulting in flash floods. The surface runoff and potential evaporation rates are extremely high.

Due to the low rainfall and high temperatures there is a lot of evapo-transpiration resulting into deposition of salt in the soil and capping on the surface. As a result, only about 30 per cent of Turkana District's soil can be rated as moderately suitable for agricultural production. These moderately fertile soils are found at the central plains of Lorengippi, the upper Loima, the lowlands of the Turkwel, Nakaton and Kawalathe drainage along the lake at Todonyang plains, the lower Kalokol and Turkwel – Kerio Rivers and a portion of the Loru Plateaus.

1.1.3 Settlement Patterns

The population density in the district varies from 29 persons per km² in Kakuma Division to 1 person per km² in Kibish Division.

Permanently and semi-permanently settled areas in the district are found along Turkwel and Kerio rivers where irrigated farming is practiced. Along these areas, there exist peri-urban market centres with the necessary social infrastructures like schools and health facilities that support human settlement.

There is no clear pattern of poverty distribution in the district as the poor and the rich exist side by side especially in the rural areas. Nevertheless most of the poor are found in the northern part and central plains due to recurrent drought and diseases. Cattle rustling from neighbouring countries have worsened the situation.

The poor are also found in the major towns and market centres of the district. They include migrants from other parts of the district in search of relief food and assistance from relatives engaged in productive economic activities in towns and market centres.

Table 1.2 Population Distribution and Density by Division (2002)

| Division | Population | Density |
|--------------|----------------|------------|
| Likichogio | 38,972 | 4.3 |
| Kaaling | 25,905 | 2.4 |
| Lapur | 13,764 | 3.0 |
| Lokitaung | 24,325 | 4.7 |
| Kibish | 6523 | 1.3 |
| Lokichar | 23,489 | 8.1 |
| Oropoi | 19,408 | 3.6 |
| Lomelo | 6,556 | 1.1 |
| Katilu | 13,514 | 11.4 |
| Kainuk | 12,708 | 5.1 |
| Central | 38,685 | 18.4 |
| Kerio | 16,595 | 6.1 |
| Kalokol | 30,948 | 8.9 |
| Turkwel | 53,722 | 17.4 |
| Loima | 36,595 | 16.8 |
| Kakuma | 104,624 | 18.7 |
| Total | 485,627 | 6.3 |

Source: District Statistics Office, Lodwar, 2001

1.2 DISTRICT FACT SHEET

The district fact sheet contains an inventory of the district in terms of area, topography and climate, demographic and population profiles, and socio economic indicators. The fact sheet provides the basic information important for the formulation of development strategies and priorities for implementation over the next seven years, to achieve the theme of the Plan of "Effective Management for Sustainable Growth and Poverty Reduction."

| | | |
|---|-----------------------------|------------------------|
| Land Area | | |
| Total area | | 77,000 km ² |
| Arable land | | 25,000 km ² |
| Non-arable land (does not include water mass) | | 37,440 km ² |
| Water mass | | 7,560 km ² |
| Urban area | | 7,000 km ² |
| Topography and Climate | | |
| Attitude | Highest | 1800m above sea level |
| Rainfall | Lowest | 120mm |
| Average annual rainfall | | Between 300-400mm |
| Temperature range | Minimum | 24 ^o c |
| | Maximum | 38 ^o c |
| Average temperature | | 30 ^o c |
| Demographic and Population Profiles | | |
| Population size (2002) | | 497,779 |
| Total no. of males | | 247,916 |
| Total no. of females | | 249,863 |
| Female/male sex ratio | | 1:1 |
| Population growth rate | | 3.3% |
| Population density (average) | Persons per km ² | 7 |
| Highest density (Kakuma) | Persons per km ² | 29 |
| Lowest density (Kibish) | Persons per km ² | 1 |
| Primary school going age 6-13 | | 115,989 |
| Secondary school going age 14-17 | | 50,097 |
| Labour force (15-64) | | 264,242 |

| | |
|--|--|
| Female in reproductive age (15-49) | 124,454 |
| Youth population (15-25) | 112,660 |
| Dependency ratio | 100:88 |
| Rural population at the start of the plan | 428,616 |
| Rural population at the end of the plan | 523,135 |
| Urban Population | |
| Urban population at the start of the plan period | 69,163 |
| Urban population at the end of the plan period | 83,639 |
| Number of towns with a population of 2,000-10,000 | |
| Kalokol | 2,308 (2002); 3,028 (2008) |
| Kakuma | 9,808 (2002); 10,825 (2008) |
| Crude birth rate | 50.3 per 1000 |
| Crude death rate | 16 per 1000 |
| Under 5 mortality rate | 220 per 1000 |
| Life expectancy | 50 |
| Infant mortality rate | 170 per 1000 |
| Total fertility rate | 5.5 |
| Literacy rate | 60% |
| Social Economic Indicators | |
| Total number of households | 80,921 |
| Average household size | 6 |
| Number of female headed household | 5,931 |
| Absolute poverty | 333,636 (overall poverty 74%) |
| Food poverty | 365,196 (81%) |
| Contribution to national poverty | 1.2% |
| Hardcore rural poverty | 279,533 (62%) |
| Average household incomes | |
| Sectoral contribution household income | |
| Agricultural income (wages) | 12.4% |
| Wage employment | 31% |
| Livestock income | 56.6% |
| Agriculture | |
| Total number of farms | 11,939 |
| Average farm sizes | 0.5 acres |
| Number of irrigation schemes | 21 |
| Number of people working in the agricultural sector | 77,684 |
| Cattle | 176,000 |
| Sheep | 813,000 |
| Goats | 1,626,000 |
| Donkeys | 32,000 |
| Poultry | 10,030 |
| Number of people involved in livestock | 310,734 |
| Most prevalent livestock diseases | CCPP, CBPP, Rinderpest, Tryps, Anthrax, Worm infections |
| Main type of fish species catch | Tilapia and Nile Perch |
| Number of fish species | 48 |
| Number of commercial fish species | 12 |
| Number of people engaged in fisheries sector | 58,263 |
| Number of land beaches | 8 |
| Main forest products | Construction materials, materials for making domestic goods |
| Cooperatives | |
| Number of active cooperatives by type: | |
| Fishermen | 3 |
| Saccos | 1 |
| Agricultural | 1 |
| Multipurpose | 1 |
| Consumer | 1 |
| Key cooperatives, which have collapsed in the last 5 years | Turkana Women Handicraft Cooperative Society Ltd. Katilu Farmers' Cooperative Society |

| | |
|---|---|
| Total Registered Cooperatives Members by Type | |
| Saccos | 387 |
| Fishermen | 4,003 |
| Agricultural | 496 |
| Consumer | 500 |
| Multipurpose | 110 |
| Total | 5,496 |
| Total Turnover by Type (Kshs) | |
| Multipurpose | 22,402,424 |
| Saccos | 484,917 |
| Fishermen | 822,288 |
| Agricultural | 278,904 |
| Consumer | Not available |
| Health | |
| 3 most prevalent diseases | Malaria, respiratory diseases, Diarrhoea diseases, |
| Doctor/Patient ratio | 1:75,000 |
| Childhood diseases | Kwashiorkor, Anemia, marasmus, malaria, diarrhoea, measles, eye infections, pneumonia |
| Number of health facilities | 86 |
| Type of health facilities | Hospitals: 5, Dispensaries: 60, Health Centres: 8 Private clinics: 13 |
| Average distance to nearest health facility | 50 km |
| Number of beds in hospital | 990 |
| Number of cots in hospital | 43 |
| Education | |
| Pre-primary | |
| Number of pre-primary schools | 277 |
| Enrolment in pre-primary schools | 27,102 |
| Teacher/pupil ratio in pre-primary | 1:74 |
| Primary Schools | |
| Number of primary schools | 161 |
| Number of boarding schools | 41 |
| Number of enrolled pupils in primary schools | 37,483 |
| Enrolment rates in primary schools | 33.9% |
| Drop out rates in primary schools | 62.9% |
| Teacher/Pupil ratio in primary schools | 1:40 |
| Average years of school attendance | 5 |
| Number of secondary Schools | |
| Number of secondary schools | 8 |
| Enrolment in secondary schools | 2,466 |
| Enrolment rate in secondary schools | 4.95% |
| Drop-out rate in secondary schools | 24.1% |
| Teacher/pupils/ratio in secondary | 1:23 |
| Adult Literacy | |
| Number of adult education learning centres | 163 |
| Enrolment in adult education learning centres | 2,803 |
| Average class attendance | 1,488 |
| Number of adult teachers | 163 |
| Teacher/Learners ratio | 1:11 |
| Tertiary | |
| Number of other training institutions (e.g. colleges) | 3 |
| Children homes for special education | Lokichar RCEA Islamic center Kalokol Children's Home Lodwa Children's Home Nadirikonyen Rehabilitation Centre |
| Water and Sanitation | |
| Number of households with access to piped water | 15,334 |
| Number of household with access to potable water | 23,000 |
| Number of wells | 700 |
| Number of boreholes | 500 |

| | |
|---|--|
| Number of springs | 16 |
| Number of major rivers in the district | Turkwel, Kerio, Tarrach, Sunguta |
| Average distance to nearest potable water point | 10 km |
| Energy Sector | |
| Number of trading centres with electricity | 1 |
| Transport Facilities | |
| Total km of trunk roads (i.e. national roads) | 2,853.6 km |
| Tarmac road total length | 470 km |
| Gravel road total length | 366.8 km |
| Earth road total length | 20,16.8 km |
| Airstrips | 22 |
| Communication | |
| Number of households with telephone connections | 76 |
| Number of private and public organizations with telephone connections | Data not available |
| Number of telephone booths connections | 493 |
| Number of people with telephone connections | 849 |
| Number of post/sub-post offices | 5 |
| Trade, Commerce and Tourism | |
| Number of trading centres | 26 |
| Number of registered business | 309 |
| Number of informal sector enterprises | 6,243 |
| Number of tourist class hotels | 10 |
| Number of tourist attraction sites | 3 Turkana Southern Game Reserve and Nasolot Highlands in Lake Turkana Kenyatta House-Lodwar (Lokitung) |
| Type of wildlife in Southern Turkana Game Reserve | Elephants, buffaloes, zebras, Leopards, cheetah, hyenas, less kudu, dik dik, grand gazelles, jackals and fringe eared onyx |
| Types of animals in central highlands of Lake Turkana | Crocodiles, hippos, fish and birds |
| Bank of financial Institutions | |
| Number of banks | 2 |

CHAPTER TWO
MAJOR DEVELOPMENT CHALLENGES
AND CROSS CUTTING ISSUES

2.0 INTRODUCTION

This chapter discusses the major development challenges and cross cutting issues in the district. It begins by providing a broad overview of the last District Development Plan 1997-2001 and assesses in broad terms whether the expectations of the plan were met. It also analyses the implementation of projects and programmes and attempts to show any achievements, constraints and lessons learnt. The chapter then looks at the linkages between the District Development Plan, the National Development Plan and other policy Papers. Finally, it looks at the major development challenges and cross cutting issues the district is likely to face during the plan implementation period.

2.1 OVER-VIEW OF THE 1997 – 2001 PLAN

During the 1997 – 2001 Plan period, the district's major concern was to mobilise resources and create an enabling environment for the private sector to venture into industrial development. It was envisaged that industrial sector development would have positive spillover effects and stimulate growth in the other sectors. To achieve this goal, the District Development Plan articulated the measure to be undertaken to create an enabling environment for industrial take off. These included measures to:- improve the infrastructure, strengthen security, produce raw materials, develop human resources, protect the environment, improve marketing and to implement the one hundred and twenty eight projects enlisted in the District Development Plan.

At the end of the plan period, very little was achieved in creating an enabling environment for the private sector to contribute towards industrialization of the district. Further, the overall district project implementation status was only 22 per cent. Twenty-eight projects out of the one hundred and twenty eight were implemented to various levels. Most sectors were not funded at all either by the government or other development agencies, while those sectors, which were funded, received funding for only a few of their proposals.

2.2 IMPLEMENTATION OF THE 1997-2001 PLAN

Table 2.1 shows the implementation of the development projects contained in the 1997-2001 DDP by department. The low implementation rate of only 22 per cent as indicated above was as a result of many constraints the district faced during the plan period. These constraints included; insufficient funds, delay in releasing voted funds, piecemeal funding, cash flow problems, freezing of voted funds, low community participation in project management, over-ambitious project proposals, insecurity like cattle rustling, lack of effective monitoring and evaluation system, the 1997 El-Nino, La-Nina and the prolonged 1999 – 2001 drought.

Table 2.1 Implementation Status of the 1997- 2001 Development Projects

| Department | No of projects proposed during the 1997 – 2001 | | No. of projects implemented | % Implementation status (physical and financial) | Total cost |
|------------------------------------|--|-----|-----------------------------|--|------------|
| | Old | New | | | |
| Livestock Dev. | 2 | 7 | 2 | 47% | 3.4m |
| Veterinary | 5 | 3 | 1 | 40.5% | 2.4m |
| Agriculture | 3 | 2 | 3 | 56.6% | 9.1m |
| Water Dev. | 14 | 1 | 11 | 93.7% | 15.7m |
| T.R.P | 6 | 4 | 4 | 14.6% | 8.4m |
| Education | 1 | 4 | 0 | - | - |
| Fisheries | 3 | 4 | 1 | 10% | 5m |
| Wildlife | 2 | 1 | 0 | - | - |
| Public Works | 2 | 3 | 4 | 95% | 51.2m |
| Commerce/Trade | 1 | 2 | 1 | 40% | 895.000 |
| Co-operative Development | 3 | 0 | 0 | - | - |
| Environment and Natural Resources. | 2 | 7 | 0 | - | - |
| Lands and Settlement | 7 | 0 | 0 | - | - |
| Physical Planning | | | | | |
| Survey | 4 | 0 | 0 | 0 | - |
| Health | 6 | 9 | - | - | - |
| Social Services | 2 | 0 | 0 | - | - |
| Adult Education | 2 | 3 | 0 | - | - |
| Home Affairs/Nat. | 2 | 3 | 0 | - | - |
| Her. Prisons Dept | | | | | |
| Probation | 1 | 1 | | | |
| OOP Provincial Administration | 1 | 7 | 0 | - | - |
| Police Dept | 2 | 1 | | | |
| Reg. of persons | 1 | 1 | 2 | 100% | |
| Civil Registration | 1 | 1 | 2 | 100% | 851,630 |

Source: District Development Office, Lodwar, 2001

The combination of the above constraints has made the situation in the district even worse than it was at the start of the 1997 – 2001 Plan Period. During this period, the physical infrastructure sector, particularly roads were extensively damaged by the El Nino rains. Heavy vehicles transporting famine relief food to the district added to the extensive damage of the roads. Some areas in the district remain inaccessible due to lack of properly maintained all weather roads. The current road network in the district is in a pathetic state and requires urgent rehabilitation and reconstruction.

The agriculture and rural development sector was also affected by low funding, El Nino and the prolonged 1999-2001 droughts. The implementation rate, for example, in the agriculture sub-sector was 56.6 per cent. The drought caused a lot of damage and resulted in the following: reduction in livestock production in terms of meat and milk; high rates of livestock mortality due to lack of pasture and water, and drought related diseases; reduced yields from irrigation schemes and rainfed shambas. This aggravated the food security problem in the district as manifested in increased malnutrition in the district. The groups most affected by malnutrition include children under 5 years, the aged, the lactating and pregnant mothers.

The water sub-sector also experienced difficulties due to drought. The prolonged drought put increased pressure on the available water facilities and quite a number of them broke down while the water table became too low. There is, therefore, need to rehabilitate and restore some of the critical water sources so as to ensure improved access to safe drinking water for domestic pastoralist, agro pastrolist, and their livestock in the district.

The human resource development sector, particularly the education sub-sector, recorded dismal implementation rate. The proposed projects/programmes in the education sub-sector were for the construction of physical facilities and the provision of services. However, none of the proposed physical facilities projects were implemented.

Due to the low implementation rate of development projects/programmes, the mission of the 1997 – 2001 District Development plan was not met. The poor implementation did not augur well for the districts desire to industrialize, reduce poverty, unemployment and other social-economic problems. The district must refocus its efforts to revitalise its economy during the 2002-2008 Plan Period.

