

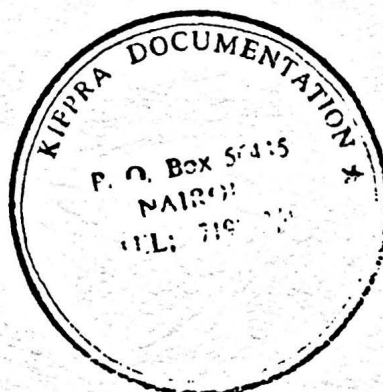


REPUBLIC OF KENYA

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MINISTRY OF FINANCE AND PLANNING

**NYANDO  
DISTRICT DEVELOPMENT PLAN  
2002–2008**



**Effective Management for Sustainable Economic  
Growth and Poverty Reduction**

## FOREWORD

The Nyando District Development Plan (DDP) for the Plan period 2002-2008 was prepared by the District Departmental Heads of various Ministries under the coordination of the District Commissioner assisted by the District Development Officer and members of the District Planning Team. The Plan is a product of broad-based consultations among various stakeholders undertaken in the district. It has been prepared in the backdrop of the theme of the 9<sup>th</sup> National Development Plan, which is “Effective Management for Sustainable Economic Growth and Poverty Reduction”.

The 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 and 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 previous 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 PRSP/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 Nyando DDP. It outlines the institutional framework for monitoring and evaluating the implementation of the 7-year Plan, the monitoring indicators and instruments to be used, setting 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, communities will be actively and fully involved in the entire planning process from

selection, implementation, monitoring and evaluation. However, this requires huge investment 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 system 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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## **CHAPTER FOUR**

### **IMPLEMENTATION, MONITORING AND EVALUATION**

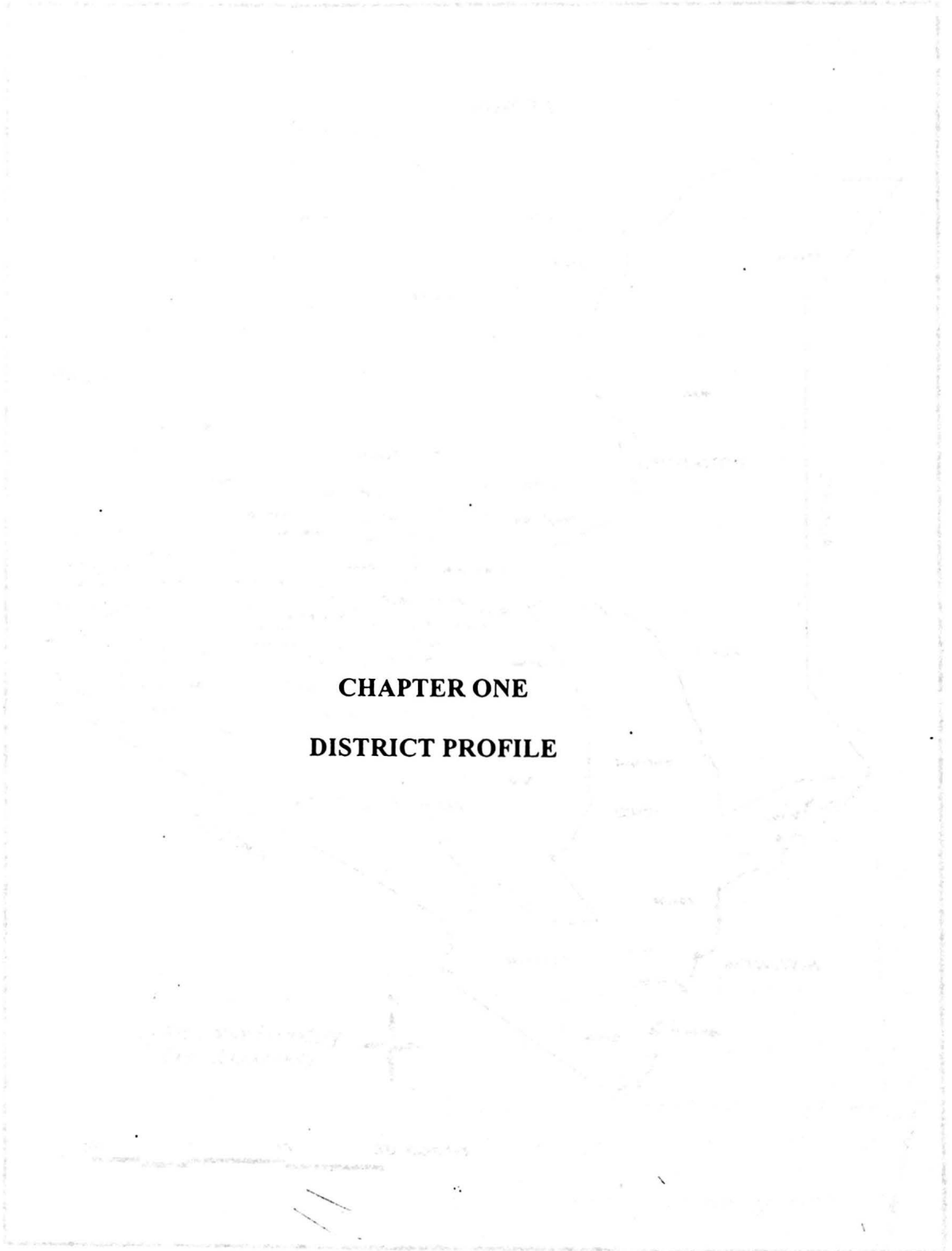
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## LIST OF ABBREVIATIONS

AI	Artificial Insemination
ATIRI	Agricultural Technology Response Initiative
CACCS	Constituency AIDS Control Committees
CBNP	Community Based Nutrition Programme
CBO	Community Based Organisation
CBR	Community Based Rehabilitation
CCF	Christian Children's Fund
DACC	District AIDS Control Committees
DANIDA	Danish International Development Agency
DEC	District Executive Committee
DCO	District Cooperative Officer
DFO	District Forest Officer
DVO	District Veterinary Officer
EPI	Expanded Programme on Immunisation
FAO	Food and Agriculture Organisation
HIV/AIDS	Human Immuno-Deficiency Virus/Acquired Immune Deficiency Syndrome
IDCCS	International Diocesan Christian Community Services
IMCI	Integrated Management of Childhood Illness
KTBH	Kenya Top Bar Hive
KNFU	Kenya National Farmers Union
LATF	Local Authority Transfer Fund
LVEMP	Lake Victoria Environmental Management Programme
MAACS	Muhoroni AIDS Awareness and Counselling Services
MCH	Maternal Child Health
MOARD	Ministry of Agriculture and Rural Development
MOENR	Ministry of Environment and Natural Resources
MOH	Medical Officer of Health
MR&PW	Ministry of Roads and Public Works
MTEF	Medium Term Expenditure Framework
NGOs	Non-Governmental Organisations
SACCOs	Savings and Credit Co-operative Societies
STI	Sexually Transmitted Infections
WHO	World Health Organisation
WMS	Welfare Monitoring Survey

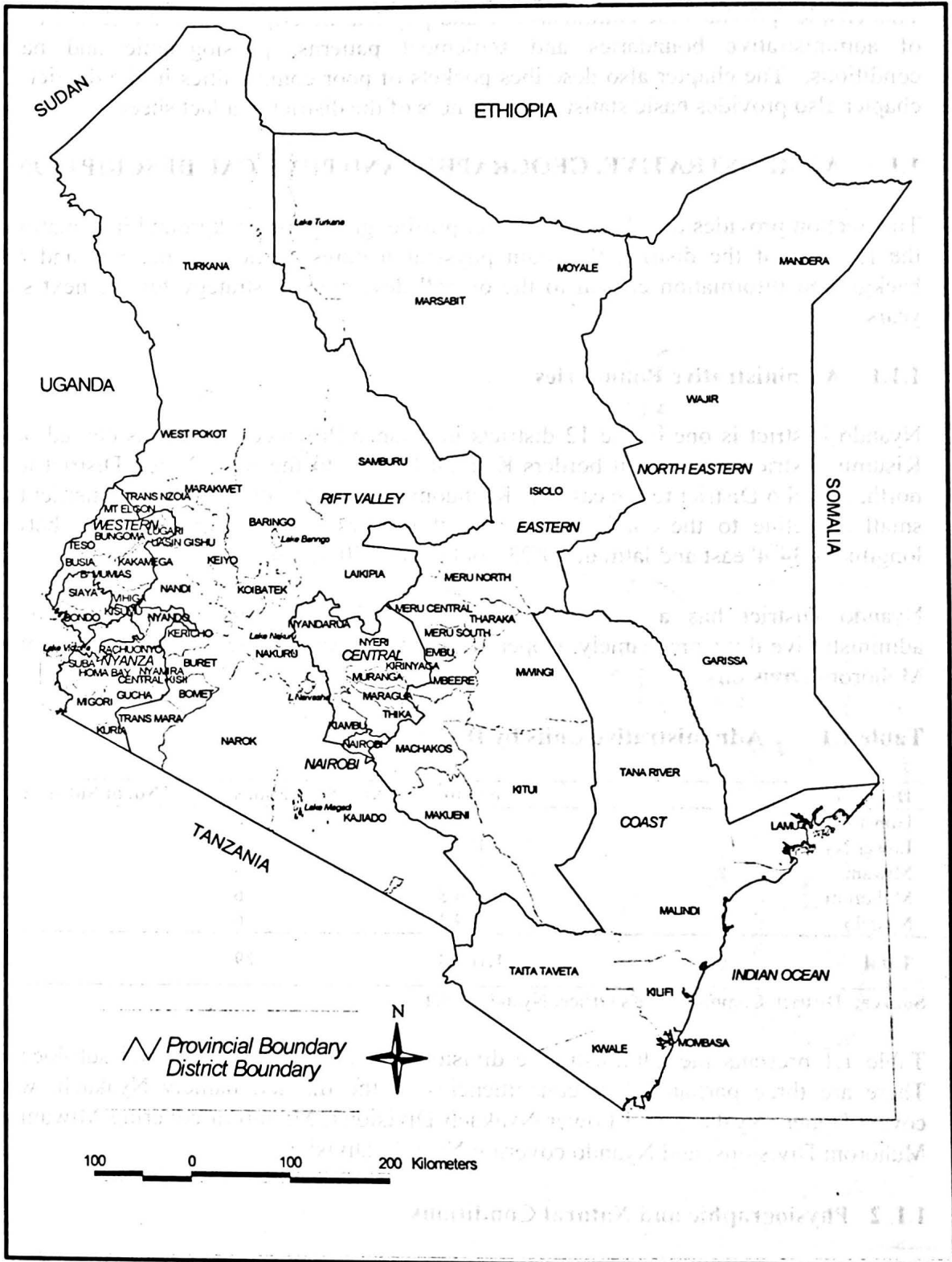
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**CHAPTER ONE**  
**DISTRICT PROFILE**

# LOCATION OF NYANDO IN KENYA



Prepared by CBS, 1999 Pop. Census

This map is not an authority over administrative boundaries

## 1.0 INTRODUCTION

This chapter provides the administrative and physical description of the district in terms of administrative boundaries and settlement patterns, physiographic and natural conditions. The chapter also describes pockets of poor communities in the district. The chapter also provides basic statistical indicators of the district in a fact sheet.

### 1.1 ADMINISTRATIVE, GEOGRAPHIC AND PHYSICAL DESCRIPTION

The Section provides details of the district profile, giving the 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

Nyando District is one of the 12 districts in Nyanza Province which was carved out of Kisumu District in 1998. It borders Kisumu District to the west, Nandi District to the north, Kericho District to the east and Rachuonyo District to the South. The district has a small shoreline to the south west where it touches Lake Victoria. It lies between longitudes 34<sup>0</sup>4' east and latitudes 0<sup>0</sup>23' south and 0<sup>0</sup>50' south.

Nyando District has a total land area of 1,168.4 km<sup>2</sup> and is divided into five administrative divisions namely, Upper Nyakach, Lower Nyakach, Nyando, Miwani and Muhoroni Divisions.