2.3 DISTRICT DEVELOPMENT PLAN LINKAGES WITH THE 2002-2008 NATIONAL DEVELOPMENT PLAN AND OTHER POLICY PAPERS

The theme of this district Development Plan is similar to that of the 2002-2008 National Development Plan, that is “Effective Management for Sustainable Growth and Poverty Reduction”. This theme is consistent with the long-term National Poverty Eradication Plan (NPEP) 1999-2015. The three basic priorities of NPEP are; improved access to basic services, promotion of broad based economic growth and social integration.

The National Development Plan provides broad macro economic objectives and sectoral priorities. The DDP has attempted to translate these broad objectives and strategies into district specific programmes/projects aimed at achieving sustainable growth and poverty reduction. The DDP has also attempted to integrate district level plans for NGOs, Regional Authorities and Local Authorities. The District Development Plan, therefore, contains projects and programmes that facilitate the realization of the National Development Plan, other Government policy documents and other stakeholders’ plans. This will harmonize the implementation of projects and programmes in the district.

2.4 MAJOR DEVELOPMENT CHALLENGES & CROSS-CUTTING ISSUES

The major development challenges that the district will face during the plan period relate to population growth, poverty, HIV/AIDS gender inequality and disaster management. These challenges must be tackled if the district is to achieve the desired level of development during the plan period.

2.4.1 Population Growth

According to the 1999 population and housing census, Turkana District had a population of 450,860 persons in 1999. This population is projected to increase to 497,779 persons in 2002 and to 606,774 persons in 2008. Table 2.2 provides the district population projections by age cohort and sex. As can be noted from the table, the district has a large proportion of young people. The age group 0-24 is estimated to be 337,157 persons or 68 per cent of the total population in 2002. This large youthful population is a reflection of the district’s rapid population growth rate estimated at 3.3 per cent. This growth rate is

above the national average of 2.9 per cent.

Table 2.2 Population Projections by Age Cohort and Sex 1999 – 2008

| Age Group | 1999 | | 2002 | | 2004 | | 2006 | | 2008 | |
|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | M | F | M | F | M | F | M | F | M | F |
| 0 - 4 | 29,268 | 27,973 | 32,314 | 30,884 | 34,518 | 32,991 | 36,874 | 35,242 | 39,389 | 37,646 |
| 5 - 9 | 37,696 | 35,169 | 41,619 | 38,929 | 44,458 | 41,478 | 47,492 | 44,308 | 50,732 | 47,331 |
| 10 - 14 | 38,088 | 34,999 | 42,052 | 38,641 | 44,921 | 41,278 | 47,986 | 44,094 | 51,259 | 47,102 |
| 15 - 19 | 33,314 | 28,432 | 36,781 | 31,391 | 39,290 | 33,533 | 41,971 | 35,820 | 44,834 | 38,264 |
| 20 - 24 | 20,503 | 19,844 | 22,637 | 21,909 | 24,181 | 23,404 | 25,831 | 25,001 | 27,593 | 26,706 |
| 25 - 29 | 16,212 | 18,715 | 17,899 | 20,663 | 19,120 | 22,072 | 20,425 | 23,578 | 21,818 | 25,187 |
| 30 - 34 | 10,447 | 14,160 | 11,534 | 15,634 | 12,321 | 16,700 | 13,162 | 17,840 | 14,060 | 19,057 |
| 35 - 39 | 9,020 | 13,471 | 9,959 | 14,873 | 10,638 | 15,888 | 11,364 | 16,972 | 12,139 | 18,129 |
| 40 - 44 | 7,647 | 9,894 | 8,443 | 10,924 | 9,019 | 11,669 | 9,634 | 12,465 | 10,291 | 13,315 |
| 45 - 49 | 6,834 | 8,437 | 7,545 | 9,315 | 8,060 | 9,951 | 8,610 | 10,629 | 9,197 | 11,355 |
| 50 - 54 | 5,261 | 5,619 | 5,808 | 6,204 | 6,205 | 6,627 | 6,628 | 7,079 | 7,080 | 7,562 |
| 55 - 59 | 3,780 | 3,486 | 4,173 | 3,849 | 4,458 | 4,111 | 4,762 | 4,392 | 5,087 | 4,693 |
| 60 - 64 | 2,772 | 2,600 | 3,060 | 2,871 | 3,269 | 3,066 | 3,492 | 3,276 | 3,731 | 3,499 |
| 65 - 69 | 1,614 | 1,613 | 1,782 | 1,781 | 1,904 | 1,902 | 2,033 | 2,032 | 2,172 | 2,171 |
| 70 - 74 | 1,114 | 970 | 1,230 | 1,071 | 1,314 | 1,144 | 1,403 | 1,222 | 1,499 | 1,305 |
| 75 - 79 | 486 | 484 | 537 | 534 | 573 | 571 | 612 | 610 | 654 | 651 |
| 80+ NS | 492 | 446 | 543 | 492 | 580 | 526 | 620 | 562 | 662 | 600 |
| Total | 224,548 | 226,312 | 247,916 | 249,863 | 264,830 | 266,911 | 282,899 | 285,121 | 302,200 | 304,574 |

Source: District statistics Office, Lodwar, 2001

* NS - Age not stated

In absolute terms, the population of the district is estimated to increase by about 22 per cent between 2002 and 2008. This increase in the overall population will call for prudent investment in socio-economic sectors in order to support a rapidly growing and youthful population. Currently, the district population is exerting a lot of pressure on the available facilities/resources like food, water, education, employment, health and vegetation. This is manifested by the persistent famine, malnutrition, unemployment, poverty and the inability of the district residents to access basic services such as health and education.

Table 2.2 further shows variations in sex ratio of the population in various age cohorts. The overall female/male sex ratio in 2002 is about 1:1 with female slightly outnumbering males. However, variations exist and in some age cohorts where males outnumber females particularly in age groups 0 – 24 and 55 – 80, while women outnumber males in age groups 25 – 54.

Table 2.3 shows the population projections for selected age groups. These age groups represent the primary school going age (6-13), secondary school going age (14 – 17), female population in reproductive age (15 – 49), the youth (15-25) and the labour force (15 – 64). Their age groups are selected because they portend special economic and social implications.

Table 2.3 Population Projections for Selected Age Groups, 1999 – 2008

| Age Group | 1999 | | 2002 | | 2004 | | 2006 | | 2008 | |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | M | F | M | F | M | F | M | F | M | F |
| 6 - 13 | 53,090 | 51,966 | 58,615 | 57,374 | 62,614 | 61,288 | 66,886 | 65,470 | 71,449 | 69,937 |
| 14 - 17 | 24,069 | 21,306 | 26,574 | 23,523 | 28,387 | 25,128 | 30,324 | 26,843 | 32,392 | 28,674 |
| 15 - 25 | 57,063 | 52,491 | 63,001 | 57,954 | 67,300 | 61,908 | 71,891 | 66,131 | 76,796 | 70,643 |
| 15 - 49 | 112,723 | | 124,454 | | 132,945 | | 142,015 | | 151,704 | |
| 15 - 64 | 114,907 | 124,428 | 126,865 | 137,377 | 135,521 | 146,750 | 144,767 | 156,762 | 154,644 | 167,457 |

Source: District Statistics office, Lodwar, 2001

The population of the primary school going age group (6-13 years) is projected increase from 115,989 persons in 2002 to 141,386 in 2008 while the population of the secondary school age group is expected to increase from 50,097 in 2002 to 61,066 in 2008. Both the primary and secondary school age groups constitute 33.4 per cent of the total population at the start of the 2002-2008 Plan period. This high percentage of school going age population will necessitate investment in learning/teaching facilities, school development, enhancement of the school feeding programme and bursaries

The female population in age bracket of 15-49 is expected to increase from 124,454 in 2002 to 151,704 in 2008. This reproductive age group constitute 25 per cent of the total district population in 2002. This high percentage of the reproductive age may contribute to rapid population growth rate during the plan period if the current high fertility rate of 5.5 is not checked. The implication is that the district must prepare to invest more on maternal child health and early childhood education facilities and family planning services during the plan period.

Labour Force (15 – 64) of the district is expected to rise from 264,242 in 2002 to 322,101 in 2008. The dependency ratio is 100:88 implying that in every 100 people there are 88 dependents. The high dependency will retard growth of the district economy as resources are diverted to consumption and hence less savings and investment. Furthermore, the majority of the people in the district are engaged in pastoralism, fishing and small business activities, whose returns have been greatly affected by unfavourable climatic conditions and lack of investment resources. The district will, therefore, have to mobilize more resources for investment the in productive sub-sectors so as to create employment opportunities for the labour force.

Population density is relatively higher in Central, Lokichar, Lokitaung, Kakuma, and Lokichogio Divisions. This pattern is influenced by the presence of relatively big urban and market centres within these divisions. These centres are attractive to human settlement because of the existence of relatively good communication networks and the availability of essential services like schools, health facilities and water. The high population in these centres calls for the mobilization of resources to provide for additional water, sanitation and infrastructure facilities. There is also a need for proper market and town planning in the district.

2.4.2 Poverty

Turkana District is one of the poorest districts in the country. According to the 1997 welfare monitoring survey (WMS II), the district recorded an overall poverty of 74 per cent, food poverty of 81 per cent, and hard-core poverty of 62 per cent. In absolute numbers this was equivalent to 333,636 overall poor, 365,196 food poor and 279,533 hard-core poor out of a total population of 485,526

According to district rankings on food poverty among the rural districts, Turkana is the third worst hit, while on overall poverty it is ranked fourth among districts with more than 60 per cent of their population below poverty line. The district is further ranked fourth among districts that have high levels of extreme poor population. The district's contribution to national poverty is 1.2 per cent food poor, 1.1 per cent overall poor and 1.5 per cent hard-core poor. This magnitude of poverty was made even worse by the prolonged drought of 1999-2001 and its devastating impact on all sectors of the economy.

The major causes of poverty in Turkana District are harsh topography and climatic conditions, prevalence of animals and crop diseases, collapse of irrigation schemes, poor marketing systems for agricultural and livestock products, low quality of livestock, lack/poor infrastructure especially roads, unreliable rainfall, lack or inadequate access to credit facilities, illiteracy and ignorance, limited employment opportunities, inadequate/lack of health facilities, large families and lack of access to productive assets, insufficient water supply, insecurity and cattle rustling, and low school enrolment, retention and completion rates.

2.4.3 HIV / AIDS

The HIV/AIDS has spread to most parts of the district and is taking a heavy toll on human life. Available statistics indicate that the most affected areas are the townships along the Kitale-Lodwar Lokichoggio Highway and Kalokol Fishing Centre on Lake Turkana.

The HIV/AIDS statistics shows that an increasing number of people are getting infected with the virus. For example, in 1999 the total number of deaths as a result of HIV/AIDS in Lodwar District Hospital was 314, which rose to 328 in the year 2000. The disease has so far caused substantial loss to the district socially and economically though statistics are not easy to access because of poor records. The impact of HIV/AIDS is manifested through increasing numbers of orphans, rising medical bills and the rising numbers of HIV/AIDS victims occupying hospital beds especially the district hospital. It is estimated that 33 percent of bed occupants in the district hospital are HIV/AIDS patients.

In order to curb the rapid spread of HIV/AIDS, the district has put in place intervention measures like screening of blood for HIV, periodic examination of STI cases and antenatal care on HIV, capacity building, distribution of condoms and supply of STI drugs/treatment. The district is facing many challenges in the process of tackling this pandemic such as slow behavioural change, rising Tuberculosis (T.B.) incidence, high sexually Transmitted Infections (STI) incidence and stigmatisation. Given that there are no drugs to cure the diseases, the district will continue to sensitise the community on the pandemic and emphasize on community based care of the HIV/AIDS victims.

2.4.4 Gender Inequality

Gender issues in development go beyond physical and biological differences between man and women, boys and girls. The gender concerns in Turkana District entails the relative access of sexes to resources as well as the different roles each sex plays in socio economic activities and decision-making. The gender division of labour in the district is mostly defined socially. However, the relative roles are a critical factor to the development and alleviation of poverty in the Turkana District. Though the male-female population is almost equal in number, access and control to resources, gender division of labour and socio-political position and role in decision-making is predominantly the man's affair. All these have implications on the development of the district; women are consigned to do mostly reproductive work while men do the productive work instead of being partners in development.

Decision making on productive property and assets like land, livestock, and cash crop is a man's affair, the females can have access to these properties but they do not have authority on their disposal and the benefits thereof. In education sub-sector, for example there is a bias towards the boy child going to school while the girl child remains at home. Equally girls are taken away from school for early marriage. All these have greatly hindered the development of girl education in the district.

In order to develop this district and hence alleviate poverty, women and men have to be actively involved in designing and promoting their own social projects. To address the bias against women and to lighten the workload, effort will be made to implement projects like water supplies and health facilities, that can reduce the distance walked to access these facilities. Measures will also be taken to channel more micro-credit to small-scale businesses managed by women like broom and basket making.

2.4.5 Disaster Management

Turkana district is prone to two main disasters, namely drought and insecurity. The district experience frequent prolonged spell of drought periods, and its frequency and severity are quite high. High frequency and magnitude of drought place strong limitations on both traditional pastoralism strategies and development potential. In drought years, forage quantity as well as quality becomes limited; livestock starve, nutritional conditions and production decline.

During severe droughts, as experienced in the 1999 – 2000 period, there was heavy loss of livestock due mainly to lack of forage and disease outbreaks. The loss of animal during that period aggravated the poverty problems in the district as milk production fell and animal deaths increased. Drought, further, affected the agro-pastorist in the district, resulting in reduced agricultural production and therefore threatening the food security in the district.

Due to the effects of drought, more resources are diverted to save lives of both human and livestock through the provision of water, relief food, disease control, provision of human health services and food supplements.

To combat the effects of drought in the district, the early warning system will be used more effectively in the formulation of development projects and programmes. The

traditional coping mechanisms like animal mobility to grazing areas; composition of herds (mixer), food storage and preservation will be strengthened in the plan period.

Insecurity is another recurrent problems affecting the Turkana community. Pastoralist communities neighbouring Turkana District have the cultural habits of cattle rustling which have adversely affected the district. During such raids the district suffers a lot in terms of loss of life, loss of property, displacement of families, destruction of infrastructure e.g. schools, health and water facilities, and disruption of education and farming. During the plan period, effort will be made to reduce the insecurity menace in the district through peace harmonization meetings, strengthening the capacity of the security force and stock theft patrols especially at border points.

CHAPTER THREE

**DISTRICT DEVELOPMENT
STRATEGIES AND PRIORITIES**

3.0 INTRODUCTION

This chapter explores priority areas the district will undertake to achieve the objectives of reduced incidences of poverty and spur economic growth. The chapter gives an in-depth analysis of the status of the six PRSP sectors and make clear cut development strategies that will be implemented in the next seven years to turn around the poor economic status of the district.

3.1 AGRICULTURE AND RURAL DEVELOPMENT

3.1.1 Sector Vision and Mission

The sector vision is "suitable and equitable rural development for all" while the mission is to "contribute to poverty reduction through the promotion of food security, agro-industrial development, trade, water supply, rural employment and sustainable utilization of natural resources".

3.1.2 District Response to Sector Vision and Mission

During the plan period, the sector will improve on food security by expanding the existing irrigation schemes, rehabilitating the water conveyance structures to improve irrigation water efficiency, systematic investigation and design, and improvement of the new small-scale irrigation schemes within the river-line of Turkwel and Kerio to cover 10,000 hectares. The sector will further develop the abundant ground water for irrigation, control crop pests and diseases, improve extension services and conserve the agricultural resources base through protection of the catchments areas and agro-forestry.

The livestock sub-sector will contribute to the attainment of food security, income and employment creation through increased qualitative and quantitative livestock production by breeding, selecting and upgrading the breeds from outside the district i.e. sahiwal cattle, galla goats doper sheep and Somali/Rendile camel. Emphasis will be put on better methods of utilizing rangelands, development of livestock water supplies in both dry and wet grazing zones to reduce long trekking distances, initiating and supporting modern methods of fodder production and conservation especially in irrigation schemes and plains where crops remain unutilised and go to waste and intensify extension service and initiating and supporting modern methods of bee-keeping.

The district will advocate for natural resource conservation and friendly use of the same resource. Training the cooperators and advancing credit will strengthen the co-operative sector.

3.1.3 Importance of the Sector in the District

Turkana District is arid and semi-arid and pastrolism is the main economic activity. The livestock sub-sector is the backbone of the district and is traditionally the single most important source of food and income. The sub-sector is a source of livelihood for over 60 per cent of the district population. Livestock is part and parcel of almost all social interactions, from neighbourhood meat feasts, through ritual uses, the bride wealth to legal compensation. A family therefore, needs stock not only to support itself but also to fulfil social commitments

Agriculture in the district is practised mainly by the agro-pastoralists who form 16 per cent of the total population of the district. This population practices crop production along the Turkwel and Kerio rivers and on arable land within the floods areas. Two types of farming systems, rain fed and irrigation crop production are practised in the district. However, the harvests are normally low and the district therefore relies on food imports from neighbouring districts.

Fishing is also an important activity along the Lakeshore of lake Turkana, where an estimated 12 per cent of the population derive their food and income. Vegetation in the district is vital for wood-fuel, building materials and feeding livestock. Pods and fruits are harvested and collected for fodder and food and also for making basketry and brooms.

3.1.4 Role of Stakeholders in the Sector

The various stakeholders in the sector include the Ministry of Agriculture and Livestock Development, NGOs, Local Authorities, Religious and Civil Organization, and financial institution. The table below indicates the various roles these stakeholders are expected to play for the sector vision and mission to be achieved, during the plan period.

| Stakeholder | Role |
|---|--|
| Ministry of Agriculture and Livestock Development | Provision of technical and extension services; Provision of inputs. |
| NGOs | Facilitate the implementation of water, agriculture, livestock and environmental activities in their jurisdiction. |
| Local Authorities – Lodwar Municipal Council and Turkana County Council | Provision of basic infrastructure and maintenance of roads within their jurisdiction. |
| Religious and Civic organisations | Training and capacity building; |
| Banks | Provision of credit. |

3.1.5 Sub-sector Priorities, Constraints and Strategies

| Sub Sector | Priorities | Constraints | Strategy |
|-----------------------|---|---|---|
| Crop Development | Drought resistant crops; Horticulture. | Limited arable land; Lack of rain/water; Pests and diseases; Lack/limited farm input; Inadequate extension services; Low skills by the community on irrigation water management. | Rehabilitate and develop small-scale irrigation schemes; Drill boreholes; Provision of pesticides; Provision of farm inputs; Strengthen the extension services; Carry out community capacity building. |
| Livestock Development | Increase Livestock production. | Poor animal species; Poor range-land; Inadequate water; Poor livestock marketing systems; Inadequate extension services; Lack/limited bee-keeping equipment; Frequent outbreak of diseases and pests; Limited department capacity. | Upgrade the old livestock species; Put in place better methods on rangeland utilization; Develop livestock water supplies; Streamline livestock marketing; Strengthen extension services; Assist the community to procure KTBHS and honey harvesting accessories and capacity building; Control of livestock diseases pests; Rehabilitate and equip the satellite laboratory; Develop vaccination crushes and village drug stores; Train community animal health workers. |

| | | | |
|-----------------|--|---|--|
| Fisheries | Improve Fish production. | Lack/limited fishing equipment; Poor post harvest fish quality; Limited institutional capacity in the department; Limited community capacity to exploit the existing fish potential. | Construction of boats and procurement of fishing equipment; Community training on post fish harvesting managements; Construction of fish drying racks; Departmental capacity building and strengthen extension services; Community training and financial support. |
| Forestry | Conservation of forests; Agro-forestry. | Indiscriminate exploitation of forests e.g. charcoal burning; Limited departmental capacity. | Community sensitisation on friendly use of forest; Conserve and start agro-forestry fruit tree nurseries along the irrigation scheme by the community. |
| Cooperatives | Cooperative management. | Limited institutional capacity; (Illiteracy); Lack of credit. | Capacity building; Community capacity building; Establish credit revolving fund. |
| Survey | Town planning | Limited/Lack of funds. | Develop a plan for Lokori, Lodwar, Lokichoggio Kainuk and Kakuma. |
| Physical Survey | Town planning; Morulem survey; District map. | Limited/Lack of funds. | Carry out cadastral survey of plots in Lodwar, Lokichoggio, Lokori; Undertake topo survey of Kakuma and Lokori; Revise district map; Carry out cadastral survey of Morulem irrigation scheme. |
| Meteorology | Improve collection and dissemination of meteorology information. | Limited/Lack of funds; Inadequate rain gauges and measuring cylinders; Inadequate departmental capacity. | Replace rain gauges and measuring cylinders; Open new rainfall stations; Staff capacity training; Construction of a meteorological station; Procure vehicle and motorcycles. |
| Environment | Environmental conservation; Water and marine resources conservation; Improvement of energy supply; Improvement of sanitation; Disaster management. | Recurrent droughts/High rate of degradation of natural resources; Limited/Lack of funds. | Mountains and River-line forest conservation; Improvement and initiation of alternative sources of energy supply; Construction of pit latrines; Strengthening of drought monitoring programme; Carry out environmental impact assessment; Carry out an inventory of marine resources. |

3.1.6 Project and Programme Priorities

A. On-going Projects and Programmes: Crop Development

| Project Name Location/Division | Objectives | Targets | Description of Activities |
|--|--|---|--|
| Rehabilitation of the Small Scale Irrigation Schemes Kainuk, Katilu, Turkwel, Central, Kerio, Lokori Divisions | To enhance food security among the pastoralists. | Three schemes rehabilitated and expanded per year; Turkwel dam desilted; Eleven boreholes drilled and functional. | Repair and construction of intakes, conveyance structures and division boxes; Desilting canals; Turkwel Dam and drill boreholes. |
| Provision of Farm Inputs District wide | To enhance food security among the pastoralists. | 11,939 farmers provided with farm inputs. | Procurement of maize sorghum, cowpeas, green grams, vegetables (kales, tomatoes, spinach, onions) seeds; Procure tools (Jembes, spades, rakes, pangas, metal karai). |

| | | | |
|---|--------------------------------|--|---|
| Capacity Building/Extension District wide | Ensure project sustainability. | Undertake 216 PRA trainings sessions for agro-pastoralist farmers. | PRA training workshops and two internal visits conducted. |
| Pests and Diseases Control District wide | Enhance food security. | 680 sumicidin supplied annually. | Purchase of pesticides and chemicals. |

B: New Project Proposals: Co-operative Development

| Project Name, Location/ Division | Priority | Objectives | Targets | Description of Activities |
|--|----------|--|--|---|
| Credit Scheme District wide | 1 | Advance credit to cooperatives. | Revolving fund established. | Establish a credit revolving fund. Justification: Currently the credits in operation have limited capital. |
| Capacity Building for Co-operative Members District wide | 2 | Improve the management of co-operatives. | Training livestock traders, fish traders and members of Sacco societies. | Conduct management seminars for co-operative members. Justification: To sharpen the managerial skills of co-operators. |

A: On-going Projects and Programmes: Livestock Development

| Project Name Location/Div | Objectives | Targets | Description of Activities |
|---|--|--|--|
| Livestock Improvement Programme District wide | To improve the quality and yield of livestock | Purchase 1000 dopers; 1000 galla buck rams, and 1000 Somali/Rendile camels | Assist community to purchase high yielding and drought tolerant livestock breeds to upgrade the local sheep, goats, camels & poultry. |
| Bee-Keeping District wide | Promote and improve bee keeping and production in the district. | Purchase 800 KTBHS; Organize 18 training for bee-keepers; Construct 2 honey refineries. | Assist the community to purchase KTBHS; Training of beekeepers; Construction of honey refinery. |
| Community Restocking District wide | To promote the livelihood and enables families to have control of their destiny. | 1000 families restocked with 30 small stock, one donkey and one camel each. | Identification of destitute families; Purchase & distribution of small stock. |
| Pasture Reseeding Programme District wide | To improve conservation and vegetation regeneration on otherwise bare ground. | 13 water harvesting/spread structures constructed. | Construction of water harvesting/ spread structures for range conservation; Reseeding of degraded bare areas with appropriate grass species mainly lowland areas and along river Turkwel/Tarach. |
| Livestock Water Development District wide | Promote the nutrition status of livestock. | 4 water pans and 10 water troughs constructed. | Construction of water pans and troughs. |
| Livestock Marketing District wide | Increase the income of the pastoralists and their purchasing power. | Organize and train livestock traders; Support 40 livestock traders financially annually. | Capacity building of livestock traders; Construction of sales yard; Establishment of livestock trading fund. |
| Disease and Pest Control District wide | Improved health status of livestock in the district. | Eradicate common diseases livestock. | Treatment of sick animals; Vaccination of livestock and control of livestock pests. |
| Institutional Capacity Building District wide | Improve and expand animal health services delivery. | 200 vet-scouts trained. | Training of community animal health workers. |
| Infrastructure Development District wide | Improve and expand animal health services delivery. | 10 mobile crushes established. | Rehabilitation, relocating and construction of crushes. |

| | | | |
|---|---|---|--|
| Equipment for Satellite Laboratory Lodwar | To improve diagnosis and delivery of health services. | Rehabilitate and re-activate veterinary satellite laboratory. | Purchase of laboratory equipment needles, syringes, and grass barrels; Repair of microscopes; Purchase of Laboratory reagents, gas cylinder. |
| Rural Tannery and Abattoir Okichar, Katilu Lodwar | Improve the quality of livestock products. (meat hides and skin). | Two tanneries and one abattoir constructed. | Establishment of 2 rural tanneries at Lokichar and Katilu; Construction of a medium size abattoir in Lodwar. |

B: New Project Proposals: Livestock Development

| Project Name Location/Division | Priority Ranking | Objectives | Targets | Description of Activities |
|--|------------------|---|-----------------------------|---|
| Community Animal Drug Stores District wide | 1 | Improve health delivery services. | 4 community drug stores. | Construction of drug stores. Justification: Stockist for veterinary drugs established within the community will increase accessibility of much needed drugs to the Turkana Pastoralists; Create employment and generate income. |
| Rural Tannery and Abattoir Lokichar, Katilu, Lodwar Divisions | 2 | Improve the quality of livestock product. | 2 tanneries and 1 abattoir. | Establishment of rural tanneries and construction of an abattoir. Justification: The tannery and abattoir will assist in job creation and improve the value of livestock products. |

A: On-going Project/Programmes: Fisheries

| Project Name, Location/ Division | Objectives | Targets | Description of Activities |
|--|--|---|---|
| Fish Production Kalokol Division | Increase fish production. | Ensure that the fisher folks have adequate fish production and promotion facilities in the third year of the plan; 60 engine boats bought; 60 wooden boats bought; 20 boats rehabilitated; 1,200 gill nets purchased; 3 batches of hooks purchased; 4000 floats purchased; 800 metres of mounting ropes purchased. | Construction of boats; Procurement of nets, hooks and their accessories; Identification of beneficiaries by PRA; Training of beneficiaries; Monitoring and evaluation; Rehabilitation of boats. |
| Post Fish Harvest Management Kalokol Division | Improvement of fish quality and consumer appeal of fish products from the western shores of L. Turkana. | 2000 racks constructed; 16 fish management training workshops held. | Construction of portable fish drying racks for sun dried fish products; Identification of groups of beneficiaries at the gazetted landing beaches by PRA techniques; Training of fishermen on fish handling procedures. |
| Institutional Capacity Building District wide | Increasing institution capacity of fisheries department to collect statistics, conduct sampling and enforcement of | 4 motorcycle purchased; Reagent for laboratory bought annually; New fiberglass boat procured; One desktop and a Computer purchased; | Purchase of motorcycles; Purchase of laboratory equipment and reagents; Rehabilitation of Kalokol laboratory; Purchase of new fiberglass boat; |

| | | | |
|---|--|---|---|
| | fisheries legislation. | trained. | Desktop and computer procurement; Staff training. |
| Capacity Building for Fishermen District wide | Support of organized marketing groups at every fish-landing beach. | 8 training sessions for fisherman conducted; 2 groups from 8 landing beaches supported. | Conduct training at the eight gazetted landing beaches; Provision financial support to groups of every landing beach; Market survey and information exchange; Training of groups. |

B: New Project Proposals: Rural Water Supply

| Project Name, Location/Division | Priority Ranking | Objectives | Target | Description of Activities |
|---|------------------|--|--|--|
| Rural Water Supplies District wide | 1 | Make potable water supply accessible to local community in order to improve health for women, men, children and livestock. | 100 community wells constructed and functional; 40 community wells rehabilitated; 16 water pans constructed/rehabilitated; 8 sub-surface dams constructed. | Community participation in desilting, sinking and equipping community wells; Rehabilitation of wells; Construction of water pans and desilting of the existing ones; Construction of sub-surface dams. Justification: There is need to provide clean water to the increasing pastoral population and livestock in a cost effective way. |
| Minor Irrigation Schemes Lokori, Turkwel and Kibish Divisions | 2 | To increase crop production in ASAL areas in the district. | 200 ha in four irrigation schemes established. | Community to participate in opening up small scale irrigation schemes at: Kangatosa, along Turkwel river Lokori, Kataruk and Kibish. Justification: To assist the local community to learn farming techniques and produce more food for consumption. |
| Rain Water Harvesting Kakuma, Kibish, Lokitaung Divisions | 3 | Raise farming/Livestock productivity in dry areas and diversify the economic and nutritional base of households. | Construction of Trapezoidal semi-circular, contour bunds and micro catchments. | Community participation through food for work in constructing water-harvesting structures at Kakuma, Kachoda, Kaeris and Kibish. Justification: To assist the local community to learn farming techniques and produce more food for consumption. |
| Kibish Multipurpose Project Kibish Division | 4 | Opening up the division for faster development. | 3 boreholes and 15 shallow wells sunk. | Sinking of boreholes and shallow wells. Justification: To assist the local community to learn farming techniques and produce more food for consumption. |
| Livestock Improvement District wide | 5 | Improve livestock based food security and household income. | Construct four water pans and four storage tanks; 100 families supplied with KTBH and honey harvesting equipment; Promote local poultry on a free range. | Construction of water pans and storage tanks; Supplying KTBH and honey harvesting equipment promotion of local poultry. Justification: Provide clean water and provide and create alternative sources of income generating activities. |

A: On-going Projects and Programmes: Forest

| Project Name, Location/Division | Objectives | Targets | Description of Activities |
|---------------------------------|-------------------------------------|---|---|
| Rural Afforestation | Improve biodiversity. | Plant trees along the riverline and irrigation schemes. | Raise tree nurseries and distribute seedling to farmers and institutions. |
| Community capacity building | Encourage sustainable use of trees. | Carry out 20 sensitization barazas annually. | Organize community sensitisation meetings. |

B: New Project Proposals: Land Administration, Survey and Human Settlement

| Project Name Location/Division | Priority Ranking | Objectives | Targets | Description of Activities. |
|---|------------------|--|---|--|
| Market/Towns Demarcation Lodwar, Lokori, Lokichogio, Kainuk, Kakuma and Katilu Division | 1 | To enable property owner to acquire title deeds. | 550 plots planned and issued with title deeds. | To prepare development plan for Lokori, Lodwar, Lokichogio, Kainuk and Kakuma Divisions. Justification: Facilitate issuance of title deeds to the already developed plots. It will also facilitate proper planning of the towns. |
| Cadastral Survey of Plots at Lodwar, Lokichogio and Lokori Divisions | 2 | To enable Land owners acquire title deeds. | 2500 plots to be surveyed. | To carry out cadastral survey of developed plots in Lodwar, Lokichogio, Lokori Divisions. Justification: Facilitate issuance of title deeds to the already developed plots. It will also facilitate proper planning of the towns. |
| Topo-survey Kakuma and Lokori Divisions | 3 | To enable planning and facilitate allocation of plots to individuals. | To enable planning of 150 plots. | Undertake topo-survey. Justification: To facilitate the production of new development plans and ensure proper town planning. |
| District Map | 4 | To update topo-maps covering Turkana district to reflect new developments. | To update several topo-maps at random. | Map-revision. Justification: To indicate the proper dimension of Turkana District. |
| Cadastral Survey at Morulem Irrigation Scheme | 5 | To enable land owners acquire title deeds as security. | Title deeds issued for the whole of Morulem Scheme. | Carry out cadastral survey of Morulem irrigation scheme. Justification: To facilitate the issuance of the title deeds to Morulem scheme. |

B: New Project Proposals: Environment

| Project Name Location/Division | Priority Ranking | Objectives | Targets | Description of Activities |
|---|------------------|---|--|--|
| Environmental Conservational District wide | 1 | Increase conservation of forests and water. | 80 micro nurseries established; 24 environmental conservation barazas/meetings to be held; 80 sites to be rehabilitated. | Establish micro nurseries along the river-line and irrigation schemes; Hold community conservation barazas. Reseeding of denuded areas. Justification: This will reduce the rate of land degradation in the district. |
| Rural Water and Marine Resources Management | 2 | Promote investigation, protection and conservation; | 50 water pans constructed; 80 shallow wells | Construction of water pans, shallow wells and earth dams. |