**Table 1.1 Administrative Units by Division**

Division	Area km <sup>2</sup>	No. of Locations	No. of Sub-Location
Upper Nyakach	176	6	11
Lower Nyakach	182.6	8	17
Miwani	225.7	3	14
Muhoroni	334.8	6	17
Nyando	249.3	6	17
<b>Total</b>	<b>1,168.4</b>	<b>29</b>	<b>76</b>

Source: District Commissioner's Office, Nyando, 2001

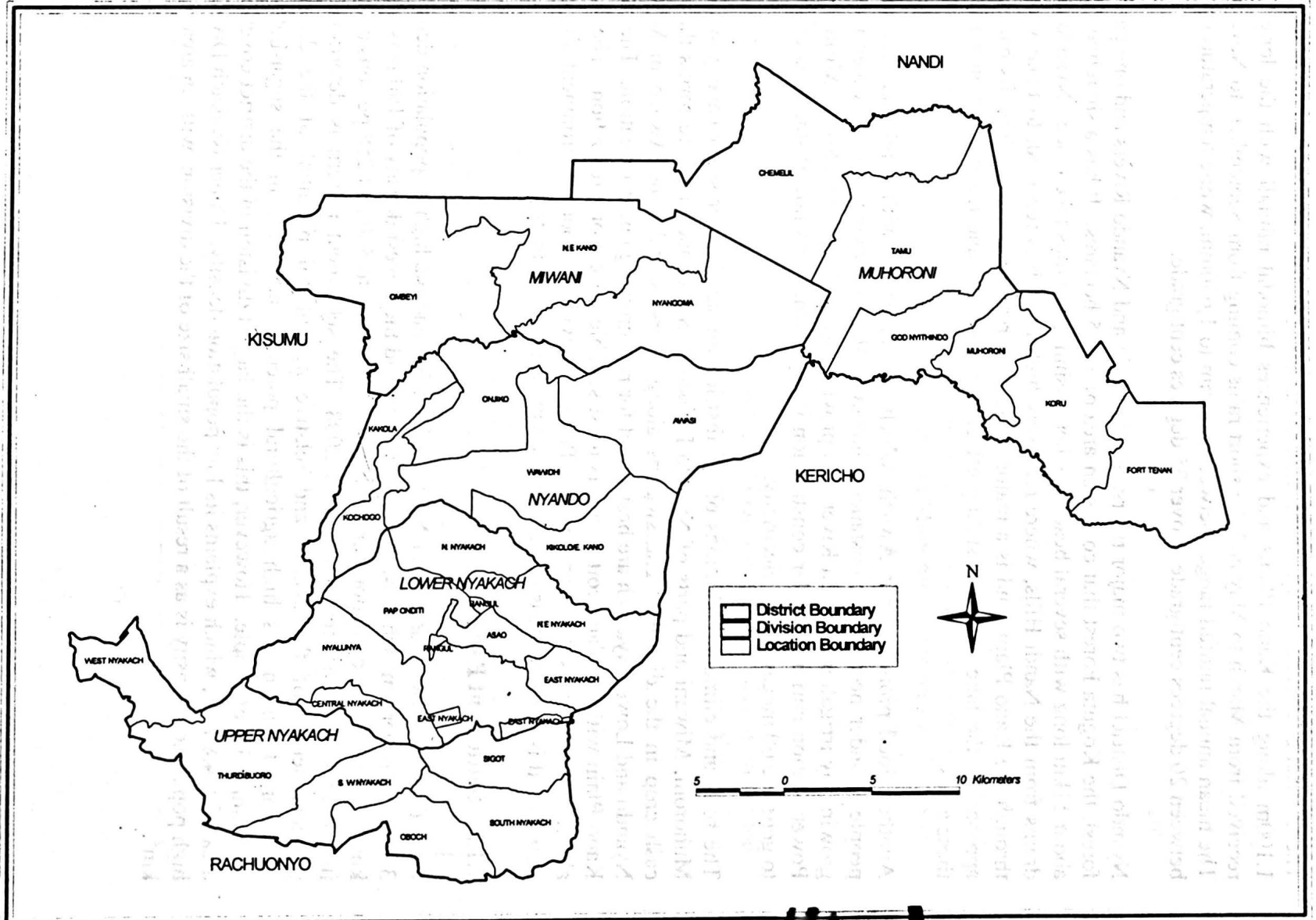
Table 1.1 presents the administrative divisions, number of locations and sub-location. There are three parliamentary constituencies in the district, namely Nyakach, which covers Upper Nyakach and Lower Nyakach Divisions; Muhoroni covering Miwani and Muhoroni Divisions; and Nyando covering Nyando Division.

#### 1.1.2 Physiographic and Natural Conditions

The district lies in the eastern part of a large lowland surrounding the Nyanza Gulf, much of it in Kano plains. The district can be divided into 3 main topographical land formations namely the Nandi Hills, the Nyabondo Plateau and the Kano Plains which are sandwiched between the two hills. The Kano Plains comprise of predominantly black cotton clay soils with moderate fertility and poor drainage. The rest of the district has sandy clay loam soils derived from igneous rocks.



# NYANDO DISTRICT (Administrative Boundaries)



The district's altitude ranges from 1,800m above sea level in Nyabondo Plateau to 1,100m along the Kano Plains and experiences bimodal rainfall with the long rains received from March to May and the short rains coming from September to November. The mean annual rainfall ranges between 600mm to 1,630mm, while temperatures range between 20 degrees centigrade to over 35 degrees centigrade.

Nyando District has two major rivers, Sondu Miriu and Nyando Rivers and one gazetted forest, the Koguta Forest that covers an area of 320.5 hectares. It has a shoreline that is about 11km long with several beaches where fishing activities take place. Nyando River drains from the Nandi Hills, where relatively high rainfall is received, to Lake Victoria through the Kano Plains and is a major cause of persistent flooding along its bank as it approaches the lake with devastating effects on resources and the population settled in these areas.

Another flood prone river is Awach, which is smaller but with similar effects on the people. Under normal circumstances, however, the two rivers provide water for rice growing by irrigation. Sondu River also provides water for running Sondu Miriu Hydro Power Station currently under construction in Nyakach. This power station is expected to generate 60 megawatts of electricity.

The soils and climatic conditions of the district are suitable for sugar cane growing in Muhoroni, Miwani and parts of Nyando Division. Sugarcane therefore forms the main cash crop in the district. The swamps along rivers Nyando and Awach in Miwani, Nyando and Lower Nyakach are best suited for rice growing under irrigation. The rest of Kano Plain with its black cotton soil is most suitable for cotton production. The higher altitude Nandi Hills and the Nyando Plateau provide a good environment for dairy farming. It is in these areas that coffee growing is being promoted.

### **1.1.3 Settlement Patterns**

Out of the five divisions, Upper Nyakach Division had the highest population density of 368 persons per km<sup>2</sup> while Muhoroni Division had the lowest density of 190 persons per km<sup>2</sup> in 1999. The population density is projected to rise to 500 and 258 persons per km<sup>2</sup>, in the two divisions, respectively, in 2008. The settlement pattern is determined by physical set-up of the district and relative agricultural potential of the divisions. Muhoroni Division has high agricultural potential and falls in the sugar-belt thus attracting a lot of people. However, this is the largest division in the district covering an area of 334.8 km<sup>2</sup>, which explains its low population density. Upper Nyakach Division's high population density is as a result of the small size of the division, with an area of 176 km<sup>2</sup>.

**Table 1.2 Population Densities by Division**

Division	1999	2002
Lower Nyakach	270	299
Miwani	257	284
Muhoroni	190	210
Nyando	259	287
Upper Nyakach	368	407
<b>Average</b>	<b>257</b>	<b>284.6</b>

Source: District Statistical Office, Nyando, 2001

A rapid assessment process conducted for the Community Based Nutrition Programme (CBNP) identified pockets of poor communities in Ayucha Sub-location of Awasi Location in Nyando Division, Kibigori Sub-location in Muhoroni Division and Gari Sub-location in Upper Nyakach. Other pockets of the poor are found in Agoro West and Awach Sub-locations in Lower Nyakach Division.

## 1.2 DISTRICT FACT SHEET

This fact sheet presents a summary of data on Nyando District that has been used for the analysis in this plan. The information was compiled with the support of the various sectors.

<b>Area</b>	
Total area	1,168.4 km <sup>2</sup>
Arable area	1,118 km <sup>2</sup>
Non-arable land	50.4 km <sup>2</sup>
Water mass	71 km <sup>2</sup>
Gazetted forest	3.2 km <sup>2</sup>
Urban area	Not Available
<b>Topography and Climate</b>	
Altitude:	
Highest	1,800 m
Lowest	1,100 m
Rainfall by stations:	
Ahero	1,260 mm
Muhoroni	1,525 mm
Koru	1,103 mm
Temperature range:	
Highest	35 <sup>0</sup> C
Lowest	20 <sup>0</sup> C
Temperature average	24.5 <sup>0</sup> C

<b>Demographic and Population Profiles</b>		
Population		332,137
<b>Population Structure</b>		
Total no. of males		162,381
Total no. of females		169,756
Male/Female sex ratio		100:104
Total no. of youthful population (15-25)		70,036
Total population of primary school going age (6 - 13):	Boys	39,398
	Girls	37,773
Total population of secondary school going age (14-17):	Boys	18,791
	Girls	17,932
Total labour force		166,619
Dependency ratio		100:99
Population growth rate		3.4 per cent
<b>Density</b>		
Highest density -Upper Nyakach		407 persons per Km <sup>2</sup>
Lowest density -Muhoroni		210 persons per Km <sup>2</sup>
Average density -Nyando District		284.6 persons per Km <sup>2</sup>
<b>Rural Population</b>		
Rural population at the start of the Plan period		248,166
<b>Urban Population</b>		
Number of towns		4
Urban population at the start of the Plan period		83,971
Crude birth rate		40/1000
Crude death rate		15/1000
Life expectancy		49 years
Infant mortality rate		89/1000
Under 5 mortality rate		110/1000
Total fertility rate		5.8
<b>Socio-Economic Indicators</b>		
Total no. of households		68,371
Average households size		4.4
Number of female headed households		Not available
Number of children headed households		Not available
No of disabled		Not available
Children needing special protection		Not available
Absolute poverty (rural and urban)		68.9 per cent
Contribution to national poverty		3.05 per cent
Average household incomes: Sectoral contribution to household income:		
Agriculture		52%
Rural self-employment		10%
Wage		25%
Urban self employment		10%
Other		3%
No. of unemployed		57,860
<b>Agriculture</b>		
Average farm size (small scale)		2 ha
Average farm size (large scale)		10 ha
Main food crops produced		Maize, cassava, sorghum, sweet potatoes
Main cash crops produced		Rice, sugarcane, cotton, coffee
Total acreage under food crops		182 km <sup>2</sup>
Total acreage under cash crops		240 km <sup>2</sup>
Main storage facilities (on and off-farm)		Traditional stores, improved stores, silos
Population working in the agricultural sector		125,348
Potential small holder irrigation schemes		7,400 ha
Area available for agricultural expansion		27,550 ha

Land carrying capacity	1 livestock unit per ha	
Main livestock breed	Zebu	
Population working in the livestock sector	83,700	
Main species of fish	Nile Perch, tilapia, omena, mudfish, catfish, schille	
No. of fish ponds	95	
No. of fish farmers	75	
No. of landing sites	6	
No. of fishermen	365	
No. of fishing crafts	179	
Beach seines	61	
No. of gill nets different sizes	1,471	
No. of long lines (hooks)	13,721	
Mosquito seines	131	
Bandas	2 (Kusa and Sango Rota)	
Size of gazetted forest:	320.5 Ha	
Main forest products	Building poles, posts, fuel wood, charcoal	
% of people engaged in forest related activities (Saw mills, furniture works etc.)	Not available	
<b>Cooperatives</b>		
Number of active cooperatives by type (i.e. SACCOs, agricultural coops, unions, housing etc.)		
<b>Type of Co-op Society</b>	<b>Number</b>	<b>Dormant</b>
Sugar cane	80	12
Consumers	2	-
Coffee	1	1
Cotton	2	-
Dairy	3	2
Fishermen	-	1
Rice	-	2
Bee-keeping	-	1
Construction	-	2
Co-op union	-	3
Savings and credit	7	9
Rural SACCO	1	1
Total	96	34
Key Coops which have collapsed in the last 5 years	11	
<b>Total registered members by type:</b>		
Sugar cane	42,569	
Consumers	402	
Coffee	1,670	
Cotton	1,118	
Fishermen	Dormant	
Rice	Dormant	
Bee-keeping	Dormant	
Construction	Dormant	
Savings and credit	4,984	
Total	50,743	
<b>Total turnover by type (Kshs):</b>		
Sugar cane	193,266,790	
Consumers	750,000	
Coffee	320,000	
Cotton	88,800,000	
Fishermen	Dormant	
Rice	Dormant	
Bee-keeping	Dormant	
Construction	Dormant	
Savings and credit	26,411,702	

Total	220,837,292	
<b>Water and Sanitation</b>		
Number of households with access to piped water	11,624	
Number of households with access to potable water	22,110	
Number of permanent rivers	5	
Number of wells:		
With hand pumps	46	
Without hand pumps	138	
Number of protected springs	32	
Number of boreholes	263	
Number of dams	5	
Number of households with roof catchments	848	
Average distance to nearest potable water point	1 km	
Number of VIP latrines	2,100	
<b>Education Facilities</b>		
<b>Pre-Primary</b>		
Number of pre-primary schools	316	
Total enrolment	Boys	(3,361) 24%
	Girls	(6,592) 47.6%
Total drop-out rates (boys & girls)	0%	
Teacher/pupil ratio	1:31	
Average years of school attendance	Boys	2
	Girls	3
<b>Primary</b>		
Number of primary schools	291	
Total enrolment by sex:	Boys	(36,968) 93.8%
	Girls	(34,487) 91.3%
Total drop-out rates by sex:	Boys	3%
	Girls	6.2%
Teacher/pupil ratio	1:31	
Average years of school attendance by sex:	Boys	8
	Girls	8
<b>Secondary</b>		
Number of secondary schools	45	
Total enrolment by sex	Boys	(4,513) 24%
	Girls	(4,082) 22.7%
Total drop-out rates by sex	Boys	3%
	Girls	6.2%
Teacher/pupil ratio	1:15	
Average years of school attendance by sex	Boys	4
	Girls	2
<b>Tertiary</b>		
Number of other training institutions (e.g colleges, polytechnics etc)	7	
Main type of training institutions	Youth polytechnics	
<b>Adult Literacy</b>		
Number of adult literacy classes	76	
Enrolment by sex	Males	221
	Female	1,769
Adult literacy classes attendance	Males	119
	Female	1,053
Dropout rates by sex:	Males	46.2%
	Female	40.5%
Literacy levels by sex:	Males	91.3%
	Female	77%
<b>Health</b>		
Most prevalent diseases	Malaria, URTI, diarrhoea, skin diseases, worms	



Doctor/patient ratio	1:50,000
Number of health facilities	36
GOK hospital	1
Sub-Dist. hospitals	2
Private hospitals	3
Health Centres	9
Dispensaries	16
Nursing/maternity homes	5
Average distance to the nearest health facility.	5 km
<b>Energy</b>	
Number of households with electricity connections	1,801
Number of trading centres with electricity	10
% Rural households using solar power	2%
Existing Power line network 33,000 Volts 11,000 Volts Secondary Transmission (33 kv) step down sub-stations	68 km. 55 km Miwani, Chemelil and Muhoroni
% Households using firewood/charcoal	90%
% Households using kerosene, gas or biogas	20%
<b>Transport Facilities</b>	
Total kilometres of roads (i.e. earth, murrum, (RAR):	
Bitumen	25.5 km
Gravel	128.8 km
Earth	818.4 km
Bitumen	136.5 km
Gravel	12.0 km
Earth	14.0 km
Total length of railway line and number of stations	40km
Number of waterways	0
Number of public service vehicles	N/A
<b>Communication</b>	
Number of households with telephone connections	232
Number of private and public organizations with telephone connections	329
Mobile service coverage	30%
Number of post/sub-post offices	Not available
Number of telephone booths	73
Number of households without radios	Not available
Number of cyber cafes	Not available
<b>Trade, Commerce and Tourism</b>	
Number of trading centres	7
Number of hotels	Not available
Number of tourist class hotels	0
Main tourist attractions	0
Number of registered hotels	Not available
Number of licensed businesses	Not available
Total number of informal sector enterprises	Not available
<b>Banks and Financial Institutions</b>	
Number of Banks	1
Volume of credit provided	Not available
Number of other financial institutions	0
Volume of credit provided	0
Number of Micro-Finance Institutions	0

## **CHAPTER TWO**

### **MAJOR DEVELOPMENT CHALLENGES AND CROSS CUTTING ISSUES**

## **2.0 INTRODUCTION**

This chapter provides an overview of the last Plan 1997-2001 and attempts to look in broad terms whether the expectations of the plan were met. It also analyses the implementation of programmes and projects and attempts to show any achievements, constraints or lessons learnt. The Chapter then looks at linkages between the Plan and the National Development Plan and other Policy documents. Finally it looks at major development challenges the district is likely to face in the Plan period and then analyses other crosscutting issues, which are relevant to the district.

### **2.1 OVERVIEW OF 1997 - 2001 PLAN**

At the start of the last Plan period Nyando District formed part of Kisumu District Development Plan for 1997 – 2001. Although the district had potential for the development of the key sectors of the economy, the level of development was low due to failure in exploiting the full potential. The agriculture sector was not performing to the required level, resulting in low overall food production. The district had to rely on food imported from outside to supplement locally produced food. There was over-reliance on sugar-cane for income, neglecting other cash crops. After the collapse of the cotton industry, cotton growing was abandoned by the farmers thus worsening income levels. In terms of livestock, the district relied on traditional animals instead of improved ones that would be more economical to the district. Due to poor farming practices coupled with lack of concern for tree planting, the district suffered from soil erosion and environmental degradation. Fishing as a source of food and income was affected by the invasion of the lake by water hyacinth. Also, there was a problem of fish marketing due to the collapse of a number of fishermen co-operatives societies in the district.

The level of access to safe drinking water was another issue of great concern as it was too low. The district is prone to flooding during the wet season thus resulting in contamination of water sources. The result is an upsurge of water borne diseases. The other extreme condition is drought when people have to walk long distances in search of water or rely on unsuitable water from ponds which is shared with livestock.

In the education sub-sector, the district lacked the necessary facilities such as classrooms and desks in most primary schools. A number of secondary schools did not have laboratories, which are essential for better performance in science subjects. This situation generally resulted in low academic standards in the district.

In the health sub-sector, the quality of primary health care was an issue of concern, given the effect of floods and drought on water and sanitation, nutrition and anaemic diseases. Also, due to low incomes most of the people were unable to meet the cost of medical care. Other sectors that were in poor development state included the Jua Kali sector and trade and industry which was affected by poor infrastructure in the district.

The district came up with objectives that were expected to be achieved over the Plan period by the different sectors. In agriculture, the objectives were to increase overall food production in the district as well as to promote coffee growing. The sector also aimed at reviving cotton production, which had collapsed. Together with the environment

sub-sector, this sector also planned to protect soil and sustain fertility. The veterinary sub-sector objectives included control of major immunizable diseases, creating awareness on causes and management of livestock disease as well as enhancing meat inspection. The plan also aimed at increasing access to safe drinking water.

In the human resource development sector, the plan sought to improve academic standards in the district and to improve on the quality of primary health care activities. Other sectors targeted for improvements were the jua kali and physical infrastructure.

By the end of the 1997-2001 Plan period the situation remained generally as it was at the beginning of the Plan period. In some sectors like agriculture and infrastructure the situation even worsened. Although a number of activities were undertaken with a view to address problems that were identified, other factors worked against these efforts. One of these was the population growth which caused a great deal of pressure on services in the education and health sub-sectors. The other factors that worked against the efforts made were problems in the sugar industry, rise in HIV/AIDS prevalence and El-Nino rains.

The district depended mainly on sugarcane for income and so the collapse of the sugar industry meant increase in poverty level in most parts of the district. HIV/AIDS prevalence which was slightly above 25 per cent at the start of the Plan period had risen to over 30 per cent by the end of the plan under review. The disease is currently an issue of great concern in the district with the sugar belt area being seriously affected. The El nino rains which occurred at the beginning of the Plan period caused massive destruction to infrastructure especially the road network, educational and health institutions.

## 2.2 IMPLEMENTATION OF THE 1997 - 2001 PLAN

The objectives in the 1997-2001 Plan were to be achieved through implementation of prioritised projects and programmes for each of the sectors. Table 2.1 presents the number of projects proposed during the 1997 – 2001 Plan period and the actual number implemented per sector. Out of a total of 138 projects proposed for Nyando District in the 1997 – 2001 Plan, only 41 projects were implemented, which is about 30 per cent implementation rate. Of the remaining projects, 76 will be carried forward to the next plan period while the rest will be abandoned for various reasons like priority and strategy.

**Table 2.1 Review of 1997 – 2001 District Development Plan Implementation**

Department	No. of Projects Proposed	No. of Projects Implemented	Percentage Implementation Status of	Total Cost of Projects Implemented (Kshs.) Millions
Agriculture and Livestock	11	4	36	1,791,091
Veterinary	5			
Co-operatives	1	1	45	2.25
Education	14	11	78	
Roads	18	3	16	-
Water	9	7	19	38
Probation	2	0		
Children's	2		0	Nil
Social Services	4	0	0	
Culture	3	0	0	Nil

Sports	1	0	0	Nil
Adult Education	7	1	14	10 M
Applied Technology	3	0	0	Nil
Fisheries	7	1	14	
Commerce & Industry	2	0	0	
Environment	3			
Forests	10			
Health	20	10	50	-
Local Government	7	0	0	Nil
Energy	5	1	10	
Police	1	1		
Planning	3	0	0	Nil
<b>Total</b>	<b>138</b>	<b>41</b>	<b>29.7</b>	<b>52,041,091</b>

Source: District Development Office, Nyando, 2001

Over reliance on sugarcane as the only cash crop coupled with the problems in the industry, has had a negative impact on income levels of the farmers and socio-economic status especially following the collapse of the sugar industry. Cotton had been an alternative cash crop for the district and the plan targeted improvement of cotton growing. Not much has been achieved in this area because the root cause for the collapse of the cotton industry is far beyond the control of the district. The only other cash crop that could supplement sugarcane in the district was rice grown under irrigation, which has faced similar problems.

The 1997 – 2001 Plan intended to maximise the benefits of the fisheries resource in a sustainable manner. This was to be done through the revival of fishermen cooperative societies in the district. Through these societies the fishermen would pool their resources together to help them develop the fishing industry. The improvement of sanitary facilities at the beaches would result in a significant reduction in post harvest losses increasing the fishermen earnings.

Control of the water hyacinth took place during the Plan period. Fish processing factories have been constructed in Kisumu Town opening marketing channels for the fishermen. Lack of infrastructure like all weather roads, power, potable water etc. resulted in the fishing industry not being exploited to its full potential.

The rehabilitation of water facilities as targeted in the 1997 – 2001 Plan period was hampered by natural calamities such as the El-Nino. Another factor was the population growth, which outstripped water supply. There was also the problem of agricultural and industrial pollutants making treatment of water expensive. Loss of the economically active population through AIDS resulted in many water disconnections for non-payment and hence low and unstable revenue base.

The veterinary activities in the district were affected by major changes in government policies like the policy of privatisation and liberalization. The privatisation of tick control, AI services, clinical services, laboratory services have negatively impacted on the dairy industry that was evolving in the district. Prior to privatisation, the dipping percentage of livestock was nearly 60 per cent of cattle population. After privatisation, the dipping percentage dropped to below 5 percent. The tick borne diseases went up and livestock mortalities rose. The livestock population is not expanding as expected hence the dairy and meat products deficits. Therefore, the district is now an importer of both dairy and livestock products. The district had two A.I schemes and at its peak over 1,000



inseminations were achieved. After privatisation of the services, no insemination is being carried out leading to great loss in terms of milk and high-grade cows. To reverse the trend, cooperative movement need to be assisted with equipment and training to take up this vital service.

Lessons learnt were that there was need to diversify in the area of cash crops to avoid situation where failure in one particular industry affects the whole economy of the district. There is also great need for a balance between cash and food crop production so that in the event of failure due to problems of marketing of cash crops, the farmers can rely on food from their farms for sustenance.

Another lesson learnt was that good physical infrastructure is necessary for improved production in agriculture and fisheries. In a situation where the road network is poor, as in district, the farm and fisheries products that are perishable cannot reach the market in good time resulting into losses by the farmers and fishermen. To enable the storage of fish at the landing beaches, for instance, it is necessary that there is electricity supply to these beaches.

It was also learnt that there need to be an effective and efficient marketing machinery to assist the farmers and the fishermen in marketing their produce. The collapse of cooperative societies has left the district without suitable alternative marketing channels.

Liberalization of veterinary services in the face of general poverty made it difficult to effectively deliver veterinary services. Even access to education and health services was reduced by the introduction of cost sharing in these services. A review of these policies may be necessary to ensure that nobody is denied these essential services because they cannot afford to meet the costs.

### **2.3 DISTRICT DEVELOPMENT PLAN LINKAGES WITH THE 2002-2008 NATIONAL DEVELOPMENT PLAN AND OTHER POLICY DOCUMENTS**

The 2002-2008 National Development Plan outlines broad policy framework that the Government wishes to attain within the next seven years. The theme of the Plan directs the policy objectives and targets to be achieved by various sectors of the economy in addressing poverty levels by the end of the plan period. The District Development Plan on the other hand translates the broad policy objectives of the National Development Plan into activities that will be implemented in the Plan period.

The District Development Plan shares the same theme with the National Development Plan 2002-2008. The theme is 'Effective Management for Sustainable Economic Growth and Poverty Reduction'. In line with this theme sectoral objectives are geared towards poverty reduction by putting in place intervention measures as outlined in the district PRSP report. The Plan has been prepared with key policy documents in mind. Some of the important policy documents include sectoral strategic plans, sessional papers on structural adjustment, HIV/AIDS, industrialization, among others.

The current District Development Plan will run for a 7 year period as is the case with the National Development Plan. The two provide medium term linkages between the short term Poverty Reduction Strategy Paper Medium Term Expenditure Framework



(PRSP/MTEF) which covers a period of 3 years and the long term National Poverty Eradication Plan 1999-2015.

The priorities and strategies set out in the PRSP have been developed into projects and programmes in the District Development Plan. Reference is made to the National Poverty Eradication Plan which provides long-term framework for poverty alleviation. The District Development Plan, the PRSP and the National Development Plan are linked through the Mid Term Expenditure Framework (MTEF) and annual budget.

Linkages to the District Development Plan are also provided through Local Authorities Development Plans for Nyando County Council, Ahero Town Council and Muhoroni Town Council. The plan is also linked to multi sectoral programme plans like the Lake Victoria Environmental Management Programme (LVEMP) and National HIV/AIDS Strategic Plan (2002-2005) as well as Non-Governmental Organizations Development Plans.

## **2.4 MAJOR DEVELOPMENT CHALLENGES AND CROSS CUTTING ISSUES**

There are a number of challenges and cross cutting issues that will have to be addressed in order to attain some measure of success in the plan's desired goals of poverty reduction and sustainable economic growth. These are issues such as the population growth, poverty, HIV/AIDS, gender inequality and disasters like floods, among others.

In Nyando District the problem of frequent flooding has been an issue of major concern and posed serious challenges to the development of other sectors. The floods affect agricultural production and has been the main cause of damage to the road network. Another serious challenges to the development in the district is the problem in the sugar industry that has led to the closure of Muhoroni Sugar Factory and operational problems in other sugar factories. This has consequently led to less income to the people in the district. This section will highlight some of these issues in the light of their implications to the development of the district.

### **2.4.1 Population Growth**

The population of Nyando District according to the 1999 population census results was 299,930. This gives an inter census population growth rate of 3.4 per cent per annum. At this rate, the district's population is projected to be 332,137 at the start of the Plan period in January, 2002. Assuming this rate of growth is maintained, the district's population is projected to increase to 407,300 by the end of the planning period in 2008 as shown in Table 2.2. This rapid growth if unchecked will exert pressure on the available resources and have contra effects on programme and strategies set in this Plan period.

**Age/Sex Structure:** Table 2.2 also presents the population by age and sex. There are more males than females from the age groups 0-4 to 15-19. However, the number of females for the rest of the age groups from 20-24 is more than that of males. The overall sex ratio of the population is 100:104. The population is characterically very youthful with over 44 per cent of the total population falling below 15 years of age. This is a development challenge as much of the district resources will be directed towards meeting basic social services for the young members of the population.