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|---|---|--|--|---|
| District wide | | Exploitation and proper use of the district water resources. | constructed; 80 earth dams constructed. | Justification: Assist to document the district water potentials. |
| Energy Supply District wide | 3 | Enhance availability and use of alternative sources of energy and energy saving devices. | Support production of alternative sources of energy e.g. solar and wind and energy saving devices. | Initiate and promote the use of alternative sources of energy and energy saving devices. Justification: To exploit the readily available energy resource. |
| Sanitation Programme District wide | 4 | Promote clean environment. | 400 pit latrines constructed; 80-health education workshop held. | Construction of pit latrines. Justification: To prevent disease outbreaks/promote the use of latrines. |
| Disaster Management District wide | 5 | Assist mitigate/deter the devastating effect of drought. | One remote sensing software installed NDVI images supplied. | Strengthen drought; Early warning system in the district; Set up a desert monitoring system. Justification: Assist mitigates effects of drought. |
| Environmental Impact Assessment District wide | 6 | To ensure that development programmes/projects take into consideration environment in to account; To enhance public awareness the importance of linkages between development and land use planning. | 11 EFAS carried out; 80 EIAs workshops/barazas to be held; 11 land-use plan meetings held. | EIAs to be carried out along irrigation schemes, boreholes; EIAs barazas to be held. Justification: The study will assist planners/project managers and the community to take into consideration the environment when designing and implementing projects. |

B: New Project Proposals: Meteorological

| Project Name Division/Location | Priority Ranking | Objectives | Targets | Description of Activities |
|---|------------------|---|--|---|
| Rehabilitation of rainfall Stations District wide | 1 | To rehabilitate all serviceable rainfall station in the district. | 3 rain gauges installed and 219 measuring cylinders purchased 3 per station. | Replace rain gauges and measuring cylinders. Justification: To ensure that the district collects proper weather data and gives proper weather forecast. |
| Opening of New Stations District wide | 2 | Increase area of coverage for Rainfall data collection. | Five new stations opened; Five rain gauges installed; 15 new measuring supplied. | Open fine new rainfall stations. Justification: To expand weather forecast stations for accurate date information. |
| Personnel Training Central Division | 3 | Accurate data collection | 156 persons trained; 76 training sessions achieved. | Capacity building through training, training materials and equipment. Justification: Upgrade the skills of weather monitors for proper weather data collection and forecast. |
| Meteorological Station Lokichogio Division | 4 | Provide safe landing/take off to aircrafts. | Office/Staff blocks instruments and equipment. | Construction and equipping of a full meteorological station at Lokichogio. Justification: Avoid unnecessary aeroplanes accidents. |

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|---|---|---|---|--|
| Vehicles and Motorbikes Central Division | 5 | Co-ordination of data collection from Rainfall and Meteorological Stations. | 1 four-wheel vehicle and 1 motorcycle procured. | Procurement of a four-wheel drive vehicle and 250cc motor cycle. Justification: To facilitate the mobility of staff members and enhance their work performance. |
|---|---|---|---|--|

3.1.7 Cross-Sector Linkages

For the agriculture and rural development sector to achieve its vision and mission and contribute to the development of the district during the plan period, it will require complementary support from the other sectors. This will include the provision of adequate water supply for irrigation and livestock, passable all weather roads, stable security and labour force. The agriculture and rural development sector performance will influence the growth of trade and industry sector as it is a major source of inputs to the industrial sector. It also generates income for investment in trade and industry.

The income generated from agriculture and rural development sector also influences the purchasing power of the local community thus further enhancing the growth of trade and industry. The growth of education sub-sector would immensely benefit from agriculture and rural development, as the income generated from this sector will assist the community to invest in educational physical facilities and afford the education levies.

The human resources sector provides skilled labour to the agriculture and rural development sector that assist to improve agricultural production.

3.2 PHYSICAL INFRASTRUCTURE

3.2.1 Vision and Mission

For enhanced and sustainable economic growth, the sector will provide physical infrastructure through rehabilitation, improvement and effective management of the existing infrastructure facilities. In the medium term, the sector will focus on measures aimed at improving both quality and quantity of facilities that are likely to generate greater economic impacts in the economy. In the long run, the sector is expected to be a leading input in the country's overall goal of poverty alleviation by providing an efficient network of basic infrastructure such as roads, railways and ports that will stimulate industrial and agricultural development.

3.2.2 District Response to Sector Vision and Mission

To develop the road network during the plan period, the district will concentrate on: routine and periodic maintenance of paved and unpaved roads, construction of new access roads; building of drainage structures, bridges and drifts; bush clearing and periodic maintenance of airstrips.

The water sub-sector will endeavour to provide potable water for both livestock and human consumption through the rehabilitation of broken down water supplies, completion of stalled water supply, drilling and equipping of new bore-holes, construction and equipping shallow wells and sub-surface dams, spring and river

protection and training water users association members in simple maintenance of water supplies.

On energy supply, the district will explore the possibility of extending power supply from Turkwel gorge exploit the use of wind power, solar energy and energy saving appliances.

3.2.3 Importance of the Sector to the District

The physical infrastructure sector plays a very critical role in Turkana District. The road network facilitates the importation of goods and service from the neighbouring districts to cover the deficits such as domestic consumption goods that the district normally faces. The roads also facilitate delivery and marketing of livestock, fish and other goods from the district to the rest of the country. They also facilitate people to access services like health, water and markets.

Turkana District being arid, water is very critical to its development. Good quality and sufficient water is important for domestic purposes, farming and livestock. In specific terms water contributes to the improvement of the health status of the people and increased crops and livestock production. Energy supply is very crucial in food storage due to the high temperature in the district. Business can hardly operate in the district without electricity.

3.2.4 Role of Stakeholders in the Sector

| Stakeholder | Role |
|--|---|
| Ministry of Roads and Public Work. Kenya Power and Lighting Company Telkom Kenya Postal Corporation of Kenya NGOs Community | Construction works and maintenance of classified roads; Maintenance and supply of power and implementation of the rural electrification programme; Maintain existing telephones lines and extended services to new consumers; Offer postal services; Offer training and civic education; Labour based maintenance of rural access roads. |

3.2.5 Sub-Sector Priorities, Constraints and Strategies

| Sub-Sector | Priorities | Constraints | Targets |
|------------|---|--|--|
| Roads | Improve roads to all weather conditions; Improvement of airstrips. | Limited/inadequate road network; Poor road network; Poorly maintained airstrips. | Road rehabilitation; Opening access roads; Maintenance of airstrips. |

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| Water | To guarantee access to safe potable drinking water; To provide adequate water for livestock and irrigation. | Lack of drilling rig; Inadequate/lack of water; Lack of Tara-meter; Frequent breakdown of water supplies; Low capacity of the community to manage water supplies. | Rehabilitation of broken down water supplies; To drill and equip boreholes; Construct shallow wells Construct new water supplies; Protection of rivers and springs; Construct sub-surface dams; Community Capacity building on water supply management; Procure 1 drilling rig and 1 Tara meter. |
| Energy | Alternative energy supply; Rural electrification programme. | Limited sources of energy; Inadequate/lack of energy supply in the district. | Extension of hydro-power from Turkwel Gorge; Exploit wind power; Exploit solar energy use; Encourage use of energy saving devices. |

3.2.6 Project and Programme Priorities

A: On-going Projects: Major Water Works and Sanitation

| Project Name, Location/Division | Objectives | Targets | Description of Activities |
|---|---|--|---|
| Lokitaung Water Supply Lokitaung Division | To guarantee access to safe drinking water for human and livestock use. | Access clean water to 6,000 people and 20,000 livestock. | Replace destroyed pipelines, provide dosing facility and construct two watering troughs. |
| Kalokol Community Water Supply (Kadokorinyang) Kalokol Division | To guarantee access to safe drinking water for human and livestock use. | Access clean water to 3,400 people and 10,000 livestock. | Augment supply by rehabilitating source, rising main, construct 150m ² masonry tank, replace 200m electric cable and purchase gen-set. |
| Kerio Water Supply | To guarantee access to safe drinking water for human and livestock use. | Access clean water to 2,000 people and 4,000 livestock. | Relocate the water source by drilling replacement borehole and provide components connected thereto. |
| Kokuro Water Supply | To guarantee access to safe drinking water for human and livestock use. | Access clean water to 5,000 people 5,000 livestock. | Provide 24m ³ steel elevated tank. |
| Namuruputh Water Supply | To guarantee access to safe drinking water for human and livestock use. | Access clean water to 2,500 people and 12,000 livestock. | Replace windmill with generator; Set a submersible pump, repair of 100m ³ masonry tank and lay extension lines. |
| Lorokon Water Supply | To guarantee access to safe drinking water for human and livestock use. | Access clean water to 1,500 people and 1,000 livestock. | Purchase floating pump C/W panel, construct pump house and relocate rising main. |
| Kibish Water Supply Kibish Division | To guarantee access to safe drinking water for human and livestock use. | Access clean water to 4,500 people and 1,000 livestock. | Replace 50m ³ steel elevated tank, segment distribution lines and provides for CWPCs. |
| Lorugum Water Supply | To guarantee access to safe drinking water for human and livestock use. | Access clean water to 3,200 people and 20,000 livestock. | River bank protection and augmentation of supply by laying extension to distribution mains and construction of two water kiosks. |

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|--|---|--|--|
| Kainuk Water Supply Kainuk Division | To guarantee access to safe drinking water for human and livestock use. | Access clean water to 2,500 people and 14,000 livestock. | Provide 100m ³ steel elevated tank and extension of reticulation system 2" GI/UPVC 4 km long. |
| Lokichar Water Supply Lokichar Division | To guarantee access to safe drinking water for human and livestock use. | Access clean water to 2,000 people and 4,000 livestock. | Drill borehole to 60m depth and equip with pumping unit, lay rising main 2 km long and construct pump house. |

B: New Project Proposals: Major Water works and Sanitation

| Project Name Location/Division | Priority Ranking | Objectives | Targets | Description of Activities |
|--|---------------------|--|---|--|
| Makutano Water Supply | 1 | To guarantee access to safe potable drinking water for both human and livestock. | Available enough water to 1,500 people and 1,200 livestock. | Lay rising main 14 km long, construct 100m ³ masonry tank, install reticulation system and provide pumping unit. Justification: To provide clean, safe ground drinking water for livestock and human consumption who have no alternative within a reasonable distance. |
| Todonyang Water Supply | 2 | To guarantee access to safe potable drinking water for both human and livestock. | Access clean water to 1,000 people and 20,000 livestock. | Drill borehole and equip with appropriate pump and provide reticulation system. Justification: To provide clean, safe ground drinking water for livestock and human consumption who have no alternative source of accessing water within a reasonable distance. |
| Kalemunyang Water Project | 3 | To guarantee access to safe potable drinking water for both human and livestock. | Provide clean water to 1,200 people and 1,000 livestock. | Drill borehole to depth of 60 m and equip with suitable pumping unit; Erect 50m ³ steel elevated tank and provide requisite accessories for reticulation system. Justification: To provide clean, safe ground drinking water for livestock and human consumption who have no alternative source of accessing water within a reasonable distance. |
| Lokichoggio Water Project Lokichogio Division | 4 | To guarantee access to safe potable drinking water for both human and livestock. | Provide clean water to 5,000 people and 15,000 livestock. | Drill borehole 50 m deep and equip with appropriate pumping unit, erect 100m ³ steel elevated tank and provide requisite mains for community. Justification: To provide clean, safe ground drinking water for livestock and human consumption who have no alternative source of accessing water within a reasonable distance. |
| Kaloboi Water Project | 5 | To guarantee access to safe potable drinking water for both human and livestock. | Avail enough quality water for 3,000 people and 15,000 livestock. | Drill borehole to at least 60m deep and equip with appropriate Hand pump. Justification: To provide clean, safe ground drinking water for livestock and human consumption that have no alternative source of accessing water within a reasonable distance. |

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|--------------------------------------|----|--|---|--|
| Kataruk Water Project | 6 | To guarantee access to safe potable drinking water for both human and livestock. | Avail water for 4,000 people and 40,000 livestock. | Drill borehole and equip with Hand pump provide water trough. Justification: To provide clean, safe ground drinking water for livestock and human consumption that have no alternative source of accessing water within a reasonable distance. |
| Riet Water Project | 7 | To guarantee access to safe potable drinking water for both human and livestock. | 8,000 people and 40,000 livestock to access enough water. | Drill borehole to at least 80m deep and provide appropriate Hand pump together with reticulation system. Justification: To provide clean, safe ground drinking water for livestock and human consumption that have no alternative source of accessing water within a reasonable distance. |
| Kangirisae Water Project | 8 | To guarantee access to safe potable drinking water for both human and livestock. | Benefit 3,500 people and 30,000 livestock herds. | Drill borehole to at least 60m deep C/W apt. Hand pump and reticulation system. Justification: To provide clean, safe ground drinking water for livestock and human consumption that have no alternative source of accessing water within a reasonable distance. |
| Nadukamel (Upper Tiya) Water Project | 9 | To guarantee access to safe potable drinking water for both human and livestock. | Access water to 4,000 people and 20,000 livestock. | Drill borehole and a fix apt pumping unit. Justification: To provide clean, safe ground drinking water for livestock and human consumption that have no alternative source of accessing water within a reasonable distance. |
| Lochremoit Water Project | 10 | To guarantee access to safe potable drinking water for both human and livestock. | Accesses water to 5,000 people and 10,000 livestock. | Establish conventional water supply system. Justification: To provide clean, safe ground drinking water for livestock and human consumption that have no alternative source of accessing water within a reasonable distance. |
| Namukuse Water Project | 11 | To guarantee access to safe potable drinking water for both human and livestock. | Access water to 2,000 people and 11,000 livestock. | Drill boreholes to depth of 60m and equip with appropriate pumping unit, erect 50 m ³ elevated steel tank and install reticulation system as necessary. Justification: To provide clean, safe ground drinking water for livestock and human consumption that have no alternative source of accessing water within a reasonable distance. |
| Kapus Water Project | 12 | To guarantee access to safe potable drinking water for both human and livestock. | Access water to 2,000 people and 11,000 livestock. | Drill borehole and equip it with appropriate pumping unit. Justification: To provide clean, safe ground drinking water for livestock and human consumption that have no alternative source of accessing water within a reasonable distance. |

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|--|----|---|----------------------------------|--|
| Construct Water Pans Lorengesinyen, Riet, Nana, Lokitipi Plans, Mogilla, Songot, Kokurotuko, Lokiriama Lorengippi Kalemunyang | 13 | To guarantee accesses to enough water for Livestock watering and other uses other than human drinking. | Medium size 11 pans constructed. | Carry out civil works of pan construction of capacity 11600m ³ . Justification: Provide clean water to an increasing number of people and livestock. |
| Development and Protection of Springs Kibish_Division Lomoruedome, Koyasa, Nangolemoru, Lotaruk, Lokamarinyang, Kaleng Lorumor, Loruth, lomanakipi, Lomelo Division Lorusio Lokori Division Tegeit, Lokichar Division Lochwangamatak, Lokitaung Division Nattoo Katilu Division Naoyanga Kerio Division Kerio Loima Division Lokiriama | 14 | To guarantee accesses and enough water for Livestock watering and other uses other than human drinking. | Develop and protect 15 springs. | Execute civil works in development and protection of springs Justification: To ensure continuous water flow. |
| Shallow Well Programme South Kaputiro, Loitanit, Karubangorok, Kibish, Kangarok, Kibish, Lokamarinyang, Ioyoro, Nasachaburi, Kechunyuk, Nakwaperit, Narengoi, Oropoi, Lokichoggio, Nakapelieoi Central Kotela, Nasura, Lokipo, Kerio, Nádoto, Nakurio, Kalemunyang, Lorengippi, Lokiriam, Loima, Nakatian, Lochor- aikeny, Lorengelup North Lokapel, Katilu, Juluk, Kapeliobok, Lokichar, Nakwamoru, Lokori, Kaputir, Lokwamosing | 15 | To guarantee accesses to enough water for Livestock watering and other uses other than human drinking. | Sink and equip 38 shallow wells. | Sinking of shallow wells and equipping them with hand pumps. Justification: Provide clean and safe drinking water. |

| | | | | |
|--|----|--|---|--|
| Community Management Committees Training Programme District wide | 16 | Impart operation and management skills in the communities in running water supplies and protecting conserving water resources as outlined in Sessional paper No. 1 of 1999 on national Policy on water resources management and development. | 30 management committees trained. | Mobilize communities to elect management committees and organize training workshops for them. Justification: To ensure water supply sustainability. |
| Pump Maintenance Unit Project | 17 | Guarantee access to fast moving spares for repair of hand pumps. | One store constructed and stocked at the water office | Construct store and stock with spares for all hand pumps in the district. Justification: Offer standby spares. |
| Drilling and Tarameter | 18 | Guarantee access to fast moving spares for repair of hand pumps. | Purchase one drilling and one tarameter. | Purchase one drilling and one Tara-meter. Justification: Currently there are no such machines in the district and to access one from other areas is cumbersome. |