**Table 2.2 Population Projections by Age Groups**

Age Cohorts	1999		2002		2004		2006		2008	
	M	F	M	F	M	F	M	F	M	F
0-4	23,747	23,709	26,297	26,255	28,147	28,102	30,128	30,080	32,248	32,196
5-9	21,198	20,831	23,474	23,068	25,126	24,691	26,894	26,428	28,787	28,288
10-14	23,459	22,116	25,978	24,491	27,806	26,214	29,763	28,059	31,857	30,033
15-19	19,426	18,795	21,512	20,813	23,026	22,278	24,646	23,845	26,380	25,523
20-24	12,347	13,649	13,673	15,115	14,635	16,178	15,665	17,317	16,767	18,535
25-29	8,770	9,891	9,712	10,953	10,395	11,724	11,127	12,549	11,910	13,432
30-34	6,818	8,390	7,550	9,291	8,081	9,945	8,650	10,644	9,259	11,393
35-39	6,249	7,767	6,920	8,601	7,407	9,206	7,928	9,854	8,486	10,547
40-44	5,450	6,290	6,035	6,965	6,460	7,456	6,914	7,980	7,401	8,542
45-49	4,709	5,160	5,215	5,714	5,582	6,116	5,974	6,547	6,395	7,007
50-54	4,016	4,123	4,447	4,566	4,760	4,887	5,095	5,231	5,454	5,599
55-59	2,666	3,036	2,952	3,362	3,160	3,599	3,382	3,852	3,620	4,123
60-64	2,405	3,007	2,663	3,330	2,851	3,564	3,051	3,815	3,266	4,083
65-69	1,933	2,552	2,141	2,826	2,291	3,025	2,452	3,238	2,625	3,466
70-74	1,452	1,863	1,608	2,063	1,721	2,208	1,842	2,364	1,972	2,530
75-79	936	1,055	1,037	1,168	1,109	1,250	1,188	1,338	1,271	1,433
80 +	1,054	1,061	1,167	1,175	1,249	1,258	1,337	1,346	1,431	1,441
<b>Total</b>	<b>146635</b>	<b>153295</b>	<b>162381</b>	<b>169756</b>	<b>173807</b>	<b>181701</b>	<b>186037</b>	<b>194487</b>	<b>199128</b>	<b>208172</b>

Source: District Statistics Office, Nyando, 2001

**Primary school going age (6-13):** The age group of children of primary school going age was 35,578 males and 34,110 females during the population census in 1999. This figure is projected to increase to 39,393 males and 37,773 females by the start of the Plan period. It is projected that by the end of the Plan period there will be 48,314 boys and 46,321 girls in the 6 – 13 age bracket, as shown in Table 2.3.

This increase in the population of primary school going age has implications on existing primary school facilities. These facilities are not adequate and with the increase in primary school age population, there will be need for expansion of the facilities.

**Secondary school going age (14 – 17)** The result of the 1999 census gives those of secondary school going age as 16,969 males and 16,193 females. This figure is projected to be 18,791 males and 17,932 females in 2002 and is expected to rise to 23,044 boys and 21,990 girls by the end of the Plan period, as shown in Table 2.3. The increase in the population for the secondary school going age group has implications on secondary school in the district. The age group also ends up looking for employment in the job market after school and so has direct relevance to unemployment problems.

**Table 2.3 Population Projection by Selected Age Groups and Sex**

Age Group	1999		2002		2004		2006		2008	
	M	F	M	F	M	F	M	F	M	F
6 - 13	35,578	34,110	39,393	37,773	42,165	40,431	45,132	43,276	48,308	46,321
14 - 17	16,969	16,193	18,791	17,932	20,113	19,194	21,529	20,544	23,043	21,990
15 - 49		68,653		76,025		81,378		87,101		93,230
15-64	71,827	78,635	79,540	87,079	85,137	93,206	91,128	99,765	97,540	106,785

Source: District Statistics Office, Nyando, 2001

**Females reproductive age (15 – 49):** This age group that represents women in the reproductive age, and is projected to be 76,025 at the start of the Plan period and this number is projected to reach 93,230 by the end of the Plan period, as shown in Table 2.3. This particular age group is important as it has implication on the fertility rate making it necessary to improve on Maternal Child Health (MCH) under the primary health care services.

**Labour force (15-64):** According to Table 2.3, the labour force in the district at the start of the Plan period is projected to be 166,619. This figure is projected to reach 204,325 by the end of the planning period with far reaching implication on dwindling job market. In order to absorb the increasing labour force, the district will invest more in the productive sectors in the district. Modern agricultural practice, improved fish marketing will be encouraged during the Plan period, while agro-based industries and the Jua Kali sector will be promoted.

#### 2.4.2 Poverty

At the national level, the poor are defined as those who are unable to afford minimum basic human needs comprising of food and non-food items. There are three measures of poverty used in general, namely: the food poverty line, the hardcore poverty line and the absolute (or overall) poverty line. The food poverty line is a measure below which people do not meet their minimum food requirement. This for Kenya has been set at 2,250 calories per day per adult based on FAO/WHO recommendations. This works out to Kshs. 927 and Kshs. 1,254 per adult per month in rural and urban areas respectively. The overall poverty line which includes expenditure on non-food items was computed at Kshs. 1,239 per month per adult.

According to the Welfare Monitoring Survey (WMS) III of 1997, Kisumu District from which Nyando District was created, contributed 2.94 per cent to rural food poverty nationally. The contribution of Kisumu to overall rural poverty was 3.05 per cent. Assuming that, Nyando and Kisumu Districts contributed proportionately, as they are today, it is estimated that there were about 199,318 individuals below the rural food poverty line in Nyando District. This accounts for about 66 per cent of the district's population. Based on the contribution of 3.05 per cent to overall rural poverty the district had about 206,776 individuals or 68.9 per cent of the population below the absolute poverty line.

The major causes of poverty in Nyando District include: poor agricultural technologies, lack of proper storage facilities, erratic and unreliable rainfall, poor and inaccessible road network, frequent floods, problems with the sugar, rice, cotton and fish industries, lack of title deeds, poor water and sanitation systems, impact of HIV/AIDS, low accessibility to health services, among others.

The division that is most affected by poverty has been identified as Miwani Division. The DANIDA (CBNP) has embarked on a community based multi-sectoral intervention programme to be implemented in Miwani Division over the Plan period.

### **2.4.3 HIV/AIDS**

HIV/AIDS has grown to be a major crisis in Nyando District not so much because of the high prevalence rate but due to the rising trend of infections. According to the Ministry of Health the HIV/AIDS prevalence has risen from 19 per cent in 1990 to 29.4 per cent in 1999 for the district compared to the national prevalence rate which was 14 per cent. Strong Luo cultural beliefs, poverty in the community and stigmatisation of infected/affected people have been a hindrance to the control of HIV/AIDS in the district

HIV/AIDS has negative impact to the general development of the district. The disease has overstretched the demand for health services available in the district. The cost of treatment of opportunistic infection has risen as a result of AIDS. The district has lost a large number of those who are economically active, those who are skilled and professionals. As a result of deaths due to AIDS, the number of orphans has grown, as well, as the school dropout rate.

The industrial sub-sector has not been spared either with the sugar industry in the district suffering due to high medical bills for workers as well as from frequent absenteeism due to illness. The disease lowers labour productivity and increases the cost of production.

Due to the nature of the HIV/AIDS problem, all the stakeholders need to join hands to fight the spread of the disease. The Ministry of Health has done a lot in its AIDS campaign but it has now become clear that the fight against HIV/AIDS is far greater than the ministry can handle on its own. In the district there are other organizations involved in one way or another in mitigating the impact of HIV/AIDS. Among these are Muhoroni AIDS Awareness and Counselling Services (MAACS) that has been working with communities and industries in Muhoroni Division on HIV/AIDS activities. Another organization working with those infected/affected is a CBO by the name, Home Based Care in Miwani Division.

Due to the magnitude of the problem there is need for more stakeholders to be brought on board. With the launching of the Constituency AIDS Control Committees (CACC) and the District AIDS Control Committee (DACC) it is expected that efforts to involve more community initiatives and participation in the fight against the scourge will increase.

The following are the negative impacts of HIV/AIDS: overstretched health facilities with growing number of HIV/AIDS patients, health sub sector spending big sum of money on purchase of drugs for opportunistic infection, high number of orphans and widows, loss of professionals and skilled people, high school dropout rate and collapse of other sectors i.e. agriculture, industries due to lack of manpower and high expenditure on medical bills.



AIDS has affected all sectors of our economy in the district. The agricultural sector, which is a key sector, has been adversely affected resulting to low agricultural production. The sugar companies in the district have expressed concern at the impact of the disease on their workforce and their families, farmers and the community around their companies. The scourge targets the age bracket that provides labour for the agricultural sector. The result is lower income levels for the families and low food production.

Another important sector affected by HIV/AIDS is the human development sector with the education sub-sector losing about 4 teachers every month in the district. The disease has contributed to school drop-out, as many of the students are unable to meet the school fees obligations due to the death of their parents or other financial implications arising from HIV/AIDS. The result is an increase in child labour. The disease affects the student community itself and studies by the Ministry of health indicate a prevalence rate of 8 per cent among the student community in this region.

Within the district there are areas of high rate of HIV/AIDS related deaths. Information at the Civil Registrar's Office indicate that Miwani Division ranks high in the number of deaths and Nyangoma Location has been singled out as a location that is badly affected.

Intervention measures to be put in place by the various stakeholders include prevention and advocacy; treatment and control of STIs; prevention of mother to child transmission; treatment and support of the infected and affected; mitigation of socio-economic impact including counselling and emotional support; and home based care and provision of opportunities for treatment and support.

#### **2.4.4 Gender Inequality**

Gender issue in development is becoming increasingly important, as it is critical to achieving all the primary development objectives that include poverty reduction. It is widely acknowledged, "Development if not engendered is endangered" (Global Human Development Report, 1995).

As a concept, gender marks a fundamental axis of power relations in society. It is used to define distinctions in activity, access and control of resources and participation in decision-making.

In the district, women have less access than men to resources and limited enjoyment of socially valued goods, opportunities and rewards. The effective mainstreaming of gender issues in development matters require the integration of equality concerns in the analysis, formulation and implementation of policies, programmes and projects with the objective of ensuring positive impact for both women and men, and in bridging gender disparities.

The inferior position of women in society, especially within marriage is a major issue of concern in the district. Traditional ownership and inheritance patterns continue to marginalize women and girls and prevent them from having access to, and gaining control of productive resources such as land. In addition, the traditional division of labour overburdens women and blocks them from positions of power and influence.

In this Plan period, adequate financial allocation will be made to activities that benefit women directly. Small-scale enterprises that will promote women's access to productive resources, thereby addressing their social, educational and health will be enhanced.

The girl child is disadvantaged in areas of education where preference is given to boys, in cases where parents are faced with a problem of choice between the two sexes. The average years of primary school attendance for girls is 6 years, for secondary school attendance it is only 2 years for girls. This signifies a very high dropout rate for girls. Even when they are left in school the girls spend a lot of time performing household chores like drawing water, fetching firewood and cooking leaving them with very little time for studies. To address this, some level of awareness will be created on the importance of giving equal opportunities to both sexes for their future development.

#### **2.4.5 Disaster Management**

The poor soils and drainage capacity in the district makes the district prone to flooding when it rains. This affect planting and survival of planted crops, which sometime get swept by the ravaging floods. The floods also affect tree planting, livestock and the people. Frequent floods cause the spread of livestock diseases such as black quarter and anthrax.

Floods wash away tree seedlings in tree nurseries thus discouraging farmers from practicing agro-forestry. During floods, outbreak of such diseases as cholera dysentery and typhoid are rampant. At this time also the environment promotes mosquito breeding hence high cases of malaria in the district. The floods also destroy houses, pit latrines and zero grazing units.

The other extreme climatic condition is the drought, which cause food and water shortages. Drought reduces the survival rate of seedlings even those planted during the rainy season. It also negates the efforts made on rural afforestation. In Nyando such negative impact can be seen in Koguta Hills Forest, which has been afforested since 1960s, but much of the established plantation dried up due to the 1997 drought.

Fires are also common during the dry season. Fires burn the vegetation cover exposing the area to soil erosion during the rains. Fires also destroy sugarcane farms making farmers suffer massive economic loses.

There is an institutional arrangement in place for disaster response right from the national level to the district level. The Office of the President through the Department of Relief and Rehabilitation co-ordinate and monitor disasters throughout the country. At the provincial level there is a Provincial Disaster Co-ordination Committee while at the district level the role of disaster management is given to the District Disaster Co-ordination Committee.

There is need for monitoring in order to forecast disaster especially seasonal ones like floods, epidemics, and armyworms. Besides, such seasonal disasters that are easy to forecast, there will be a mechanism of preparedness in place in case of the unpredictable disasters such as fires, accident etc. Effective communication systems between the police, fire fighters and the hospitals in case of occurrence of disasters will be enhanced during the Plan Period. The District Disaster Co-ordination Committee will ensure that



there is a certain level of preparedness to handle any kind of disaster in the district and to seek for support from the Provincial or National level where necessary.

#### **2.4.6 Environmental Conservation and Management**

Much of Nyando District falls with the Kano Plains with a few rivers that drain into the Lake Victoria from the hills in Nandi and Kericho Districts. Lack of proper management of water flowing from the hills has caused serious soil erosion problems in Lower Nyakach and Miwani Divisions. This has resulted to huge and ugly galleys such as Katuk Ondejo in Lower Nyakach. Frequent flooding during the rain periods also has been a matter of great environmental concern.

There is also a problem of effluent management by the sugar and agro-chemical industries in the district. The Lake Basin Development Authority has a part of its project portfolio, river pollution monitoring visit to check on irresponsible effluent disposal by the industries. Other organisation undertaking pollution monitoring includes OSIENALA. The Forest Department is involving the communities in afforestation programme especially of hilltops.

### CHAPTER THREE

## DISTRICT DEVELOPMENT STRATEGIES AND PRIORITIES



### 11.3.1 Importance of the Sector in the District

The Agriculture and Rural Development Sector is the main source of employment and is key to the poverty reduction efforts in Nairobi District. Agriculture contributes 52 per cent of the household incomes and employs over 125,348 people while the livestock

### **3.0 INTRODUCTION**

This chapter maps out priority measures that the district will undertake to achieve its objectives of reducing the incidences of poverty and spurring economic growth. The chapter clearly states the development path envisaged for the district for the next seven years. It is prepared in line with the following PRSP/MTEF and National Development Plan broad sectors:-

- Agriculture and Rural Development
- Physical Infrastructure
- Tourism, Trade and Industry
- Human Resources Development
- Information Communication Technology
- Public Administration, Safety, Law and Order

### **3.1 AGRICULTURE AND RURAL DEVELOPMENT**

#### **3.1.1 Sector Vision and Mission**

The sector vision for the Agriculture and Rural Development sector is “sustainable 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**

In response to the sector vision and mission the district will enhance promotion of small scale production, fruit tree (mangoes, paw paw and citrus) production and organised marketing, irrigated vegetable production and marketing, diversification from sugarcane as the key cash crops to other crop such as groundnuts, cotton and green grams in Miwani and Muhoroni Divisions and promotion of agro-forestry as a commercial entity through production of tree products e.g. timber poles, fuel wood. This will also enhance environmental conservation, commercialisation of production through formation of conditionalities based Common Interest Groups (CIGs) with focus on marketing strategies and enhancement of household food security through increased cereal production and increased alternative food crops like cassava and sweet potatoes.