A: On-going Projects and Programmes: Roads

| Project Name Location/Division | Objectives | Targets | Description of Activities |
|---|---|---|------------------------------|
| Kainuk- Nakabosan RDAI | Facilitate transport of goods, services and people. | 66km of road to be reconstructed. | Road reconstruction. |
| Lodwar- Nakabosan | Facilitate transport of goods, services and people. | 120 km of road to be resealed. | Road resealing. |
| Lokori Kapeddo | Facilitate transport of goods, services and people. | 134 km to be gravelled. | Road graveling. |
| Namorutunga box culvert | Facilitate transport of goods, services and people. | 1 box culvert to be constructed. | Construction of box culvert. |
| Lodware-Kolokol 60km (RD D348) | Facilitate transport of goods, services and people. | 60 km to be of road resealed. | Road resealing. |
| Drifts Lokichar (RD A1) Kachoda (RD C47) | Facilitate transport of goods, services and people. | 2 Drifts to be reconstructed. | Road reconstructed. |
| Kakuma-Lokichogio | Facilitate transport of goods, services and people. | 120 km of road to be repaired and resealed. | Repair and resealing. |
| Lodwar - Makutano | Facilitate transport of goods, services and people. | 70 km of road to be resealed. | Resealing. |

B: New Project Proposals: Roads

| Project Name Location/Division | Priority Ranking | Objectives | Targets | Description of Activities |
|-----------------------------------|---------------------|--|---------------------------|--|
| Kakuma-Kaikor | 1 | Facilitate transport of goods, services and people | 126 km road to be graded. | Road grading. Justification: The area is inaccessible and hence to make it reachable and facilitate service delivery in livestock and human health, trade and commerce. |

B: New Projects Proposals: Energy

| Project Name Location/Division | Priority Ranking | Objective | Targets | Description of Activities |
|-----------------------------------|---------------------|--|--|--|
| Rural Electrification Programme | 1 | To enhance business activities in the Peri-urban areas of Lodwar Town. | Supply power to Kawalathe Kanamkemer Nakwamekwi Napeter. | Construct and erect electricity power lines to the peri-urban areas of Lodwar Town. Justification: Supply of electricity in these areas will promote social and economic development. |

3.2.7 Cross Sector linkages

The Physical Infrastructure sector will greatly facilitate the growth of the district economy by enhancing transportation of inputs and outputs for development purposes in various parts of the district.

Adequate and good transportation network will help rejuvenate trade within the district and neighbouring districts while adequate energy supply will boost the growth of trade, industry and facilitate the production of various goods and services. Effective delivery of essential services like health, livestock vaccination campaigns, and security depend on adequate and passable roads. The production of crops and livestock in Turkana District squarely depends on this sector through the supply of water.

3.3 TOURISM, TRADE AND INDUSTRY**3.3.1 Vision and Mission**

The sector vision and mission are “contributing to the socio-economic development of the country through facilitation of an enabling environment for sustainable growth and promotion of trade, industry, tourism and regional integration with a view to improving the welfare of all Kenyans.”

3.3.2 District Response to Sector Vision and Mission

To enhance business activities in the district, during the plan period, business management training will be intensified, while small-scale loans will be advanced to the businessmen. The district will also endeavour to encourage the initiation and support of small-scale industries such as modern slaughterhouse, tannery, leather works and brick making.

Tourism development in the district will be promoted through the development of infrastructure activities such as access roads, gates and water at both Turkana South game Reserve and Nasolot Game Reserve. Furthermore, water and fish sporting and expeditions on river Omo will be encouraged and supported. The existing lodge at lake Turkana will be rehabilitated and a lodge will be constructed at Southern Turkana Game Reserve to facilitate the promotion of tourism.

3.3.3 Importance of the Sector in the District

The Tourism, Trade and Industry Sector is not well established in most parts of the district. However, the trade sub-sector is fairly established and contributes to development of the district by facilitating the community to access essential services such as consumption domestic goods. It is through trade that the district access goods and services from other parts of the country. At the same time the district is able to sell its livestock, fish, artefacts, mats baskets and wood fuel for consumers inside and outside the district.

In the district about 8 per cent of the people are engaged in small-scale business like selling charcoal, fuel wood, hawking, small-scale business and other Jua-Kali activities.

3.3.4 Role of Stakeholders in the District

| Stakeholder | Role |
|---|--|
| Local Authorities – Turkana County Council. | Collect revenue from commercial ventures, promote tourism related activities and planning of urban centres; Provision of basic infrastructure and collection of garbage. |
| Banks Department of Trade and Industry. | Provide banking services; and provision of credit. Training of entrepreneurs on business skills, provides loans to the business community, encourage investments in industrial ventures and provide relevant business information to the local entrepreneurs. |
| NGOs | Training and mobilizing of local communities. |



3.3.5 Sub-sector Priorities, Constraints and Targets

| Sub sector | Priorities | Constraints | Strategies |
|------------------------------|--|--|--|
| Tourism | Infrastructure development in potential tourism sites. | Inaccessibility; Geographical location of the districts; Insecurity. | Development of infrastructure. |
| Trade, commerce and Industry | Empowerment of the small-scale entrepreneurs. | Limited credit facilities; Limited managerial skills by entrepreneurs. | Training on business management; Provision of small-scale loans to businessmen |

3.3.6 Project and Programme Priorities

A: On-going Projects and Programmes: Trade

| Project Name, Location/Division | Objectives | Targets | Description of Activities |
|---------------------------------|--|--|---|
| Capacity Building | To empower the small-scale entrepreneurs on business management. | To train 340 small-scale entrepreneurs on business management skills annually. | Training on business management. |
| Credit Scheme | To enhance the working capital of the small scale entrepreneur/traders | 50 small-scale traders advanced with credit loans annually. | Advance credit to small-scale businesses. |

3.3.7 Cross Sector Linkages

Tourism, Trade and Industry Sector is closely linked to the Physical Infrastructure Sector. The infrastructure sector facilitates the transportation of goods and services from one part of the district to the other thus enabling the people to have access to both consumption and production goods.

Good and passable road network influence tourism activities. The public administration, safety, law and order provided by the Provincial Administration ensures that peace and harmony exist for tourism, trade and industrial activities to be implemented. The Information, Communication Technology Sector facilitates the growth of Tourism, Trade, and Industry Sector through advertisement on TV, radio and Internet.

3.4 HUMAN RESOURCES DEVELOPMENT

3.4.1 Vision and Mission

The sector vision is “to achieve sustainable development and utilization of human resources in order to attain better quality of life for all Kenyans”. The mission of the sector is “achievement of greater levels of human resources development through improved human capabilities, effective human power utilization and social-cultural enhancement”.

3.4.2 District Response to Sector Vision and Mission

During the seven years plan period, the district will endeavour to produce quality labour force. On education, the district resources will be invested in the improvement/provision of teaching and learning facilities such as classrooms, water and sanitation, desks, mattresses, beds, sheets, blankets, mosquito nets, textbooks, solar panels and pressure lamps. Efforts will also be made to intensify advocacy, social mobilization and community sensitisation on education, provide educational bursaries and enhance the school-feeding programme.

On the health sub-sector the district will concentrate on expanded immunization, reduction of prevalent diseases and reduction the spread of HIV/AIDS. Additional health facilitates will be provided, mobile clinical services, health education, intensified and adequate drug supply provided. Furthermore, efforts will be made to ensure that adequate health staffs are posted to all the health facilities in the district.

The adult education sub-sector will channel its resources to provide teaching and learning facilities, assist the community start additional learners classes, community mobilization and sensitisation and departmental capacity building.

3.4.3 Importance of the Sector in the District

The human resource development sector is key to the development of the labour force of the district. It provides all other sectors with skilled, healthy and well-trained labour-force thus offering effective service. The education sub-sector trains and produces quality labour force for the various professions. A well-educated population has the capacity for innovative approach to development. The level of business management and the maximizing of returns are determined by the quality of labour force. The education sub-sector therefore plays a key role in determining economic growth.

The health and nutrition sub-sector ensures that the health condition of the workforce and the work environment is conducive by putting in place effective health strategies. The sector controls all the epidemics, which threaten the human race. The human resources development sector empowers the people to make well-articulated judgment and decisions.

3.4.4 Role of Stakeholders in the District

| Stakeholder | Role |
|---|---|
| Ministry of Education | Provision of teachers, supervising and inspecting education institutions; |
| Ministry of Health | Provide education to the public on disease prevention and health promotion; Provide health facilities with equipment and staff; |
| NGOs | Promote home based care for aids patients; Provision of textbooks and physical facilities to schools, support children from poor families with fees and uniform; |
| Arid Lands resources Management Programme Social Services Department | Provision of textbooks and physical facilities to schools; Mobilise communities and provide training. |

3.4.5

Sub-sector Priorities, Constraints and Strategies

| Sub Sector | Priorities | Constraints | Strategies |
|------------------------|--|---|---|
| Health and Nutrition | Improve the health status of the people. | Inadequate health facilities; Inaccessible health facilities; Inadequate drug supply; Limited mobile clinical services; Rapid spread of HIV. | Immunization campaign; Expand mobile health services Preventive and curative health services; Health education; Expansion of health facilities; Reduce the spread of HIV/AIDS. |
| Education and Training | Improvement of education standard in the district; Improve enrolment, retention and completion rates. | Inadequate teaching and learning facilities; Negative parental attitude towards education; Early marriages particularly for girls; Inability of parents to meet educational levies; Inaccessibility to educational facilities; Lack of guidance and counselling; Inhibiting cultural practices; Lack of parental care. | Provision of learning and teaching facilitates; Provision of bursaries to needy students; Enhancement of school feeding programme; Community sensitisation. |
| Adult Education | Improve literacy levels of adults and the youth out of school. | Lack of learning and teaching materials; Limited capacity of the teaching staff; Nomadic life style; Low attitude towards education. | Recruitment of teaching staff Sensitisation of the community on adult education; Assist the community to start additional learning centres; Provision of learning materials Training/re-fresher courses for the teaching staff; Capacity building of the department. |

3.4.6 Project and Programme Priorities

A: On-going Project: Education and Training

| Project Name, Location/Division | Objectives | Targets | Description of Activities |
|--|--|---|---|
| School Bursaries District wide | Improve retention and completion rate in schools. | 80% of bright students advanced with bursaries. | Provision of bursaries to bright students. |
| Learning and Teaching Facilities District wide | Enhance enrolment, retention and completion rates in schools. | 277 pre-primary; 161 primary; 8 secondary schools to be assisted. | Assist the community to provide teaching and learning facilities. |
| Community Mobilization and Sensitization District wide | To enhance enrolment retention and completion rates in schools. | Carry out 50 sensitisation meetings. | To sensitise the community on the importance of education. |
| School Feeding Programme District wide | To improve the enrolment, retention and completion rates in schools. | To provide three course meal in 42 boarding schools. | To enhance school feeding programme. |
| Institutional Capacity Building District wide | Enhance the management of schools and education in the district. | 161 teachers and 50 administrators earmarked for training. | Hold school management seminars for head teachers and education administration. |

B: New Project Proposals: Education and Training

| Project Name Location/Division | Priority Ranking | Objectives | Targets | Description of Activities |
|---|---------------------|---|--|--|
| Kalokol A.I.C Kalokol Division | 1 | Expand education facilities to cater for the increasing demand. | Construct the school to completion. | Construct the school. Justification: The demand for secondary education is increasing rapidly to the extent that the current number of secondary schools in the district cannot cope. |
| Lokichoggio A.I.C Moi Secondary School Lokichoggio Division | 2 | Expand education facilities to cater for the increasing demand. | Construct the school to completion; % of completion of the project. | Construct the school. Justification: The demand for secondary education is increasing rapidly to the extent that the current number of secondary schools in the district cannot cope. |
| Lokichar Secondary School Lokichoggio Division | 3 | Expand education facilities to cater for the increasing demand | Construct the school to completion. | Construct the school. Justification: The demand for secondary education is increasing rapidly to the extent that the current number of secondary schools in the district cannot cope. |
| Songat Secondary School | 4 | Expand education facilities to cater for the increasing demand. | Construct the school to completion. | Construct the school. Justification: The demand for secondary education is increasing rapidly to the extent that the current number of secondary schools in the district cannot cope. |

B: New Project Proposals: Adult Education

| Project Name Location/Division | Priority Ranking | Objectives | Targets | Description of Activities |
|--|---------------------|--|--|--|
| Training and Retraining of Teachers District wide | 1 | Strengthen the teaching staff. | 100 new full time teachers employed; 19 existing teachers; 105 part-time teachers; 100 new teachers; NĠO teachers trained. | Employ additional adult teachers; Train both old and new teachers. Justification: To strengthen delivery of services. |
| Learning and Teaching Facilities District wide | 2 | Access teaching/ Learning resources at DAEO and AEO's office. | 100 new and 163 existing centres equipped. | Equip offices with enough teaching/learning materials. Justification: Assist create conducive working atmosphere. |
| Motor Vehicle Motorbikes Central Division | 3 | Improve supervision and monitoring of the Adult Education Programme. | One vehicle and 5 motorbikes. | Purchase/provide one vehicle, 5 motor-bikes (Yamaha 175 CC for supervisors). Justification: To ensure effective supervision of learning and teaching. |
| Capacity Building of the Community and Teachers District wide | 4 | To strengthen non-formal education in the district. | Hold barazas at the catchments areas; 120 NFE teachers trained; All NFE centres | Sensitisation of the community on NFE Training NFE teachers and procurement of teaching materials. |

| | | | | |
|--|---|--|---|--|
| | | | provided with teaching aids. | Justification: This will assist the community to appreciate the importance of Adult Education. |
| Mobile Classes District wide | 5 | Increase the number of mobile classes in the purely nomadic areas of the district. | 10 mobile classes to be established. | Establish 10 mobile adult classes. Justification: To ensure that majority of people attend adult classes. |
| Provision of Office Equipments and Repair of Offices District wide | 6 | Provide good and spacious working environment. | 4 division offices; Repair, paint and equip the DAEO's office with photocopy machine, electrical typewriter, fans, steel cabinet, tables chairs and duplicating machines. | Assist the community build and equip divisional offices; Renovate and equip DAEO's office. Justification: To assist create conducive working atmosphere. |