The Forest Department will establish individual tree owned nurseries in which farmers sell seedlings and get some income. Individual farmers will also be encouraged to plant woodlots in their farms.

In medium term the sector will ensure that all households have access to safe water. This will be achieved by increasing accessibility to potable water within the shortest distance possible and at affordable cost.

#### **3.1.3 Importance of the Sector in the District**

The Agriculture and Rural Development Sector is the main source of employment and is key to the poverty reduction efforts in Nyando District. Agriculture contributes 52 per cent of the household incomes and employs over 125,348 people while the livestock

sector employees 83,700 people. The main food crops produced in the district are maize, cassava, sorghum and sweet potatoes. The cash crops grown in the district are rice, sugarcane, cotton and coffee. The Forestry sub-sector helps in environmental conservation, by planting trees in many areas in order to reduce the rate of soil erosion. The sub-sector creates employment for casual workers. Tree nurseries established purely for commercial purposes act as a source of income. Woodlots planted on individual lands also contribute to the generation of income. Over 95 per cent of the rural population use fuel wood as a source of energy making, the forestry a key sub-sector in ensuring that there is enough wood fuel by encouraging the rural population to plant more trees.

The Rural Water Supply sub-sector plays a significant role in the development of the district by managing and conserving water resources. If people use safe (potable) water, health risk is largely reduced and water provided within a reasonable distance, a lot of productive time is saved for social and economic development. Moreover most of the sugar industries in the district use large quantities of water in their production. It is the water quality unit within this sector that ensures the wastewater from these sugar factories conforms to given standards after treatment before being discharged back to the rivers.

### 3.1.4 Role of Stakeholders in the Sector

Stakeholder	Role
Agriculture Department	Provision of extension services, environmental management, irrigation development and agriculture information management.
Water Department	Implementation and coordination of water policies, establishment of database on water resources in the district.
Forest Department	Increase forest and tree cover with a view to increasing the supply of forest products and services.
Veterinary Department	Livestock disease control, tsetse control and provision of A.I services.
Cooperative Department	Registration and liquidation of societies and enforcement of the cooperatives societies Act.

### 3.1.5 Sub-Sector Priorities, Constraints and Strategies

Sub Sector	Priorities	Constraints	Strategies
Crop Development	Promotion of food and cash crops; Improve marketing channels; Improve on-farm storage.	Unreliable weather; Lack of credit; Prevalence of pest and diseases; Soil erosion; Inadequate land preparation equipment; High post harvest losses; Low commodity prices; Delays in payments.	Promotion of small holder irrigation rice production; Promotion of fruit trees; Diversification from sugarcane to other cash crops; Promotion of Agro-forestry; Enhance household food security; Promote pluralistic and participatory extension services.
Livestock Development	Livestock production; Improved marketing channels for products.	Tickborne diseases; High costs of dairy animals; Inadequate fodder production; Lack of credit facilities; Erratic rainfall;	To reduce mortality rate for both dairy animals and chicks; Increase egg production of local birds from 40-120 through upgrading schemes; Re-vitalise dairy co-operative

		Poor marketing channels; Low quality of water; Mismanagement of dairy cooperative societies; High mortality.	societies for improved marketing of dairy products.
Irrigation Development	Promote irrigation to supplement rain fed agricultural production.	Poor schemes organisation; Poor O&M of the schemes; Lack of inputs; Low prices of rice; High initial investment cost; Poor marketing channels; Lack of awareness and technical expertise.	Training of irrigation interest groups on leadership skills; Re-organisation and revitalisation of committees; Training on irrigation Water Management; Stakeholder involvement.
Agricultural Research and Development	Promote agricultural research	Shortage of trained staff; Research findings are not disseminated; Lack of demonstration of recommended management systems; Lack of knowledge of basic principles of crop production.	Expansion of training programmes; Increase liaison with research institutions; Increase farmers participation in research programmes; Collection of data on status of natural resources and determine the management processes and practices in livestock, farm, forestry and general household characteristics for research extension purposes.
Environment	Promote rural afforestation; Promote Agro-forestry.	Lack of interest and laxity by community members on environment management; Poor protection of planted seedlings/low survival rates; Harsh environment; Over stocking and over grazing leading to soil erosion.	To sensitise the local community on importance of conservation; Train at least 20 farmers in each division on tree nursery establishment; Establish one command nursery in each division; Establish one demonstration farm per division; Encourage farmers to establish their own woodlots; Conservation of fragile areas –Koguta-Miriu Hills, river banks- Nyando and Miriu River.
Rural Water Supply	Increase accessibility to potable water; Enhance water supply from existing facilities.	Inadequate safe water; Frequent floods; Filtration; Inefficient water supply.	Construction of dams; Training on river embankment and protection; Periodic disiltation; Conduct geological survey.
Cooperatives	Revive dormant societies; Broaden financial base of societies.	Delaying of payments; Narrow financial base; Poor management; Lack of credit.	Broaden financial base; Increase share capital; Ensure prompt payment.
Land Administration, Survey and Human Settlement	Open lands Office in the district; Survey and plan all trading centres in the district.	People have to travel to Kisumu to settle land cases; Unplanned development of urban centres.	Provide offices for lands staff and post lands personnel to the district; Survey and Physical Planning Departments in consultation with Local Authorities to undertake in the planning exercise.
Food Security	Ensure availability of food at all times	Poor food harvests and lack of proper food storage.	Promote better food production and storage techniques.

Fisheries	Improve fish catch and maintain high quality of fish.	Lack of financial resources by fishermen; Poor sanitary conditions in fish landing beaches; Lack of proper marketing channels.	Revitalise fishermen co-operatives; Improve on sanitary conditions at the beaches..
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### 3.1.6 Project and Programme Priorities

#### A: On-going Projects/Programmes: Crop Development

Project Name Location/Division	Objectives	Targets	Description of Activities
National Agriculture and Livestock Extension Programme District wide	To provide and facilitate efficient extension service for increased crop production, food security, increased incomes and improved environment; Enhance farmers, staff and stakeholders knowledge and skills; Promote and strengthen farmers institutions.	Reach all farmers requiring extension service; Establish one focal area in each division every year.	Provide extension services to all farmers; To develop and implement focal areas.
Cotton Production Revitalization District wide	Rekindle cotton production and establish strong link between farmers and ginners.	Raise the current cotton hectares of below 500 in the district to 4,000 ha. By the end of the plan period.	Source and provide cotton seed to farmers but eventually link them to ginners for sustainable supply.
Accelerate Cassava Multiplication Programme District wide	Re introduce cassava that has been destroyed by Cassava Mosaic disease and cassava green mite by bulking resistant/tolerant and clean planting materials.	Each division to have 5-acre bulking plots and by the end of it all cassava growing farmers to be able to access clean planting material.	Source from research centres and other primary multiplication site clean planting materials of cassava and establish secondary and tertiary sites in the district.
Safe Use of Pesticides District wide	Be able to sensitise farmers and other stakeholders on safe, effective and economical methods of using chemicals.	Train farmers in each division.	Train users on the most effective and efficient use and disposal of pesticides.
Promotion of Small Holder Community Based Rice Production in the Kano Plains (ATIRI) Lower Nyakach, Nyando Miwani Divisions	Improve farmers ability to make demands on agricultural services providers; Enhance effectiveness of intermediary organisations and farmers groups in meeting knowledge needs of their clients and members.	Establish 20 schemes.	Provide bulked input; Provide training opportunities.
Promotion of Individual Irrigation Systems Within the Higher Potential Areas	Improve income of individual farmers.	Start 5 individual irrigation schemes.	Provide training to farmers.
LVEMP	To improve the environment of Lake Victoria and its catchment area.	Lake Victoria catchment area.	Community sensitisation; PRAs; Focal Area Development; Committee training; Farm specification; Plans development and implementation.



## B: New Project Proposals: Crop Development

Project Name Location/Division	Priority Ranking	Objectives	Targets	Description of Activities
Fruit Tree Production and Processing District wide	1	Promote fruits production and rural processing and boost rural incomes and employment opportunities.	Increase present hectarage under fruits by 70 annually, train 5 organized divisional fruit production groups annually on various aspects and start organized marketing groups in each division.	Organize farmers into fruit producing groups; Train them in fruit tree production and initiate fruit tree seedlings nurseries. <b>Justification:</b> The district is a net importer of fruits.
Horticultural Vegetable Production District wide	2	Promote horticultural vegetable production and marketing.	Increase production by increasing yields by 30-40 per cent, train 1 group annually per division on agronomy and marketing strategies.	Train farmers on horticultural vegetable production. <b>Justification:</b> Need to diversify production for increased food supply.
Beekeeping Lower Nyakach Upper Nyakach and Nyando Divisions	3	Increase honey and wax production through the use of lungstroth hives and KTBH.	400 lungstroth hives and 800 KTBH.	Promotion of lungstroth and KTBH to increase bush honey and wax production. <b>Justification:</b> Source of income for poverty reduction.
Promotion of Community Based Small Holder irrigation (mini project) District wide	4	Development of appropriate irrigation guidelines and a framework for farmers organisations and develop a training master plan for staff.	Train farmers in five irrigation schemes.	Training both farmers and staff and formulate guidelines. <b>Justification:</b> To exploit existing potential for irrigation in the district.

## A: On-going Projects/Programmes: Livestock Department

Project Name Location/Division	Objectives	Targets	Description of Activities
Tick Control District wide	Reduce the tick borne diseases and therefore the livestock mortality; Promote dairy industry; Increase milk and meat products; Create employment by dairy industry plant.	Increase dipping percentage to 70 per cent; Reduce livestock mortality to less than 10 per cent; Increase milk production.	Revive collapsed cattle dips (45 dips); Train dip committees in dip management; Train 30 zero grazing farmers; Buy acaricide and 4 hand sprays for farmers.
Artificial Insemination District wide	Increase milk production through improvement of genetic pool; Increase meat production (diary breeds are bigger); To control breeding diseases.	3,000 animals inseminated; 2 Co-operative societies trained.	Revive artificial insemination services; Upgrade local breeds; Improve on the grade cows.
Tsetse Control District wide	Open up more arable land for livestock and crop production; Increase food production; Reduce cases of	Purchase 400 traps per year; Train 5 communities per division.	Surveys of tsetse habitats in the district; Trapping of tsetse flies in the district; Treatment of trypanosomiasis cases and reduce number of

	Trypanosomiasis; Reduce chances of human trypanosomiasis.		animals harbouring trypanosomiasis.
Disease and Pest Control District wide	Reduce no. of quarantines, therefore, promoting livestock trade; Reduce livestock mortalities; Increase revenue collection through movement permit issues; Increase livestock population by reducing mortalities.	Achieve zero quarantines in the district; Reduces livestock mortalities in the district; Control illegal livestock movement and spread of livestock disease; Increase livestock population by 5per cent annually.	Vaccination against FMD, Newcastle fowl, typhoid, B/Q, Rabbies, RVF; Control of livestock movement: Supervision of cattle auction rings and issue of health certificates; Baiting of stray animals.
Veterinary Extension District wide	To improve tick control services hence reduce tickborne diseases; Establish artificial insemination for upgrading and improvement of diary herd; Open up of arable land for farming; Improve hides and skin quality; Improve quantity of meat consumed.	Achieve over 60 per cent dipping cattle population; Achieve over 5,000 insemination cases per year; Open up all available arable land for farming of crops and livestock production.	Training dip committees on dipping and spraying; Mobilizing cooperatives on AI; Training communities on tsetse control; Training butchers on defraying; Training meat inspectors.
Hides and Skin Services District wide	Improve quality of hides and skin.	To establish tanneries and leather industries.	Licencing of bandas; Issuing dispatch notes; Training frayers and defrayers; Licensing of tanneries.
Meat Inspection Services District wide	To ensure wholesome meat for the public.	To establish modern slaughter abattoirs.	Meat inspection; Slaughter slab inspection; Meat carriers inspection and licensing.
Rabbies Control District wide	Eradication of rabbies in the district.	Disease free.	Baiting of stray dogs; Vaccination of dogs.
L.D.P District wide	Increase milk production/intake and farmers income.	Increase no. of dairy animals; Increase no. of crosses; 5 bull scheme; 5 dairy cows; 360 crosses/ year.	Dairy production/ promotion through introduction of dairy cows; Upgrading by bull schemes; Farmer training (capacity building).
HPI Upper Nyakach	Increase milk production and farmers income.	26 dairy goats; 3 bucks.	Giving dairy goats to small farmers and women groups for milking and multiplication.
Christian Children Fund Catholic Project Upper Nyakach Lower Nyakach	Increase milk production and intake and income and better standards of orphans, widows and the disabled.	200 cows; (160 cows already given).	Promotion of dairy production among the orphans and widows and disabled.
I.D.C.C.S. Inter Diocesan Christian Community Services	Increase livestock farm production and income.	Increase farm production and income by 50 per cent.	Training farmers on aspects of good dairy and poultry production (capacity building).

**A: On-going Projects/Programmes: Rural Water Supply**

Project Name Location/Division	Objectives	Targets	Description of Activities
Nyando Flood Control Nyando Division	To reduce the risk of floods on the rural population living along River Nyando.	Increase safety of the people staying along the river to enable them carry on with agricultural and economic activities.	Continue building dykes along Nyando River, repair D6C and D6D, repair farm tractor and motor scrappers to be used in the construction of the dykes and drenching.
Kabar Women Group Miwani Division	Ensure availability of safe drinking water for the community; Provide sources of income to water kiosks operators and water vendors.	Ensure a few more households each year gain access to potable water.	To complete installation and equipping of borehole; To construct elevated storage tanks; Lay pipeline and construct various water kiosks.
Tamu Water Supply Muhoroni Division	Increase the pumping capacity of W/S and supply more water to the consumers regularly.	Guarantee reliability of the supply as a result of modern pumping units and supply water as frequently as possible to the consumers.	Rehabilitation of the water supply, replacement of pumping and generating sets and new ones purchased; Rehabilitation of delivery lines; Rehabilitation of staff houses.
Koru/Mnara Water Supply Muhoroni Division	To restore pumping capacity and increase water production.	Increase access to potable water in the division.	Rehabilitation work by contractors and funds from El-nino projects; Installation of pumping set; Undertake construction; Rehabilitation of pump house and reservoirs.