A: On-going Projects and Programmes: Health and Nutrition

| Project Name Location/Division | Objectives | Targets | Description of Activities |
|---|--|---|--|
| HIV/AIDS/TB Control District wide | Reduce HIV transmission; Improve care for PLWA; Reduce TB load on the community. | Reduce HIV transmission by 30 per cent; Increase TB treatment centres from the current 5 – 10. | Community sensitisation campaigns; Condom distribution; Train health workers, counsellors, teachers, on STI/HIV/AIDS/TB control; Establish Voluntary Counselling Centres; Strengthen blood donor services; Establish more TB treatment centres. |
| Malaria Control Programme District wide | Reduce malaria morbidity and mortality. | Reduction of malaria related morbidity and mortality by 40 per cent. | Promote community health education and the sectoral collaboration in malaria control; Promote use of insecticides and treated nets; Promote proper treatment and management of malaria patients. |
| Water and Sanitation District wide | Improved sanitation and water supply systems. | Percentage of households with access to safe water and use of latrines to be increased. | Sensitise community on safe drinking water; Management of communal water resources, and use of latrines; Train health workers on HACCP sampling and inspection techniques; Train food handlers on hygienic food management. |
| Expanded Programme and Immunization District wide | Improved immunization rate. | Increase immunization rate from 40 per cent to 80 per cent. | Train 130 health workers and sensitise community on EPI services; Immunization campaigns Procure 40 EPI refrigerators. |
| Lodwar School of Nursing Central Division | Complete on-going project. | Complete all the outstanding works. | Construction of road works and parking; Purchase fire fighting equipment; Construction a high-level water tank. |
| Lokitaung Sub-District Hospital | Complete on-going project. | Complete all the outstanding works. | Complete finishes and installation of electrical works. |

| | | | |
|---|---|---|---|
| Kibish Dispensary Kibishi Division | Complete on-going project. | Complete finishes painting, doors; Drill borehole; Fencing and septic tank. | Complete finishes, plumbing, painting doors; Drill shallow well Construct septic tank; Fencing. |
| Kapeto Dispensary | Improve accessibility of health services. | Dispensary completed. | Construction of dispensary. |
| Kangakipur | Improve accessibility of health services. | Project completion. | Construction of health facility. |
| Kokuro | Improve accessibility of health services. | Project completion. | Construction of health facility. |
| Hydatid Control Programme District wide | Promote community based hydatid control mechanisms; Improve management of hydatid patients. | Reduce hydatid incidence from 25 to 4%. | Community sensitisation on hydatid control; Treat dogs, sterilize female dogs and destroy infected carcasses; Treatment of hydrated patients. |
| Integrated Management of Childhood Illnesses District wide | Improve management of childhood illnesses. | Under 5 mortality rate will reduce from 170 to 120 per 10,000 by 2008. | Training of health workers and community on IMCI. |
| Intestinal Worms Control District wide | Break the cycle of worm transmission. | Prevalence of intestinal worms reduced by 50 per cent. | Community sensitisation on worm control; Conduct targeted de-worming campaigns. |
| Community Capacity Building District wide | Improve access of health services by the community. | Increase health coverage from 50 per cent to 80 per cent. | Training of CHWs and TBAs (1260). |

B: New Project Proposals: Health Nutrition

| Project Name Location/Division | Priority Ranking | Objectives | Targets | Description of Activities |
|-----------------------------------|------------------|---------------------------------------|--|--|
| Lokangae Dispensary | 1 | Access health services to the people. | 1 dispensary block; 3 staff houses, 1 borehole and 3 latrines constructed. | Construct dispensary block, 3 staff houses water supply and latrines. Justification: It is a settled area, highly populated with no nearby health facility. |
| Nakeret Dispensary | 2 | Access health services to the people. | 1 dispensary block; 3 staff houses, 1 borehole and 3 latrines constructed. | Construct dispensary block, 3 staff houses water supply and latrines. Justification: It is a settled area, highly populated with no nearby health facility. |
| Lomeyan Dispensary | 3 | Access health services to the people. | 1 dispensary block; 3 staff houses 1 borehole and 3 latrines constructed. | Construct dispensary block, 3 staff houses water supply and latrines. Justification: It is a settled area, highly populated with no nearby health facility. |
| Kapua Dispensary | 4 | Access health services to the people. | 1 dispensary block; 3 staff houses, 1 borehole and 3 latrines constructed. | Construct dispensary block, 3 staff houses water supply and latrines. Justification: It is a settled area, highly populated with no nearby health facility. |
| Kamagus Dispensary | 5 | Access health services to the people. | 1 dispensary block; 3 staff houses, 1 borehole and 3 latrines constructed. | Construct dispensary block, 3 staff houses water supply and latrines. Justification: |

| | | | | |
|---|----|---|--|--|
| | | | | It is a settled area, highly populated with no nearby health facility. |
| Makutano Dispensary | 6 | Access health services to the people. | 1 dispensary block; 3 staff houses, 1 borehole and 3 latrines constructed. | Construct dispensary block, 3 staff houses water supply and latrines. Justification: It is a settled area, highly populated with no nearby health facility. |
| Naurus Dispensary | 7 | Access health services to the people. | 1 dispensary block; 3 staff house, 1 of borehole and 3 latrines constructed. | Construct dispensary block, 3 staff houses, water supply and latrines. Justification: It is a settled area, highly populated with no nearby health facility. |
| Kaikor Health Centre | 8 | Improve access of health services by the community. | 1 health centre block; 3 staff houses, 1 borehole and 3 latrines. | Construction health centre block, 3 staff houses water supply and latrines. Justification: It is a settled area, highly populated with no nearby health facility. |
| Male Ward at Lodwar District Hospital Central Division | 9 | Improved inpatient management. | Male ward constructed. | Construction of male wards. Justification: The old men ward has been condemned and currently the male patients are squeezed in one tiny room. |
| Amenity Ward at Lodwar District Hospital Central Division | 10 | Increase inpatient facilities. | Amenity ward constructed. | Construction of amenity ward. Justification: Provide more inpatient space and increase the revenue to the hospital. |
| Communication Radios District wide | 11 | Improve communication network for timely responses. | 20 health facilities equipped with radio set systems. | Procurement and distribution of radio communication equipments. Justification: To ensure quick responses to emergency cases. |
| Cold Chain Fridges and Solar Panels and Battery Set District wide | 12 | To raise the immunization rate from 40 per cent to 80 per cent. | 6 panel completed; 6 fridges. | Acquisition of cold chain facilities. Justification: To assist improved expanded immunization programme. |
| Microscopes District wide | 13 | Enhance lab detection e.g. malaria. | 4 microscopes. | Purchase light microscopes. Justification: Improve diagnosis of Malaria cases at the dispensary and health centres. |

3.4.7 Cross Sector Linkages

The performance of the Human Resources Development Sector is closely linked to the performance of the other sectors mainly Agriculture and Rural Development, and Tourism, Trade and Industry, sectors. These two sectors provide employment opportunities to the labour force in the district.

Public administration, safety law and order sector also plays a crucial role by creating a peaceful working environment for the Human Resource Development Sector to undertake its projects and programmes. To improve the education standard in terms of facilities, the

Tourism, Trade and Industry sector will have to generate more income for investment in these facilities.

The local community will participate in all the sectors of the economy in order to generate enough income for consumption and saving for investment in other production activities.

3.5 INFORMATION COMMUNICATION TECHNOLOGY

3.5.1 Sector Vision and Mission

The sector vision is “for Kenya to be at the forefront in Africa in the use of Information and Communication Technology (ICT) to improve the quality of life and competencies,” while the mission is “to promote and enable the society by developing a National Information Infrastructure (NII) and skills for all Kenyans regardless of geographical or socio-economic status”.

3.5.2 District Response to Sector Vision and Mission

During the plan period, the district will focus on strengthening and improving communication, which at the moment is poorly functioning. The main areas of concern will be to, strengthen the existing radio booster for better reception, install a television booster in the district, modernize the existing telephone for better reception, purchase one TV camera for recording development programmes, purchase one mobile cinema unit to stage development in the district, establish a local newspaper to be published weekly, start GIS at the DIDC for the development of a data bank, purchase a 4 WD vehicle fitted with coda radio for information office and a mobile telephone facility fitted in the information vehicle.

3.5.3 Importance of the sector in the district

Information Communication Technology is very important for the development of the district. It's through communication on electronic media that important information such as the spread of HIV/AIDS can reach the majority of people. Trade and commerce can easily be facilitated through TV, Internet, radio and newspapers advertisement. Through the media important national and international events occurrences like new research discoveries and inventions are accessed. Information for quick decision-making and action is easily made through fax, e-mail and courier services.

3.5.4 Roles of stakeholders in the sector

| Stakeholder | Role |
|----------------------------------|--|
| Government Private Sector | Provide policy on ICT and guidelines; Train the public on ICT and provide commercial internet access. |
| Ministry of Finance and Planning | Establish and make operational District Information and Documentation Centres. |
| NGOs | Information System; Provide technical support. |

3.5.5 Sub-sector Priorities, Constraints and Strategies

| Sub-sector | Priorities | Constraints | Strategies |
|------------|---|--|---|
| ICT | Establish project data bank and GIS in DIDC. Capacity building. | Lack of machinery and equipment; Lack of trained personnel. | Purchase of Equipment; Organize training sessions. |

3.5.6 Project and Programme Priorities

B: New Project Proposals: ICT

| Project Name Location/ Division | Priority Ranking | Objectives | Targets | Description of Activities |
|------------------------------------|---------------------|--|--|--|
| Databank/GIS Central Division | 1 | Collection, storage and dissemination of information for project planning and implementation, monitoring and evaluation. | Adequate equipment; machines and materials procured. | Purchase of equipment/machinery. Justification: Assist improves planning by availing the much-needed data and other relevant information. |
| Capacity Building District wide | 2 | Empower officers. | Train 400 officers. | Organize training. Justification: Equip officer with necessary skills for efficient delivery to clients. |

3.5.7 Cross Sector Linkages

The Information Communications Technology sector will facilitate project planning and implementation by various sectors of the economy by dissemination of relevant information. Furthermore, other sectors should fully support the initiative to make the DIDC fully functional as an information reference centre.

The private sector will play a major role in ICT investment for the sector to achieve its mission and vision. This will include investing in IT services and training the various, stakeholders in the application of the technology.

The Human Resource sector through the education sub-sector will facilitate the introduction and growth of IT training that all levels of the local learning institutions.

3.6 PUBLIC ADMINISTRATION, SAFETY, LAW AND ORDER

3.6.1 Sector Vision and Mission

The vision of the sector is “prudent management and governance in order to maximize the welfare of all Kenyans”; while the mission is “to promote socio-economic and politically stable development of the country through the provision of administration, efficient management of fiscal policies, ensuring overall macro-economic stability and the creation of an enabling environment for economic growth and development.

3.6.2 District Response to Sector Vision and Mission

In order to create conducive working environment for development to take place peace and stability must prevail. Peace and stability in the district can be guaranteed by holding harmonization meetings within and beyond the district boundary. The police security force will be strengthened to effectively contain the insecurity menace in the district by providing communication facilities and vehicles, establishment of security outposts' troubled areas and opening up security roads.

3.6.3 Importance of the Sector in the District

Provincial administration plays a key role in the maintenance of law and order in the district. The security force endeavours to ensure that law and order is maintained in the district for meaningful development to take place. Protection of people and their property is a prerequisite for development and economic growth. Public Administration, Safety Law and Order will articulate government policies in various areas and coordinate their implementation. Furthermore, this sector will coordinate and oversee the implementation of projects and programmes in the district.

The two local authorities, Turakana County council and Lodwar Municipal Council provide infrastructure services to the community by construction of facilities such as nursery schools, slaughter houses, social halls and livestock sale yards thereby offering employment to the community.

3.6.4 Role of Stakeholders

| Stakeholder | Role |
|--|---|
| Provincial Administration Judiciary Prisons Department Civil Registration Department Registration Department | Law enforcement, mobilization of public and chairing development committee meeting. Ensures that justice is carried out. Keeping custody of convicts and remands prisoners. Registering of birth and deaths in the district. Registration of Kenyans who have attained 18 years and issuing them with identification cards. |

3.6.5 Sub-sector Priorities, Constraints and Strategies

| Sub-sector | Priorities | Constraints | Strategies |
|---------------------------|-------------------------------|---|--|
| Provincial Administration | Maintenance of Law and Order. | Lack of security; Communication gadgets; Lack/inadequate transport (vehicles); Lack/inadequate security roads. | Hold peace harmonization meetings internally and externally; Procure effective communication gadgets for the security force; Provide adequate serviceable vehicles to the security force; Strengthen KPR force; Carry out community sensitisation on security matters; Establish security outposts. |
| Provincial Administration | HIV/AIDS. | Rapid spread of HIV/Aids; No cure for HIV/Aids; Stigmatisation of HIV/Aids victims; Slow attitude change. | Community sensitisation; Distribution of condoms; Treatment of STI/STDS; Screening of blood; Establish Village Counselling Centres. |
| District Planning Units | Complete stalled projects. | Lack of funds. | Complete the project. |

| | | | |
|----------------------|---------------------------|---|--|
| Development Planning | Training in PRA, M and E. | Inadequate trained officers. | Organize PRA training Hold PRA at the community and the district level. |
| DIDC | Provide equipment. | Poorly functioning DIDC; Lack of equipments. | Equip the DIDC. |

3.6.6 Project and Programme Priorities

A: On-going Projects: Provincial Administration

| Project Name Location Division | Objectives | Targets | Description of Activities |
|--|--|--|---|
| Internal and External Peace Meetings District wide | Create conducive and enabling environment for development. | 20 peace meetings held annually. | Hold 20 peace meetings per year (Internal and external). |
| Institutional Capacity Building of the Security Force District wide | Create conducive and enabling environment for development. | 5 posts opened; 20 communication gadgets bought; 4 land rovers purchased; 200km of security roads opened; Security early warning system institutionalized. | Establish security outpost at trouble spot areas; Procure effective communication gadgets/systems for the security force; Provide adequate and serviceable vehicles to the security force; Open up security roads; Set up early warning security systems. |
| Develop M & E System | Strengthen planning M and E | All projects and Programmes in the district. | To develop M and E system for the district. |
| DIDC Equipment Central Division | Strengthen planning | To equip the DIDC with computers and other accessories. | Purchase DIDC Machineries and equipment. |
| HIV/AIDS District wide | Reduce the spread of HIV/AIDS | Hold Barazas/seminars. | Organise/barazas, trainings and distribute condoms. |
| District Planning Unit. Central Division | Complete stalled project. | Complete plastering, electrical works, plumbing, doors, and windows. | Construct the project to completion. |

B: Project Proposals: Development Planning

| Project Name Division/Location | Priority Ranking | Objectives | Targets | Description of Activities. |
|------------------------------------|------------------|------------------------------|---|--|
| M and E System District wide | 1 | Strengthen planning M and E. | M & E. Institutionalised. | To develop M and E system for the district. Justification: To ensure timely and transparency in project implementation. |
| Training on PRA District wide | 2 | Strengthen planning M and E. | To train 600 participants during the plan period. These will be 4 trainings per year. | Train all heads of departments and development committees on PRA, project management M and E. Justification: To equip officer and communities with planning skills. |
| DIDC Equipment Central Division | 3 | Strengthen planning. | To equip the DIDC with computers and other accessories. | Purchase DIDC Machineries and equipment. Justification: To store, and disseminate information/date for planning. |

B: New Project Proposals: Local Government

| Project Name Location/Division | Priority Ranking | Objectives | Targets | Description of Activities |
|---|---------------------|---|--|---|
| Slaughter House Central Division | 1 | To create employment and raise the revenue base of the council. | Construction of slaughterhouses at Lodwar. | Construction of 1 slaughterhouse. Justification: Currently the town has no dissent slaughterhouse. |
| Guest Houses Kainuk, Kalokol, Kakuma Division | 2 | To raise the revenue base of the council and offer accommodation. | Construct 3 rental houses. | Construction of Guesthouses. Justification: To offer accommodation and raise the revenue to the council. |
| Boreholes District wide | 3 | Provision of clean potable water | Drill boreholes | Drilling of boreholes. Justification: To ensure that water is within the reasonable distance. |
| Sewerage Exhauster | 4 | To ensure cleanliness of market and town centres. | Procure one exhauster. | Purchase of sewerage exhauster. Justification: Currently there is no exhauster in the district and when in need the same is hired from Pokot. |
| Turkana South Game Reserve | 5 | Promote wildlife activities at the Reserve. | Construction of infrastructure. | Construction of Infrastructure SWG as access roads, gates water supply. Justification: To create conducive environment for the tourist. |
| Social Halls Lokichoggio, Kakuma Lokichar, Lorugum | 6 | To offer conducive environment for social events. | Construction of four social halls. | Construct of social halls. Justification: There are no social facilities in these towns. |
| Sale yard, Kibish Division | 7 | Facilitate livestock off-take. | 1 (one sale yard constructed). | Construction of livestock sale yard. Justification: Assist/Promote livestock marketing. |
| Nursery schools Nachukui, Lorugum Namoruputh, Kakuma Nakalale | 8 | Encourage and promote school development. | Five Pre-Primary schools established. | Development of nursery schools. Justification: Promote the level of education in the district/current there are no such facilities in these areas. |
| Market Stalls Kakuma, Lokichoggio Divisions | 9 | Facilitate small-scale business. | Two market stalls. | Construction of market stalls. Justification: To offer conducive selling/marketing facilities to the businessmen. |

3.6.7 Cross Sector Linkages

Public Administration, Safety, Law and Order Sector is very crucial for development activities to take place at any place. The sector endeavours to ensure peace and stability prevails so that an enabling environment is created for the other players in the economy.

For peace to prevail cooperation and collaboration by all sectors is a must. The provincial administration sub-sector will coordinate and ensure that government policies are understood and implemented.