**B: New Project Proposals: Rural Water Supply**

Project Name Location/Division	Priority Ranking	Objectives	Targets	Description of Activities
Awasi Water Supply Nyando and Miwani Division	1	To supply potable water to district HQ at Awasi Township and its environs.	Avail piped water supply to Awasi and its environs by the year 2008.	Design and plan intake structures, gravity line and storage tank distribution on network. <b>Justification:</b> There is no water supply for Awasi District headquarter
River Awach Oroba Flood Protection Lower Nyakach, Nyando and Miwani Divisions	2	Reduce flood havoc in the lower Nyakach; Nyando and Miwani Divisions; Provide dams for H.E.P. fishing and irrigation.	Encourage socio-economic development through farming, fishing and settlement.	Construct dykes on the lower reaches of the Oroba and Awach; Construct drainage channels for the streams; Provide check dams on the upper reaches of the river. <b>Justification:</b> Protect people and crops from damage by floods
Nyando Water Supply Upper Nyakach E. Kadianga Loc. Oboch Location	3	To give the population on the lower part of the plateau potable water.	Give potable water to at least 80 more households every financial year.	Carry out feasibility studies for consumer lines on the southern plateau; Rehabilitate coagulation basins and elevated steel tank; Rehabilitate clear water tanks. <b>Justification:</b> Increase supply to meet demand.

Kibigori Water Supply Miwani Division	4	Increase amount of water supplied.	Increase potable water accessibility by bringing water to walking distance by the year 2008.	Rehabilitate intake; Replace gravity mains with bigger diameter pipe to improve distribution. <b>Justification:</b> Increase supply to meet demand.
Muhoroni Water Supply Muhoroni Division	5	To produce and supply adequate water.	Increase safe water accessibility to Muhoroni Township by 20 per-cent every financial year.	Laying of independent rising main to storage tank; Repair of backwash tank; Purchase and installation of low lift pumping set; Laying of line to Thessalia Mission Hospital; Repair backwash tank and storage tank. Repair of composite filtration unit. <b>Justification:</b> Increase supply to meet demand.
Sinking of Boreholes and Shallow Wells District wide	6	To avail potable water to rural populations within walking distances.	10 boreholes and shallow wells per division every financial year..	Drilling of boreholes by rig and installation of hand pump; Digging/sinking of shallow wells by hand/rig and installation of hand pump. <b>Justification:</b> Increase supply to meet demand.

**A: On-going Projects and Programmes: Environment**

Project Name Location/Division	Objectives	Targets	Description of Activities
Rural Afforestation through Extension District wide	Increase tree cover in the whole district; Reduce the rate of environment degradation; Reduce soil erosion.	To afforest the whole district.	Planting trees in the whole district; Sensitising the locals to plant trees on their farms; Tree nursery establishment.
Afforestation of Part of Koguta Forest	To rehabilitate the degraded sites of the forest where Sondu Miriu Hydropower Project is working	To rehabilitate all the areas which will be degraded as a result of the project (Hydropower).	Raise at least 10,000 seedlings for planting; Plant all these seedlings in the degraded areas of Koguta Forest.
Tree Nursery Establishments District wide	To raise enough seedlings for rural afforestation; To enable farmers to have small tree nurseries for their own domestic use; To increase awareness on tree planting and protection..	To have one communal tree nursery in each division.	Train farmers on tree nursery establishment; To establish at least one communal tree nursery in each focal area where Lake Victoria Environment Management Program (LVEMP) is working.

## B: New Project Proposals: Environment

Project Name Location/ Division	Priority Ranking	Objective	Targets	Description of Activities
Nyando/Miriu River Flood Control /Afforestation Project Nyando, Miwani and Upper Nyakach Divisions	1	To increase tree cover in the district; Provide farmers with an alternative source of income by marketing tree products to wood based cottage industries; Conserve soil and water in order to increase food productivity.	To have at least over 50 per cent of the planned areas afforested at the end of the plan period; Organize one training per division to train farmers on site; Organize farm visits once per month in all divisions; Organize and provide communities with free seeds to enable them establish tree nurseries.	Afforest hilltops; Train farmers on agro forestry; Increase the vegetation cover on the fragile banks so as to stabilize the embankment and control floods to increase food production; Control soil erosion and conserve the environment. <b>Justification:</b> The river banks are prone to soil erosion and need vegetation cover for protection.
Establishment of Central Tree Nurseries Miwani, Nyando and Lower Nyakach Divisions	2	To raise seedlings for divisional tree planting.	Raise at least 15,000 seedlings for divisional tree planting.	To bring tree seedlings nearer to farmers; Provide seedlings for divisional and communal national tree planting exercises. <b>Justification:</b> There is need for increased access to tree seedlings.
Tree Planting along the Highways District wide	3	To plant trees along the highway for environmental and aesthetic purpose.	To plant trees at least in all the highways.	To improve vegetation cover along the high ways. <b>Justification:</b> To prevent soil erosion.
To Construct 6 Offices, one for Each Division and DFOs Office District wide	4	To create office accommodation.	6 offices constructed.	To improve running of afforestation activities and administration activities from a central place. <b>Justification:</b> Lack of office space.
Demonstration Farms District wide	5	To increase the farming abilities and create awareness on tree planting techniques.	To organize and support one demonstration farm in each division.	Provide farmers with a model farm with all afforestation activities, to act as an alternative source of income; To reduce floods and soil erosion to increase agricultural production. <b>Justification:</b> To serve as a teaching ground for farmers

## B: New Project Proposals: Fisheries

Project Name Location/Division	Priority Ranking	Objectives	Targets	Description of Activities
Post Harvest Loss Reduction District wide	1	To reduce post harvest losses and improve on fish prices	Improve fish handling facilities at Sango Rota and Kusa beaches	Construct ice plant at Sango Rota; Construction of cold rooms at Sango Rota and Kusa beaches.



Streamling of Fish Marketing District wide	2	To improve on fish marketing channels and reduce losses incurred by fishermen; To ensure reasonable prices for fish.	Revive 6 fishermen Cooperative Societies; Construct 6 fish storage facilities.	Reactivate the existing fishermen co-operative societies and train their members; Provide storage facilities in beaches.
Improve Accessibility to Credit District wide	3	To avail capital to fishermen so that they can invest in their trade.	Review fishermen loan schemes in the two beaches; Encourage the formation of SACCOs by fishermen.	Train fishermen on management of loan schemes; Build capacity of fishermen to enable them identify other sources of funds for investment.
Improvement of Sanitary Conditions at Fish Landing Sites	4	To ensure high quality of fish; To ensure good health and hygiene for fishermen.	Construct 6 VIP latrine in 6 beaches.	Construct VIP latrines
Control over-Exploitation of Fisheries Resources in Lake Victoria	5	To conserve the fisheries resources in the lake.	Hold awareness creation among the fishing community.	Conduct awareness creation meeting.
Improvement of Fish Farming	6	To improve fish harvesting from fish ponds.	Identify 3 demonstration ponds.	Train farmers on construction and management of fish ponds.

### B: New Project Proposals: Co-operatives

Project Name Location/Division	Priority Ranking	Objectives	Targets	Description of Activities
Storage of Fish	1	To ensure high fish quality is maintained for better prices.	Build 6 storage facilities.	Put up fish storage facilities.
Maintenance of Quality Fish	2	To increase income from fish by reducing losses.	6 bandas to be constructed.	Put up fish bandas in each of the six beaches.
Hygienic Storage of Processed Fish	3	Increase dry fish storage capacity to reduce losses.	3 bandas to be constructed.	Put up dry fish store in market areas.
High Quality Seed for Fish Farmers	4	Improve fish production by fish farmers.	Supply 50 fish farmers with high quality seed.	Produce high quality fish seed.

#### 3.1.7 Cross Sector Linkages

The agriculture and rural development sector cannot thrive if other sectors are not well developed. The most critical sector to the growth of Agriculture Rural Development is the Physical Infrastructure Sector. Good roads are essential for transporting farm produce to the market and industries as well as for getting farm inputs to the farmers. Public Administration, Safety, Law and Order is also crucial for the growth of the agricultural sector. In the absence of security no meaningful development can take place.

### 3.1 PHYSICAL INFRASTRUCTURE

#### 3.2.1 Sector Vision and Mission

The sector vision and mission is "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

**Roads:** The Roads Department will continue to maintain the existing network in Nyando District to help spur economic growth. The department will also rehabilitate roads and bridges to facilitate transportation of sugarcane to the factories and other farm produce to the market.

**Energy:** One important source of energy for the district is electricity. The Kenya Power and Lighting Company has approximately 68 km of 33,000 volts and 55 km of 11,000 volts of electricity power-lines. The district has three secondary transmission (33 KV) step-down sub-stations at Miwani, Chemelil and Muhoroni. The Government currently has an ongoing Rural Electrification Project in Nyando District funded by the Spanish Government. This project covers Nyando District Headquarters, Awasi Trading Centre, Awasi Catholic Mission, Awasi Secondary School and the surrounding areas.

### 3.2.3 Importance of the Sector in the District

**Roads:** The roads play an important role in the economy of Nyando District by facilitating transportation of sugar-cane, the main cash crop to the factories and other farm produce to the market. The roads also enable the transportation of farm inputs and other consumer goods to the farmers.

**Energy:** Electricity plays a vital role in the development of industries, the Jua-Kali sector and agriculture. With increased electrification of rural and urban centres, the growth will be towards industrialisation with the net effect of poverty reduction and economic growth.

**Communication:** POSTA plays a vital role in the development of the district in terms of social, and economic aspects. With increase in postal network in rural and urban centres, the growth of industries such as Jua Kali, and agriculture will be seen to be forging ahead as a result of efficient and reliable communication. Postal network plays a major role as a social mobilization tool in development.

### 3.2.4 Role of Stakeholders in the Sector

Stakeholder	Role
Public Works Department	Maintenance of classified roads and supervision of construction works.
KPLC	Maintain the existing power lines and implementing the Rural Electrification Programme.
Postal Corporation of Kenya	Provide postal services.
Telkom Kenya	Provide telecommunication services.

### 3.2.5 Sub-Sector Priorities, Constraints and Strategies

Sub-Sector	Priorities	Constraints	Strategies
Roads	Maintain existing road network to good standard; Repair damaged road sections to restore communication; Repair damaged bridges; Upgrade important roads in the district.	Frequent damage by floods; Ill equipped roads department; Poorly motivated road maintenance team.	Undertake frequent checks on roads and identify bad sections for repair; Involve the private sector in road maintenance; Ensure proper co-ordination among various stakeholders e.g local authorities, roads department, private sector, communities; Develop skilled and motivated road maintenance work force.
Energy	Supply electricity to public institutions and trading centres under rural electrification programme.	High cost of capital investment.	Identify donor countries to support the expansion of electricity supply.
Communication	Provide quality postal services.	High capital requirement to put in place full postal network; Poorly motivated work force; Failure by customers to renew postal box services leading to loss of revenue.	Adopt cutting edge technology in service delivery; Develop skilled and motivated work force; Create focused marketing and product development.
Urbanization	Planning of trading centres; Provision of infrastructure and services such as roads, water, electricity and telephone.	Most of the trading centres are unplanned and lack water, electricity, and telephone services.	Include all necessary facilities while planning for these centres that will develop into urban centres.
Transport	Improve transport communication within the district.	Poor and impassable roads.	Improve condition of roads throughout the district.

### 3.2.6 Project and Programme Priorities

#### A: On-going Projects/Programmes: Roads

Project Name Location/Division	Objectives	Targets	Description of Activities
Road D 311 Kopere-Songhor Muhoroni Division	To facilitate Transport of sugarcane to the factories.	10 km	Tarmacking and culverting of the road.
Road E 1134 Katito-Miruka Lower Nyakach Division	To facilitate transport in the high potential area.	10 km	Opening, culverting and gravelling of the road.