Agriculture and Rural Development Sector will require security for the farmers/pastorists to engage all their energy to livestock and farming activities. The Human Resource Development and Physical infrastructure Sectors require coordinated effort, planning, implementation and monitoring for their projects and programme to be successfully implemented. The public Administration, safety, law and order sector require inputs from the other sector, such as well maintained road network, reliable water supply, manpower, among other to achieve its mission and vision.

CHAPTER FOUR
MONITORING AND EVALUATION

4.0 INTRODUCTION

This chapter focuses on the Monitoring and Evaluation (M & E) of projects and programmes set out in Chapter Three. The purpose of M & E is to ensure that implementation of these projects and programmes is on schedule while ensuring that there is no deviation towards the realization of the project objectives. The chapter further presents hierarchical institutional framework, which will be adapted to carryout M & E, ensuring the involvement of all stakeholders in the exercise.

4.1 INSTITUTIONAL FRAMEWORK FOR MONITORING AND EVALUATION SYSTEM IN THE DISTRICT

One of the major problems experienced during the 1997-2001 Plan period was the lack of a proper monitoring and evaluation guidelines. The implementation of projects was hardly monitored; as funds were not allocated for this exercise, save for project progress reports tabled in the DDC/DEC. This method of monitoring proved counterproductive as in most cases reports tabled in development forums were not accurate and could only be verified through field visits by constituted committees. There is therefore, need to allocate adequate funds for monitoring and evaluation during the plan period.

During the 2002-2008 Plan period, monitoring will be carried out continually while evaluation will be done periodically. Implementers will place a leading role in both monitoring and internal evaluation. The District Monitoring and Evaluation Committee (DMEC) with members drawn from various stakeholders will be charged with the responsibility of monitoring and evaluation of all development projects/programmes in the district so as to ensure faster implementation and high completion rates.

The Divisional Monitoring and evaluation Committee (Div. M & E C) composed of the District Officer, Divisional Departmental Heads, NGOs representatives, donor agencies and other stakeholders will execute monitoring and evaluation of projects and programmes at the divisional level. Monitoring will be done on quarterly basis through field visits. Subsequent reports will be placed before the Divisional Development Committee for perusal, discussion, adoption, intervention and submission to the District Development Committee.

Monitoring and evaluation at the community (village, sub locational, locational) level will be the onus of the respective project committees basing their assessment on the project plans. While monitoring will be a continuous process, evaluation will be done in the mid term and at the end of the plan period in 2008.

4.2 IMPLEMENTATION, MONITORING AND EVALUATION MATRIX

Sectoral projects, monitoring indicators and instruments that will be used to carry out the M & E are presented in the following matrix.

4.2.1 Agriculture And Rural Development

| Project Name | Cost Kshs | Time Frame | Monitoring Indicators | Monitoring Tools | Implementing Agency | Stakeholders Responsibilities |
|--|-----------|-------------|--|--|---------------------|-------------------------------|
| Rehabilitation of the Small Scale Irrigation Schemes | 175 M. | 2002 - 2007 | No. of structures rehabilitated; Turkwel dam desilted; No. of boreholes drilled; Acreage under irrigation. | DALEO reports; DDC/DEC minutes. | DALEO | Funding; Implementation. |
| Provision of Farm Inputs | 12 M. | 2002-2007 | No. of farmers provided with seeds; No. of farmers practicing farming. | DALEO reports; DDC/DEC minutes | DALEO | Funding; Implementation. |
| Capacity Building/ Extension | 7 M. | 2002-2007 | No. of PRA training sessions held; No. of farmers trained; No. of implants and equipment purchased and distributed to farmers. | DALEO reports; DDC/DEC minutes. | DALEO | Funding Implementation. |
| Pests and Diseases Control | 0.8 M. | 2002-2007 | Amount of chemicals purchased annually; No. of Livestock treated and acreage of crops sprayed. | DALEO reports; DDC/DEC minutes. | DALEO | Funding; Implementation. |
| Livestock Improvement | 33 M. | 2002-2008 | No. of animals purchased. | Community reports; LSP reports DALEO reports; DDC/DEC minutes. | DALEO | Funding; Implementation. |
| Bee-Keeping | 4 M. | 2000-2007 | No of training sessions for farmers held; No. of KTBHs given; Kg of honey refined. | Community reports; LSP reports; DALEO reports; DDC/DEC minutes. | DALEO | Funding. |

| | | | | | | |
|------------------------------------|-----------|-----------|---|---|----------------------------------|------------------------------------|
| Community Restocking | 50 M. | 2002-2006 | No. of families restocked. | Community reports; LSP reports; DALEO reports; DDC/DEC minutes. | DALEO | Funding; Implementation. |
| Pasture Restocking Programme | 186.5 M. | 2002-2007 | Area under vegetation cover increased livestock productivity. | Community reports; LSP reports; DALEO reports; DDC/DEC minutes. | DALEO | Funding. |
| Livestock Water Development | 7 M. | 2002-2006 | Number of water pans and troughs constructed; Average km Travelled to the livestock point. | Community reports; LSP reports; DALEO Reports; DDC/DEC minutes. | DALEO | Funding. |
| Livestock Marketing | 7.85 M. | 2002-2006 | Number of livestock traders supported; Livestock sales. | Community reports; LSP reports; DALEO reports; DDC/DEC minutes. | DALEO | Funding; Expertise. |
| Livestock Disease and Pest Control | 9,824,500 | 2002-2008 | No. of animals vaccinated and treated. | LSP reports | DVO | Funding; Expertise. |
| Capacity Building | 4 Million | | No. of trained CAHWs | DVO reports | DVO | Implementation Funding. |
| Infrastructure Development | 5 M. | 2002-2006 | crushes constructed; 4 drug stores constructed. | DEC/DDC Minutes. | DVO | Funding; Expertise. |
| Veterinary Equipment | 515,000 | 2002-2004 | 50DHZ purchased; 40 di-zone glass purchased; 800 syringes purchased; 4 microscopes purchased; No. of reagents bought. | DVO reports; Community reports; LSP reports. | DVO | Implementing Funding |
| Rural Tannery and Abattoir | 3.2 M. | 2002-2007 | Tanneries constructed; Sales of hides and skin. | DVO reports; community reports; LSP reports. | DVO | Implementing; Funding; Expertise. |
| Fish Production | 957,000 | 2002-2006 | No. of boats repaired; No. of boats constructed; No. of ropes provided. | DDC/DEC minutes; DFO reports; NGOs reports; LSP reports. | DALEO (Department of Fisheries). | Funding Implementation; Expertise. |

| | | | | | | |
|---------------------------------|---------|-----------|--|--|----------------------------------|---|
| Post Fish Harvest Management | 2.3 M. | 2002-2006 | No. of training sessions held and fisher folks trained; No. of racks constructed | DDC/DEC minutes; DFO reports; DALEO reports; LSP reports. | DALEO (Department of Fisheries). | Funding; Expertise. |
| Institutional Capacity Building | 2.15 M. | 2002-2007 | No. of motorbikes bought; No. of reagent bought annually; Fiber glass bought and available; Laboratory in use; Extension services strengthened. | DDC/DEC minutes; DFO reports; DALEO reports; LSP reports. | DALEO (Department of Fisheries). | Funding; Implementing; Expertise. |
| Capacity Building for Fishermen | 4 M. | 2002-2007 | No. of training sessions conducted and fisher folks trained; No. of groups of fisher farmers supported financially. | DDC/DEC minutes; DFO reports; DALEO reports; LSP reports. | DALEO (Department of Fisheries) | Funding; Expertise. |
| Rural Water Supplies | 65 M. | 2002-2006 | No. of shallow wells disilted, sunk and equipped; No. of shallow wells rehabilitated; No. of water pans disilted; No. of Sub-surface schemes at Kangatosa, Lokorokol, Kataruk and Kibish. | TRP Reports; DWE reports; DDC/DEC minutes. | TRP | Funding, Implementing, Expertise. |
| Rain Water Harvesting | 5 M. | 2002-2006 | No. of water harvesting structures constructed; Availability of water at short walking distance. | TRP reports; DWE reports DDC/DEC minutes | TRP | Funding; Implementation; Expertise. |
| Kibish Multipurpose Project | 16.5 M | 2002-2006 | No. of boreholes sunk; No. of shallow well sunk; No. of water structures Average distance to the water point. | TRP reports; DWE Reports; DDC/DEC minutes. | TRP | Funding; Implementation; Expertise |

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|--|--------|-----------|--|--|------|-------------------------------------|
| Livestock Improvement | 11 M. | 2002-2007 | No. of water pans and storage tanks constructed; No. of families supplied with KTBHS bright and supplied; Improved no. at free ranges. | TRP reports; DLPO reports. | TRP | Funding; Implementation. |
| Minor Irrigation Schemes | 10 M. | 2002-2007 | Functional micro-irrigation schemes at Kangatosa, Lokoroko/Kataruk and Kibish. | TRP reports | TRP | Funding Implementation |
| Credit Scheme | 4 M. | 2002-2007 | No. of marketing societies advanced with credit. | DDC/DEC minutes; Marketing cooperative reports; DCO reports. | DCO | Funding. |
| Capacity Building for Co-operative Members | 2 M. | 2002-2005 | No. of training sessions and held; No. of cooperatives trained. | DDC/DEC minutes; Marketing cooperative reports; DCO reports. | DCO | Training; Funding. |
| Market and Town Demarcation at Lower, Lokori, Lokichoggio, Kainuk, Kakuma and Katilu | 1.5 M. | 2002-2007 | No. of plots demarcated; PDP drawing; Title Deeds issued; Survey maps. | Surveys reports; LMC reports/minutes; TCC report/minutes. | DCO | Funding; Expertise. |
| Cadastral survey of Plots at Lower, Lokori and Lokichoggio | 0.8 M. | 2002-2007 | No. of cadastral surveys undertaken; No. of title deeds issued. | LMC and TCC meeting minutes; DPPO annual reports. | DPPO | Funding; Expertise; Implementation. |
| Topo Survey of Plots at Kakuma and Lokori | 0.6 M. | 2002-2007 | No. of top surveys undertaken; Survey maps. | DDC/DEC minutes; DPPO reports. | DPPO | Funding; Expertise; Implementation. |
| District Map | 0.2 M. | 2002-2007 | District map updated; Contract documents. | DDC/DEC Minutes. | DPPO | Funding; Expertise; Implementation. |
| Cadastral Survey of Morulem Irrigation Scheme | 0.3 M. | 2002-2007 | Title deed for morulem irrigation scheme issued. | DDC/DEC Minutes; Council reports; DPPO reports. | DPPO | Funding; Expertise; Implementation. |
| Environmental Conservation | 1.4 M. | 2002-2007 | No. of meetings and people trained; No. of water | DECO reports; DFI reports; | DECO | Funding; Implementation; Expertise. |

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|--|---------|-----------|--|-------------------------------------|------|---|
| | | | pans constructed; No. of springs protected; No. of tree nurseries started. | DWE reports; DDC/DEC minutes. | | |
| Rural Water and Marine Resource Management | 0.6 M. | 2002-2006 | No. of shallow Wells, earth dams constructed. | DECO reports DWE reports | DECO | Funding; Implementation; Expertise |
| Energy | 0.4 M. | 2002-2007 | % increase in demand for energy serving devices. | DECO reports; Training; reports. | DECO | Funding; Implementation; Expertise. |
| Sanitation Improvement | 0.2 M. | 2002-2006 | No. of pit latrines constructed; No. of workshops held. | DECO Reports; Training; Reports; | DECO | Funding; Implementation; Expertise. |
| Disaster Management | 0.5 M. | 2002-2008 | No. of disaster mitigation projects implemented. | DECO reports; ALRMP reports. | DECO | Funding; Implementation |
| Environmental impact Assessment | 0.4 M. | 2002-2007 | No. of EIAs Carried pit -E. | DECO Report (EIA). | DECO | Funding raising; Expertise. |
| Rehabilitate All Serviceable Station in the District | 123,000 | 2002-2005 | No. of rain gauges and cylinders improved. | MOC report. | MOTC | Mobilization of funds; Expertise. |
| Increase Area of Coverage for Rainfall Data Collection | 85,000 | 2002-2007 | No. of new weather stations opened. | MOTC report. | MOTC | Mobilization of funds; Expertise. |
| Institutional Capacity Building | 3.5 M. | 2002-2007 | 3 Vehicles purchased; 1 motor cycle purchased. | MOTC report. | MOTC | Provision of transport; Expertise. |
| Construction of Meteorological Station at Lokichogio | 12 M. | 2002-2007 | Weather station constructed in Lokichogio. | MOTC report. | MOTC | Provision of funds; Implementation of project; Expertise. |
| Rural Afforestation | 2 M. | 2002-2007 | Area of acreage planted with trees; No. of seedlings distributed. | DFO report; DDC/DEC minutes. | DFO | Funding; Implementation. |
| Community capacity building | 1 M. | 2002-2007 | No. of meetings held; No. of people trained. | DFO reports; DDC/DEC minutes. | DFO | Funding; Implementation. |

4.2.2 Physical Infrastructure

| Project Name | Cost Kshs. | Time Frame | Monitoring Indicators | Monitoring Tools | Implementing Agency | Stakeholders Responsibilities |
|---|-----------------|------------|--|-----------------------------------|---------------------|---|
| Kainuk Nakabosan RDAL | 990 M. | 2002-2008 | No. of km reconstructed; Vehicular volume; Time taken. | DWO reports; DDC/DEC minutes | DWO (works) | Provision of security and funds. |
| Lodwar Nakabosan RDAL | 360 M. | 2002-2008 | No. of km resealed. Vehicular volume; Time taken | DWO reports ; DDC/DEC Minutes. | DWO | Provision of security and funds. |
| Lokori Kapeddo C113 | 100 M. | 2002-2008 | No. of km graveled; Vehicular volume; Time taken. | DWO reports; DDC/DEC Minutes. | DWO | Provision of security and funds. |
| Namorutunga Box Culvert (RD D348) | | 2002-2008 | No. of culverts in place. | DWO reports; DDC/DEC minutes. | DWO | Provision of security and funds. |
| Lodwar Kalokol (60 km) RD D348 | 180 M. | 2002-2008 | No. of km of road resealed. | DWO reports; DDC/DEC minutes. | DWO | Provision of security funds. |
| Drifts Lokichar (RD A1) Kachoda RDC47) Lokori RDC113) | 2 M. per drift. | 2002-2008 | No. of drifts constructed. | DWO reports; DDC/DEC minutes. | DWO | Provision of security and funds. |
| Kakuma Koikor | 3 M. | 2002-2008 | No. of km graded. | DWO reports; DDC/DEC minutes. | DWO | Provision of security and provision of funds. |
| Repair and Resealing of Kakuma Lokochoigio Road A1 | 407,080,680 | 2002-2004 | No. of km of road to be rehabilitate. | DWO reports. | DWO | Provision of security and provision of funds. |
| Resealing of Lodwar Makutano | 153,999,459 | 2002-2004 | No kms of road rehabilitated. | DWO reports. | DWO | Provision of security and funds. |
| Lokitang Water Supply | 0.23 M. | 2002-2008 | Water System rehabilitated. | DWE reports. | DWE | Funding; Expertise. |
| Kalokol Water Supply | 3 M. | 2002-2008 | Water System rehabilitated. | DWE reports. | DWE | Funding; Expertise. |
| Kerio Water Supply | 2.33 M. | 2002-2008 | Water system rehabilitated. | DWE reports; DDC/DEC minutes. | DWE | Funding; Expertise. |
| Kokuro Water Supply | 0.4 M. | 2002-2008 | Water system rehabilitated. | DWE reports. | DWE | Funding; Expertise. |
| Namuruputh Water Supply | 1.13 M. | 2002-2008 | Water system rehabilitated. | DWE reports. | DWE | Funding; Expertise. |
| Lorokon Water supply | 0.79 M. | 2002-2008 | Water system rehabilitated. | DWE reports. | DWE | Funding; Expertise. |
| Kibish Water Supply | 1.91 M. | 2002-2008 | Water system rehabilitated. | DWE reports. | DWE | Funding; Implementing. |
| Lorugum Water Supply | 0.465 M. | 2002-2008 | Water system rehabilitated. | DWE reports. | DWE | Funding; Implementing; Expertise. |

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|--|-----------|-----------|---|---|------|-----------------------------------|
| Kainuk Water Supply | 3.425 M. | 2002-2008 | Water system Rehabilitated. | DWE Reports. | DWE | Funding; Implementing; Expertise. |
| Lokichar Water Supply | 1.55 M. | 2002-2008 | Water system rehabilitated. | DWE reports | DWE | Funding; Implementing; Expertise. |
| Makutano Water Supply | 7,828,440 | 2002-2008 | Water system rehabilitated. | DWE Reports. | DWE | Funding; Implementing; Expertise. |
| Todonyang Water Supply | 3,020,760 | 2002-2008 | Water system rehabilitated. | DWE reports | DWE | Funding. |
| Kalemunyang Water Supply | 3,467,000 | 2002-2008 | Water system rehabilitated. | DWE Reports | DWE | Funding. |
| Lokichogio Water Supply | 4,834,000 | 2002-2008 | Water system rehabilitated. | DWE Reports | DWE | Funding. |
| Kaloboi Water Supply | 1,500,000 | 2002-2008 | Water system rehabilitated. | DWE reports | DWE | Funding; Implementing. |
| Katuruk Water Supply | 1,950,000 | 2002-2008 | Water system rehabilitated. | DWE reports | DWE | Funding; Implementing. |
| Riet Water Supply | 4,160,000 | 2002-2008 | Water system rehabilitated. | DWE reports | DWE | Funding; Implementing |
| Kangirisae Water Supply | 4,320,00 | 2002-2008 | Water system rehabilitated. | DWE reports. | DWE | Funding; Implementing |
| Nadukamel Water Supply | 350,000 | 2002-2008 | Water system rehabilitated. | DWE reports. | DWE | Funding; Implementing |
| Lochoremoit Water Supply | 2,910,000 | 2002-2008 | Water system rehabilitated. | DWE reports. | DWE | Funding; Implementing. |
| Namukuse Water Supply | 3,534,000 | 2002-2008 | Water system rehabilitated. | DWE reports. | DWE | Funding; Implementing. |
| Water Pans | | 2002-2008 | No. of water pans constructed; No. of livestock people served by the pans; Average distance to water point. | DWE reports. | DWE | Funding; Implementing. |
| Development and Protection of Springs | 3.75 M. | 2002-2008 | No. of springs protected. | DWE reports. | DWE | Funding; Implementing. |
| Shallow Well Programme | 4.56 M. | 2002-2008 | No. of shallow wells sunk. | DWE reports. | DWE | Funding; Implementing. |
| Capacity Building | 1.8 M. | 2002-2008 | No. of people trained. | DWE reports. | DWE | Funding; Implementing. |
| Pump Maintenance Unit Project | 4 M. | 2002-2008 | Maintenance unit functions. | DWE reports. | DWE | Funding ; Implementing. |
| Drilling Rig | 2M. | 2002-2008 | Rig in place. | DWE reports. | DWE | Funding; Implementing. |
| Rural Electrification Kwalathe Nakwamekwi Kanamkemer Napetel | 200 M. | 2002-2008 | No. of supplies/km constructed; % of increase of people supplied with electricity. | KPLC reports; DDC/DEC minutes survey reports on energy supply in Lodwar. | KPLC | Private sector to provide funds. |

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|---------------------------|------|-----------|--|--------------------------------------|-------------------------------------|------------------------|
| Alternative Energy Supply | 4 M. | 2002-2008 | No. of people, institutions/or ganizations using solar or wind energy; % increase in demand for use of energy saving appliances; Reduced demand for wood fuel. | Energy use survey; DFO/DECO Reports. | DFO/DCEO reports; Partners reports. | Funds; Implementation. |
|---------------------------|------|-----------|--|--------------------------------------|-------------------------------------|------------------------|

4.2.3 Tourism, Trade and Industry

| Project Name | Cost Kshs. | Time Frame | Monitoring Indicators | Monitoring Tools | Implementing Agency | Stakeholders Responsibilities |
|--------------------------------|------------|-------------|---|------------------|---------------------|--|
| Entrepreneur Capacity Building | 35 M. | 2002 - 2008 | No. of traders trained; No. of businesses started; Income levels. | DTDO reports. | DTDO | Funding; Expertise. |
| Credit Financing | 16.1 M. | 2002 - 2008 | Amount credit given and the No. of beneficiaries. | DTDO reports. | DTDO | Provision of credit facilities; Expertise. |

4.2.4 Human Resources Development Education

| Project Name | Cost Kshs. | Time Frame | Monitoring Indicators | Monitoring Tools | Implementing Agency | Stakeholders Responsibilities |
|----------------------------------|-------------------|-------------|---|-----------------------------|---------------------|---|
| School Bursaries | 8 M. | 2002-2008 | Amount of bursary distributed and the no. of beneficiaries; Completion rates. | DEO reports DDC/DCE minute. | DEO | Identification of beneficiaries; Funding. |
| Teaching Facilities | 3.2 M. | 2002-2008 | No. of workshops and no. of people trained. | DEO reports. | DEO | Funds; Community mobilization. |
| School Feeding Programme | To be determined. | 2002 - 2008 | Amount of food allocated annually. | DEO reports. | DEO | Funds; Food. |
| Institutional Capacity Building | 1.5 M. | 2002 - 2008 | No. of workshops held. | DEO reports. | DEO | Funds. |
| Ralokoh AIC Moi Secondary School | To be determined. | 2002-2008 | School constructed and functional; No. of students admitted. | DEO reports | DEO | Material; Finance; Equipment. |
| Lokichogio Secondary School | To be determined. | 2002-2008 | School in place and functional; No. of students admitted. | DEO reports. | DEO | Material; Finance; Equipment. |
| Lokichogio Secondary School | To be determined. | 2002-2008 | Schools in place and functional; No. of students admitted. | DEO reports. | DEO | Material; Finance; Equipment. |

| | | | | | | |
|---|-------------------|-------------|--|----------------------|--------------|---|
| Songot Secondary School | To be determined. | 2002-2008 | No. of students admitted. | DEO reports. | DEO reports; | Material; Finance; Equipment DEO reports. |
| Staff Training Recruitment | 450,000 | 2002 - 2005 | No. of new teachers; No. of training sessions held. | DOL reports. | DEO | Funding |
| Learning and Teaching Facilities for the Department | 681,500 | 2002-2006 | No. of learning facilities; Completion rate among the participants. | DOL Unicef Reports. | DEO | Funding material equipment. |
| Motor Vehicle and Motor Bikes | 2,375,000 | 2002-2007 | One vehicle in place; 5 motorbikes in place. | Unicef Reports. | DEO | Equipment. |
| Learning and Teaching Facilities for Learners | 1,184,400 | 2002-2007 | No. of courses offered; No. of participants. | DOL Unicef Reports. | DEO | Materials Funding. |
| Community Capacity Building | 2,542,250 | 2002-2008 | No of sensitisation workshops forming held; No of meeting held; No. of teachers trained. | DEO Reports. | DEO | Material Funding. |
| Learners Mobile Classes | 600,000 | 2008 | No. of mobile classes established Coverage made. | Attendance register. | DAEO | Funding. |

4.2.5 Information Communication Technology

| Project Name | Cost (Kshs) | Time Frame | Monitoring Indicators | Monitoring Tools | Implementation Agency | Stakeholders Responsibility |
|-------------------|-------------|-------------|--|----------------------------|-----------------------|-----------------------------|
| ICT | 10 M. | 2002 – 2008 | No. of computers purchased; No. of Cyber cafes. | Quarterly annual reports. | Private sector; DDO. | Expertise; Funds by DPU. |
| Databank/CIS | 10 M. | 2002 – 2008 | GIS programme in place; No. of persons trained in GIS. | Quarterly/ annual reports. | DDO | Expertise and funds by DPU. |
| Capacity Building | 10 M. | 2002 – 2008 | No. of persons Trained on IT. | Quarterly/ annual reports. | DDO | Expertise and funds by DPU. |

4.2.6 Public Administration, Safety, Law and Order

| Project Name | Cost Kshs. | Time Frame | Monitoring Indicators | Monitoring Tools | Implementing Agency | Stakeholders Responsibilities |
|--------------------------------|------------|------------|--|---|----------------------------|-------------------------------|
| Peace Harmonization | 0.8 M. | 2002-2008 | No. of harmonization meetings held; Reduced incidence of insecurity. | Provincial Administration reports; NGO reports. | Provincial Administration. | Funding; Facilitation. |
| Security Posts | 0.5 M. | 2002-2204 | No. of security posts established. | Provincial Administration report. | Provincial Administration. | Funding. |
| Security Communication Gadgets | 2 M. | 2002-2004 | No. of communication gadgets | Provincial Administration | Provincial Administration. | Funding; Expertise. |

| n Gadgets | | | gadgets procured. | reports. | | |
|---|-------------------|-----------|--|--|----------------------------|-------------------------------|
| Motor Vehicles | 5 M. | 2002-2004 | No. of motor vehicles bought. | Provincial Administration. | Provincial Administration. | Funding; Expertise. |
| Security Warning System | To be determined. | 2002-2003 | Security early warning systems functional. | Provincial Administration reports; NGOs reports. | Provincial Administration. | Funding; Expertise. |
| Security Roads | 10 M. | 2002-2004 | No security roads constructed. | DWO reports; Provincial Administration reports. | Provincial Administration. | Funding; Expertise. |
| Establishment of M & E | 4 M. | 2002-2008 | M & E Institutionalized and functional. | DDO reports | DDO | Financing Data collecting. |
| PRA Training | 6 M. | 2002-2008 | No. of training sessions held; No. of people trained. | DDO reports | DDO | Financing. |
| DIDC Machines Equipment | 7 M. | 2002-2007 | No. of machines and equipments bought. | DDO reports. | DDO | Finance; Equipment Material. |
| Turkana South Game Reserve | 1 M. | 2002-2008 | No of access roads constructed; No. of tourists visiting. | KWS reports Council minutes. | Local Authority TCC | Finance; Equipment; Material. |
| Social Halls Lokichoggio, Kakuma, Lokichar, Lorgum, | 3.2 M. | 2002-2008 | No. of Social halls constructed. No. social-cultural activities carried out. | Council minutes | Local Authority TCC | Finance; Equipment; Material. |
| Sale yard Kibish | 506,926 | 2002-2008 | Livestock sale yard in place. | Council minutes. | Local Authority; TCC. | Finance; Equipment; Material. |
| Nursery Schools Nachuki, Lorugum, Kakauma, Nakalale | 3 M. | 2002-2008 | No. of nursery schools constructed; No. of pupils admitted. | DEO reports; Council minutes. | Local Authority TCC. | Finance; Equipment; Material. |
| Market stalls Kakuma Lokichoggio | 1 M. | 2002-2008 | No market stalls constructed. | DWO sports Council minutes. | Local Authority; TCC. | Finance; Equipment; Material. |
| Slaughter House Lodwar | 0.9 M. | 2002-2008 | Slaughter house in place. | DWO reports; Council minutes. | Local Authority TCC | Finance; Equipment; Material. |
| Guest Houses at Kainuk, Kalokol and Kakuma | 4.5 M. | 2002-2008 | No. of guest houses constructed. | DWO reports Council minutes | Local Authority TCC | Finance; Equipment; Material. |
| Borehole | 2.8 M. | 2002-2008 | Borehole drilled. | DWO reports Council minutes | Local Authority TCC | Finance; Equipment; Material. |
| Sewerage Exhauster | 4.5 M. | 2002-2008 | Sewerage exhauster purchases and in place. | DWO reports Council minutes. | Local Authority TCC | Finance; Equipment; Material. |

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|------------------------------------|------------------|-----------|--|--|---------------------------------|-----------------------------|
| HIV/AIDS/ TB Control | 10 M. | 2002-2008 | No. of meetings held; Amount and No. of condoms distributed; Increased demand for condoms; No. of health workers, counsellors and teachers trained; No. of VCC established; No of HIV/AIDS transmission through blood donation o of TB centres. | MOH reports Health survey reports; DDC/DEC minutes; NACC reports; DACC reports and CACC reports. | MOH. | Funding; Implementation. |
| Malaria Control Programme | 16 M. | 2002-2008 | Reduce cases of malaria related deaths; Increase demand for insecticides and treated nets. | Health Surveys MOH/DPHO reports | MOH. | Funding; Implementation. |
| Water and Sanitation | 8 M. | 2002-2008 | % increase of people accessible to clean water and use of latrines. | Health surveys; MOH/DPHO reports. | MOH. | Funding; Implementation. |
| Expanded Programme of Immunization | 10 M. | 2002-2008 | % increase in immunization coverage. | Health surveys; MOH/DPHO reports. | MOH. | Funding; Implementation. |
| Lodwar Schools of Nursing | 5 M. | 2002-2004 | Roadwork completed; 1 water tank in place; Fire fighting equipment in place. | DWO reports; MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Loitaung Sub-District Hospital | 5 M. | 2002-2004 | Electricity in use. | DWO reports; MOH reports; DDC/DEC | MOH. | Funding. |
| Kibishi Dispensary | 7,975, 434.90 | 2002-2008 | Dispensary block, staff houses in use Borehole in place Latrines in use. | DWO MOH DDC/DEC reports. | MOH. | Funding; Implementation. |
| Lokongae | 10 M. | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO; MOH; DDC/DEC minutes. | NACC; DACC; CACC; MOH. | Funding; Implementation. |
| Nakeret Dispensary | 10 M. | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO reports; MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |

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|--|---------|-----------|--|---|------|--------------------------|
| Lomeyan | 10 M. | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO reports; MOH reports; DDC/DEC minutes.. | MOH. | Funding; Implementation. |
| Kapua | 10 M. | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO reports; MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Kamagus | 10 M. | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO reports; MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Makutano | 10 M. | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO reports; MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Naoro | 10 M. | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO reports; MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Kaikor | 10M. | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO reports; MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Kapeto Dispensary | - | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO reports; MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Kangakipur | - | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO reports; MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Kokuro | - | 2002-2008 | Dispensary block, staff houses in use; Borehole in place; Latrines in use. | DWO reports; MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Hydatid Control programme | 8 M. | 2002-2008 | % reduction in hydrated incidences. | MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Integrated Management of Child Illnesses | 800,000 | 2002-2008 | % reduction in mortality of the under 5 years. | MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Intestinal Worms Control | 400,000 | 2002-2008 | % reduction of intestinal worms. | MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |

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|--|------------|-----------|--|------------------------------------|-------------------------------|--------------------------|
| Community Capacity Building | 6,550,600 | 2002-2008 | No of CHWs and TBAs trained. | DWO; MOH; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Males Ward at Lodwar District Hospital | 11,034,600 | 2002-2008 | Ward in place. | DWO; MOH; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Amenity Ward | 3,870 | 2002-2008 | Amenity ward in place. | DWO; MOH; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Radio Communication Sets for Rural Health Facilities | 5 M. | 2002-2008 | 20 Radio communication sets purchased. | MOH reports; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Cold Chain Fridges and Solar Panels and Battery Set | 570,000 | 2002-2008 | 6 cold chains fridges in place. | DWO reports; MOH; DDC/DEC minutes. | MOH. | Funding; Implementation. |
| Microscopes | 100,000 | 2002-2008 | 4 microscope in place. | MOH reports; DDC/DEC minutes. | MOH reports; DDC/DEC minutes. | Funding. |

4.3 SUMMARY OF MONITORING AND EVALUATION IMPACT AND PERFORMANCE INDICATORS.

The following performance indicators will determine the impact of project and programmes.

| | 2002 Present Situation | 2004 Mid-Term | 2008 End of Plan Period |
|-----------------------------------|---------------------------|------------------|----------------------------|
| Health | | | |
| Infant Mortality | 170/1000 | 160/1000 | 120/1000 |
| Immunization coverage | 40% | 60% | 80% |
| Doctor patient ratio | 1:75,000 | 1:60,000 | 1:55,000 |
| HIV/AIDS incidence % | 30% | 15% | 5% |
| Crude death rate | 16/1000 | 14/1000 | 10/1000 |
| Health coverage | 50% | 65% | 80% |
| Education | | | |
| Primary school enrolment | 33.9% | 50% | 70% |
| Primary drop-out rate | 62.9% | 42% | 30% |
| Teacher pupil ratio | 1:40 | 1:40 | 1:40 |
| Secondary school enrolment | 4.95% | 8% | 12% |
| Secondary school drop-out | 24.1% | 20% | 16% |
| Social Economic Indicators | | | |
| Absolute poverty | 74% | 69% | 60% |
| Food poverty | 81% | 71% | 62% |
| Hard-core poverty | 62% | 50% | 40% |
| Literacy rate | 60% | 65% | 70% |
| Life expectancy | 50 | 52 | 55 |