## B: New Project Proposals: Roads

Project Name Location/Division	Priority Ranking	Objectives	Targets	Description of Activities
Road D 293 Ahero-Miwani Nyando and Miwani Divisions	1	To facilitate transportation of sugar cane and rice to the factories.	Gravel 36.2 km.	Gravelling of the road. <b>Justification:</b> To serve sugarcane and rice growing area.
Road E 248 Chiga-Kibigori Muhoroni and Miwani Divisions	2	To facilitate transportation of sugar cane in the sugar belt.	Gravel 31.7 km and provide culverts.	Culverting and gravelling of the road. <b>Justification:</b> To serve high potential area.
Road D218 Sondu-Kusa Nyakach Division	3	To facilitate transportation in high potential areas.	Gravel 26.2 km and provide culverts.	Culverting and gravelling of the road. <b>Justification:</b> To serve high potential area.
Road E220 Katito – Awasi Nyando and Nyakach Divisions	4	To facilitate transportation of cotton and other farm produce to market.	Gravel 21 km and provide culverts.	Gravelling and culverting. <b>Justification:</b> To promote the revival of cotton growing.
Road D290 Korowe-Nduru Kadibo Division	5	To facilitate transportation of rice and sugarcane to the factories.	Gravel 5 km and provide culverts.	Opening culverting, Gravelling. <b>Justification:</b> To serve rice and sugar-cane area.
Road D311 Songhor and Muhoroni Muhoroni Division	6	To facilitate transportation of sugarcane to factory and Dairy milk to the market.	Gravel 23.6 km and provide culverts.	Culverting and gravelling <b>Justification:</b> To serve sugar-cane and dairy rich area.
Road E219 Kasperok-Bodi Nyakachi Division	7	To facilitate transportation of farm produce.	Gravel 26 km and provide culverts.	Opening, culverting, gravelling building 3 boxes culverts. <b>Justification:</b> To promote agriculture.
Korowe – Kabonyo Rice Irrigation Kano Kadibo Division	8	To improve network connection to market centres and facilitate access to this fertile area.	Gravel 18 km and provide culverts.	Build box culvert. <b>Justification:</b> To serve market centres and link them to major roads.
Road E239 Koru – Fort Tenan Muhoroni Division	9	To ease the movement of sugarcane to the factory.	Gravel 11 km .	Gravelling. <b>Justification:</b> To serve sugar-cane transportation.
Road E235 Chemelil – Tamu	10	To improve transportation of sugarcane to the factory.	Gravel 8 km and provide culverts.	Culverting and gravelling. <b>Justification:</b> To serve sugar-cane growing area.
Road E236 Muhoroni Division	11	To facilitate transportation of sugarcane to the factory.	Open 5 km of the road through gravelling and provide culverts.	Opening culverts and gravelling. <b>Justification:</b> To serve sugar-cane area.
EI 121 Boya – Oren	12	To ease accessibility to the high potential area.	Gravel 5 km and provide culverts.	Culverting and gravelling. <b>Justification:</b> To open up high potential area.
EI 120 Ahero – Mao Nyando Division	13	To facilitate movement of farm produce.	Gravel 5 km and provide culverts.	Opening culverting and gravelling. <b>Justification:</b> Open up area to agriculture.

D218 Sondu – Kusa Nyakach Division	14	It serves a high potential and Hydro electric power station.	Tarmack 5 km of the road.	Tarmacking. <b>Justification:</b> To serve Sondu-Miri Hydro Power Station.
D293 Ahero – Miwani Division	15	To facilitate sugarcane transportation to the factories.	Tarmack 5 km of the road.	Tarmacking <b>Justification:</b> To serve sugar-cane area by linking farmers to factories.
Muhoroni – Londiani Muhoroni Division	16	To prevent further deterioration.	Recarpet 5 km of the road.	Re-carpeting. <b>Justification:</b> To save the road from more costly reconstruction.
Road C34 Mamboleo – Muhoroni Division	17	To prevent further deterioration and improve transport movement of sugarcane to other produce factories.	Tarmack and recarpet along and reseal 5 km of the road.	Tarmacking recarpeting and resealing. <b>Justification:</b> To link sugar-cane farmers to factories.
Road S1010 Miwani – Obumbo Miwani Division	18	To facilitate transportation of sugarcane and rice to the factories.	Re-gravel 12.5 km and provide culverts.	Culverting and re-gravelling <b>Justification:</b> To link sugar-cane and rice farmers to factories.
Road S2050 Koru – Gilmani Muhoroni Division	19	To facilitate transportation of maize, coffee, sugarcane and dairy milk.	Re-gravel 5 km and provide culverts.	Culverting and regravelling <b>Justification:</b> To serve maize, coffee, sugar-cane and dairy milk zone.
Road S1911/7 Koru – Mnara Muhoroni Division	20	Ease sugarcane transportation to the factories.	Provide culverts and re-gravel 10 km of the road.	Culverting and re-gravelling <b>Justification</b> To serve sugar-cane growing zone.
Road – R42 Okanowach – Osuoma	21	The road to serve a high potential area.	Re-gravel 7 km provide culverts and construct drifts along the road.	Culverting, drift construction of regravelling. <b>Justification:</b> To serve sugar-cane growing area agriculturally
Road S1031 – Miwani – Masogo Miwani Division	22	To facilitate sugarcane transportation to the factories.	Provide culverts and gravel 5 km of the road.	Culverting and gravelling. <b>Justification:</b> To serve sugar-cane growing zone.
Road R17 Rabuur – Nyangande Kadibo Division	23	To ease transport in high potential area.	Re-gavel 7.8 km and provide culverts.	Culverting and re-gravelling. <b>Justification:</b> To serve sugar-cane growing area.
Road R79B Otho – Wangay – Miwani Division	24	To ease sugarcane transportation to the factory.	Re-gravel 5 km and provide culverts along the road.	Culverting and re-gravelling. <b>Justification:</b> To serve sugar-cane growing area.
Anguecha – Kangonglo River Ombeyi Location Miwani Division	25	Ease rice and sugarcane transport to the factories.	Re-gravel and build necessary culverts along 5 km of the road.	Build a box culvert. <b>Justification:</b> To serve sugar-cane growing area.
Road R16 Ahero – Kaluore Nyando Division	26	Ease transportation of rice to milling factories.	Open 5 km of the road, re-gravel and provide box culverts.	Opening, culverting and re-gravelling. <b>Justification:</b> To serve sugar-cane growing area.
Road – Kanyamlori – Cherwa Nyakach Division	27	To serve a high potential area.	Provide culverts and re-gravel 5 km of the road.	Culverting and re-gravelling. <b>Justification:</b> To serve high potential area.
Road R76 – Alendu – Migingo Kadibo Division	28	To ease transportation of maize, cotton and rice.	Re-gravel 2.5 km.	Re-gravelling. <b>Justification:</b> To serve maize, cotton and rice area.
Road R13 Sondo – Nyamarimba	29	To serve farming areas.	Open up 17.2 km, re-gravel and provide	Opening culverting and re-graveling.

			culverts.	Justification: To support agriculture.
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### 3.2.6 Cross Sector Linkages

Physical Infrastructure sector depends on revenue generated from other sectors like agriculture, trade, tourism and industry for its maintenance. The district requires educated and healthy population for effective participation planning and implementation of programmes and Projects to attain adequacy in provision of infrastructure.

The sector will continue to facilitate transportation of agricultural goods and inputs to and from the farms. Public Administration, Safety, Law and Order will provide an enabling environment for the day-to-day operations of all the sectors.

## 3.3 TOURISM, TRADE AND INDUSTRY

### 3.3.1 Sector 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

The Tourism, Trade and Industry Sector is charged with the responsibility of promoting and developing commercial, industrial and tourism, activities both nationally and internationally. The sector is also charged with the responsibility of developing and conserving wildlife and marine resources in the country. In the Plan period the sector will therefore promote commercial, industrial and tourism activities at both national and international levels.

### 3.3.3 Importance of the Sector in the District

The sector will create job opportunities to generate incomes and wealth. By so doing it has a major contribution to poverty reduction. To contribute to poverty reduction, it will require the support of all the stakeholders. The Government's role will be to create the necessary enabling environment such as improving infrastructure, policy formulation, information dissemination etc. This way, the way for the private sector will be able to participate through investment.

The Development Financial Institutions (DFI) and the Micro Finance Institutions including NGO's will be required to provide the necessary support in financial and capacity building.



### 3.3.4 Role of Stakeholders in the Sector

Stakeholder	Role
Government Department Local Authorities	Formulate and implement sectoral policies Licensing and revenue collection; Provision of basic infrastructure i.e. market, water, sewerage
NGOs	Training and imparting necessary skills Advocacy and civic education;
Banks	Provision of banking services and credit

### 3.3.5 Sub-Sector Priorities, Constraints and Strategies

Sub-sector	Priorities	Constraints	Strategies
Trade	Creating an enabling environment for investment creation and business growth	Lack of easy and accessible credit.	Provision of easy and accessible credit by strengthening the co-operative movement; Reviewing the policies governing the interest rates on loans.
Industry	Promote local industries; Provide timely and adequate credit; Impart entrepreneurial skills.	High tariffs taxes levies; Lack of entrepreneurial skills.	Harmonise levies and reduce tariffs charged through consultations with relevant Government Departments and other players; To solicit for funds from Government agencies and external sources to offer/conduct training/counselling services.
Tourism	Marketing and promoting of the district tourism, potential	Inadequate funds to undertake a vigorous marketing and promotion exercise.	Sourcing of funds from Government and other external source.
Mining/quarrying	Ensure controlled quarrying to conserve environment.	Quarrying of ballast and sand harvesting may cause environment problems such as soil erosion.	Sand harvesters to be controlled and monitored to safe guard on environment.
Small Scale Industries	Encourage small scale industries to create jobs and increase incomes.	Lack of entrepreneurship and capital.	Provide training on entrepreneurship skills to small scale industrial entrepreneurs and jua kali artisans; Investigate possibilities of initiating small scale credit facilities.
Financial Services	Get inventory/NGOs to start financial institutions in the district.	Lack of financial institutions.	Encourage the formation of micro finance institutions.



### 3.3.6 Programme and Project Priorities

#### A: On-going Projects/Programmes: Trade

Project Name Location/Division	Objectives	Targets	Description of Activity
Entrepreneurship Training District wide	To inculcate basic business knowledge; To create awareness on investment opportunities and sources of business finance.	To train 100 persons in the 5 divisions per fiscal year.	Conduct entrepreneurship training
Joint Loan Scheme District wide	To offer credit facilities to small scale indigenous traders.	50 persons per fiscal year.	Finance small scale entrepreneurs.

#### B: New Project Proposals: Industry

Project Name Location/Division	Priority Ranking	Objectives	Targets	Description of Activities
Exhibition for Small Scale Enterprises (SSE's) District wide	1	To help market products of SSE's.	All SSE's involved in manufacturing (1 exhibition per fiscal year).	Organize an exhibition for SSE's.
Construction of Ministry Office Block Nyando District	2	To have officers operating under one roof and save government spending on rent.	All four Ministerial Departments in the Province.	To house all Ministerial Department.

### 3.3.7 Cross Sector Linkages

The provision of electricity in the rural centres will greatly stimulate the development of small scale industries, improve incomes and enhance the standard of living in these areas. With these there is hope of raising a more healthy and productive population, with opportunities of further enhancement of education and training skills in all sections of the district's economy. This sector will therefore liaise very closely with all the other 5 sectors in order to achieve this.

## 3.4 HUMAN RESOURCE DEVELOPMENT

### 3.4.1 Sector Vision and Mission

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

### 3.4.2 District Response to Sector Vision and Mission

The Ministry of Health has been sensitising the communities on all aspects of health. This has been done through the existing health facilities in the district as well as through any public functions by the department or provincial administration.

The Ministry has been providing curative services through their facilities, health promotive services, preventive services through education and rehabilitative services through transformation to enable affected persons live as near normal life as possible.

Through Public Health Department the Ministry of Health controls mosquitoes in order to reduce the incidences of malaria, ensures the provision of pit latrines through demonstrations, provide water through quality monitoring services and monitors industrial waste disposal from local industries and urban centres.

The Ministry of Education will persistently sensitise all stakeholders in education to ensure they contribute positively in provision of quality education. The Ministry will also continue with its role of co-ordination, supervision and evaluation of education activities in the district. It will ensure the continued participation of the parents, provincial administration, local politicians and the community in general, to promote the provision of quality education and to provide learners with opportunities for higher education.

The Department of Social Services will empower communities to identify their problems, mobilise their own resources and improve their standards of living. In order to achieve this, department must mobilize communities, encourage group formation, and registration, and provide training on effective group management skills. This will be for youth, women and men groups.

### 3.4.3 Importance of the Sector in the District

The Human Resource Development sector is important for the general development of the district as it provides human power in all the productive sectors in the district.

The Department of Social Services plays a significant role of mobilizing and sensitising communities to engage in income generating activities. The sector also prepares communities into organized groups for use by any Ministry or NGO.

### 3.4.4 Role of Stakeholders in the Sector

Stakeholder	Role
Education Department	Provision of teachers, supervising and inspecting schools. Curriculum development and implementation.
Private Sector	Provide and operate private schools/health facilities.
NGOs	HIV/Aids sensitization; Training and sensitization.
Community	Running of community Pharmacies; Establishment of project committees.
Health Department	Provide education to the public on disease prevention and health promotion; Provide curative services; Conduct immunisation.

### 3.4.5 Sub-sector Priorities, Constraints and Strategies

Sub-Sector	Priorities	Constraints	Strategies
Health and Nutrition	Malaria prevention and treatment. Improvement of	Lack of equipment and tools e.g. pumps, sprayers, jembes, slashes, chemicals;	Community sensitisation; Form Malaria Prevention and Control Committees;

	<p>infrastructures and equipment in health facilities.</p> <p>Reduction of ill health and mortality resulting from immunizable diseases.</p> <p>Improvement of Management of Childhood Illnesses (IMCI).</p>	<p>Lack of transport and fuel for supervision;</p> <p>Vast wetland and water hyacinth.</p> <p>Inadequate drugs.</p> <p>Inadequate funding;</p> <p>Preventive maintenance given low priority.</p> <p>Inadequate vaccines;</p> <p>Inadequate vaccine cold chain equipment;</p> <p>Inaccessibility to immunization centres;</p> <p>Lack of transport;</p> <p>Inadequate supervision.</p> <p>Poverty among the community;</p> <p>Inadequate drugs;</p> <p>Inadequate supervision;</p> <p>Lack of transport.</p>	<p>Revitalization of BI sites;</p> <p>Promotion of intersectoral collaboration.</p> <p>Procure and supply adequate drugs and other medicals upplies to all health facilities;</p> <p>Regular monitoring and respond to drugs needs.</p> <p>Sensitise community and staffs on preventive maintenance of buildings and equipments;</p> <p>Put in place preventive maintenance system at all health facilities;</p> <p>Seek support from other sectors.</p> <p>Sensitise community members;</p> <p>Supply of adequate vaccines;</p> <p>Maintenance of vaccine cold chain;</p> <p>Intensify EPI disease surveillance;</p> <p>Intensify immunization outreach services;</p> <p>Seek support from other sectors.</p> <p>Community sensitisation on (IMCI);</p> <p>Promotion of immunisation of children;</p> <p>Promote improved nutrition;</p> <p>Promote personal hygiene;</p> <p>Build capacity of CORPS/CHWS and health workers;</p> <p>Supply adequate drugs.</p>
HIV/AIDS	<p>Reduce incidence and prevalence of environmental health related communicable diseases;</p> <p>Prevention of HIV//STI/AIDS prevalence rates.</p>	<p>High poverty level among community members;</p> <p>Poor soil structure;</p> <p>Flood menace;</p> <p>Poor planned urban Towns/Centres;</p> <p>Strong cultural believes;</p> <p>Inadequate drugs;</p> <p>Inadequate medical equipment;</p> <p>Inadequate supervision due to lack of funds.</p>	<p>Community sensitisation health education;</p> <p>Construct demonstration VIP latrines;</p> <p>Capacity building of CORPS;</p> <p>Promotion of intersectoral collaboration;</p> <p>Community sensitisation and health education;</p> <p>Initiate VCT centres at all health facilities;</p> <p>Home based care for PLWA;</p> <p>Advocacy for behaviour change;</p> <p>Blood screening at H/facilities;</p> <p>Procure and supply drugs for STI treatment;</p> <p>Promote inter-sectoral collaboration.</p>
Education and Training	<p>To equip all schools with permanent classrooms;</p> <p>To have at least 2 science laboratories in every secondary school;</p> <p>Optimise utilization of existing school facilities.</p>	<p>Collapse of the sugar industry;</p> <p>Collapse of the rice irrigation scheme;</p> <p>Under enrolment;</p> <p>Large number of orphans;</p> <p>Hard economic times make it difficult to set up bursary scheme;</p> <p>Lack of sponsors for in-service training of school administrators.</p>	<p>Fundraising;</p> <p>Seeking donations;</p> <p>Sensitising parents;</p> <p>Initiate bursary schemes for bright and needy students;</p> <p>Provide training for school administrators to eliminate poor administration.</p>
Shelter and Housing	<p>Improve on the condition of existing houses;</p> <p>Increase houses in the urban areas.</p>	<p>There are still a number of houses that do not meet required standards for human habitation;</p> <p>There is shortage of housing in urban areas.</p>	<p>Develop plans for cheap conventional houses.</p>

Culture, Recreation Sports	Encourage production of cultural artefacts and folklore; Promote sports and recreational activities.	Lack of funds; Lack of sporting facilities.	Sensitise the people on the importance of cultural artefacts and folklore; Include plans for sports ground in LADPs.
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### 3.4.6 Project and Programme Priorities

#### A: On-going Project/Programmes: Education and Training

Project Name Location/Division	Objectives	Targets	Description of Activities
Provision of Physical Facilities in Secondary Schools District wide	Improve academic performance especially in science subjects.	Every secondary school should have a science laboratory.	Construction of laboratories and other facilities like dormitories in schools.
Provision of Physical Facilities in Primary School District wide	Improve academic performance by providing conducive learning environment.	Provision of classrooms in primary schools.	Construction of adequate classroom in primary schools.
School Bursary Programme District wide	To reduce school dropout rate due to lack of school fees.	Provision of bursary to needy bright students in every division.	Allocation of bursary to needy and bright students.
Text Books Provision District wide	To improve on academic performance.	Every school to be provided with necessary text books.	Distribution of text books to schools.

#### A: On-going Project/Programmes: Health and Nutrition

Project Name Location/Division	Objectives	Targets	Description of Activities
Malaria Prevention and Control District wide	Reduce incidences and prevalence of malaria among the entire population in the district.	Reduce malaria morbidity and mortality by 30 per cent.	Develop district malaria prevention and control strategies; Implement malaria prevention and control/ management package at all levels; Mobilise resources and promote intersectoral collaboration.
Reproductive Health District wide	To improve utilization of reproductive health services at all levels in the district.	Increase access to family planning services from the current 60 per cent health care facilities to 75 per cent; Improve maternal health, post abortion care.	Develop district reproductive health strategy; Promote adolescent health; Provision of wide range of contraceptive methods including surgical contraceptive and implants; Mobilise resources and implement R.H at all levels; Promote intersect oral collaboration management of specialized obstetric and genic cases.
HIV/AIDS/TB Prevention and Management District wide	To reduce transmission of STI/HIV and mitigate the consequences of infection at all levels in the district.	To reduce HIV prevalence rate by 10 per cent and STI prevalence by 50 per cent; Improve TB treatment success rate.	Develop district HIV/AIDS/TB control strategies; Implement the packages, surveillance, screening of HIV/AIDS/TB/STI. Initiate management of HIV/AIDS/TB/STI package at all levels; Mobilise resources and promote intersect oral collaboration.

Integrated Management of Childhood Illness (IMCI) District wide	Improve integrated management of childhood illnesses (IMCI) at all levels in the district.	Reduce less than five morbidity and mortality attributable to measles, pneumonia, diarrhoea, malaria, and malnutrition from 70 per cent to 40 per cent; Reduce malnutrition by 30 per cent among children less than five years.	Develop district IMCI strategy and surveillance, integrated service provision; Adopt charts to suit local conditions; Train primary level health care workers; Mobilize resources and promote intersectoral collaboration.
Expanded Programme on Immunization (EPI) District wide	Reduce ill health and mortality resulting from immunizable diseases.	Achieve 90 per cent immunization coverage with all antigens; Reduce measles morbidity by 90 per cent and mortality by 90 per cent; Reduce the incidence of Neo-Natal Tetanus (NNT) to less than 1 per 1,000 live births with 100 per cent reporting rate.	Plan and implement immunization campaigns in the district; Maintain HIS, cold chain at all levels in the district; Maintain immunization coverage of the district at 90 per cent and above; Mobilise resources and promote intersectoral collaboration.
Community Based Rehabilitation (CBR) District wide	Rehabilitation of the physically handicapped people in the community.	Have 50 per cent of the physically handicapped people in the community rehabilitated; Ten (10) community groups trained on identification and referral of physically handicapped children.	Rehabilitation of physically handicapped people in the district; Training community groups on identification and referral of physically handicapped children.
Preventive Maintenance of Infrastructure (Buildings, medical and laboratory equipment etc) District wide	Rehabilitated and well-maintained health facilities and equipment will provide an enabling environment to the provision of quality health care to the Kenyan population.	Functional preventive maintenance services in place at all health facilities.	Develop district preventive Maintenance of infrastructures strategies; Implementation of preventive maintenance packages at all levels; Mobilization of resources and promote intersectoral collaboration.
Control of Vector Borne Diseases (Bilharzias) District wide	Reduce the incidence and prevalence of Bilharzias among the rural community in the district.	Reduce incidence of bilharzias by 50 per cent.	Develop district strategy for control of vector borne diseases (Bilharzias); Implementation of strategy package at all levels; Mobilise resource and promote intersectoral collaboration.
Community Mobilization District wide	To improve living standards of the people.	Women, youths handicapped orphans.	Sensitising the community to undertake development activities.
Community Based Nutrition / Programmes Nyando and Mtwani Divisions	To reduce poverty for men and women and alleviation of malnutrition in children.	Men, women and children.	To facilitate the communities to undertake, plan and implement activities geared towards alleviation of malnutrition among children and poverty reduction



Control and Prevention of Environmental Health related Communicable Diseases District wide	To reduce the incidence of environmental health related diseases.	Reduce incidence of environmental health related diseases by 50%.	Develop a strategy to control environmental health related diseases; Mobilise the community and the private sector in the fight against environmental health hazards.
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**B: New Project Proposal: Health and Nutrition**

Project Name Location/Division	Priority Ranking	Objectives	Targets	Description of Activities
Health Management Support Systems Development District wide	1	Establish effective district health sector management and planning institutions to facilitate efficient delivery of quality health care services.	Strengthen institutional and planning capacity of DHMB, DHMT and stakeholders forum.	Develop district health management support systems strategies; Implementation of district health management support systems packages at all levels; Mobilisation of resources and promote intersectoral collaboration; Conduct regular monitoring and evaluation of the package being implemented. <b>Justification:</b> Need for improved health service delivery.
Drugs and Medical Supplies District wide	2	Establish effective demand driven system for supply of drugs and other medical supplies in the district to promote and provide quality health care services.	50 per cent of district drugs needs purchased by the district.	Develop district drugs and other medical supplies procurement, storage and distribution; Strategise implementation of drugs and other medical supplies packages at all levels; Mobilise resources and promote intersectoral collaboration. <b>Justification:</b> Ensure availability of drug and medical supply for improved service deliver.
Mental Health/Drug and Substance Abuse District wide	3	Prevention and care for mental health/drug and substance abuse in the community.	Reduction of incidence and prevalence of mental health/drug and substance abuse by 50 per cent.	Develop district mental health/drug and substance abuse control strategy; Implement the mental health/drug and substance abuse control strategy at all levels; Mobilize resources and promote intersectoral collaboration. <b>Justification:</b> Drug abuse is a rising problem especially among the youth.



## B: New Project Proposals: Culture, Recreation and Sports

Project Name Location/Division	Priority Ranking	Objectives	Targets	Description of Activities
Gender Mainstreaming and Empowerment of Women District wide	1	To establish training needs for groups.	Women groups self/help groups for handicapped and orphans.	Carry out a <i>baseline survey</i> on existing women entrepreneur; Avail systems and credit options in the district. <b>Justification:</b> Women are disadvantaged especially when accessing credit from financial institutions.
Capacity Building District wide	2	To improve the managerial capacities of groups.	Women groups, youth, handicap and orphans.	Train groups in <i>managerial</i> , leadership skill. <b>Justification:</b> Lack of managerial skills among women.
Credit Provision District wide	3	Provide credit to groups for employment.	Women, men youth, orphans handicapped.	Identification of viable groups. <b>Justification:</b> Problems of accessing credit for group activities.
Development of Monitoring and Evaluation Systems District wide	4	To be able to monitor the progress of activities undertaken.	District level and community level.	Identifying information needs for M&E. <b>Justification:</b> Need to take corrective measures in good time.

### 3.4.7 Cross Sector Linkages

Human Resource Development Sector draws support from the Agriculture and Rural Development sector in terms of income and food, for nutrition and health. Accessibility to the health facilities and schools also depends on road conditions. Security is also important for the sector to thrive.

## 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 quantity of life and competencies" while the mission is "to promote and enable the society by developing 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

The government has liberalized the telecommunication sector and freed the airwaves. The import duties on computers have also been reduced to encourage use of the machines. At the district level, department will respond to challenge for timely and accurate information by acquiring computers. In Nyando District there are computers in

Ministries of Roads and Public Works, Agriculture and Rural Development, Culture and Social Services, Health and the District Treasury. A few other non-governmental organizations also use computers for information management.

The District Treasury acquired a computer for expenditure data capture with an ultimate aim of linking to the Treasury in Nairobi to facilitate faster transfer of information and efficient disbursement of funds.

### 3.5.3 Importance of the Sector in the District

Information Communication Technology (ICT) is necessary for economic growth of a country. Kenya as a country has opened the way for the latest technology in communication by liberalizing the telecommunication sector and freeing the air waves to allow for private sector participation in the development of the sector. This has been done in recognition of the important role information delivery and exchange plays in the general development of the country. It is important that Kenya is not left out in the fast changing field of ICT.

For the district to benefit from ICT, the technology must reach every sector and every part of the country. The most important component of ICT is telecommunication. In Nyando District telecommunication services are not well developed. The district has only a few fixed telephone lines in the urban centres. Awasi, which is the District Headquarters, is served from a small exchange in Chemelil that cannot allow for expansion of the services. There are also frequent hitches in the system making communication difficult. The mission of the sector may only be achievable with the improvement of telecommunication services in the district.

### 3.5.4 Role of Stakeholder in the Sector

Stakeholder	Role
Government	Provides policy on ICT guidelines
Documentation Centre	Use of IT and operationalise the District Management Information Systems
Private Sector	Training and provision of cyber cafes

### 3.5.5 Sub-Sector Priorities, Constraints and Strategies

Sub Sector	Priorities	Constraints	Strategies
ICT	Acquisition of IT systems for the DIDC; Manpower development in the IT field; Acquisition of district level data; Co-ordination with other data sources	Lack of funding; Lack of training; Staff shortage; Lack of transport; Shortage of CBS staff for field data collection; Lack of internet, E-mail facilities and services; Lack of exchange programmes.	Identify funding sources either from GOK or donors; Train existing staff; Identify staff for posting in DIDCs; Avail transport for DSO; Avail funds for short term data collection contracts; Provide E-mail and internet services to DPU; Provide funding for exchange visits to other information centres.

### 3.5.6 On-going Project/Programmes: Information Communication Technology

Project Name Location/Division	Objectives	Targets	Description of Activities
Completion of the DIDC Building	To provide space for the DIDC; To provide office space for Ministry of Finance and Planning staff; To provide meeting room for co-ordination purposes.	To complete building by end of 2002.	Completion of building; Equipping the building with furniture and equipment e.g. book shelves, computers; Supply relevant documents.

### 3.5.7 Cross Sector Linkages

The development of ICT depends largely on infrastructure such as telecommunications. It is also important to observe that due to the huge amount of capital required the sector's success will be determined by the success of productive sectors of agriculture, trade, tourism and industries. The advancement in the sector will also be determined by the level of security prevailing for the protection of ICT equipment from vandalism.

## 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 its mission is "to promote socio-economic and politically stable development of the country through the provision of good and democratic government and development administration, efficient management of human resources and capacity building, visionary economic planning and prudent 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

At the district level there is administrative machinery under District Focus for Rural Development Strategy to ensure that government policies are implemented through the various sectors represented at the district.

The Provincial Administration structure that goes from the district to the sub-location level co-ordinates all development activities to ensure economic growth is achieved in the district. The Provincial Administration also co-ordinates other sectors ensuring that there is harmony in the delivery of government policies to the people.

The existing law enforcement institutions such as the police, the law courts and prisons help in creating an enabling environment that is safe and conducive for economic activities that benefit the people.

### 3.6.3 Importance of the Sector in the District

The sector ensures that there is an enabling environment for economic growth and development by ensuring security of the people and their properties. All other sectors can only deliver in an environment that is well managed and with assured safety, law and order. This is done through the legal system in the district composed of probation services and law courts. The police and the prisons are a part of the government machinery that ensures security prevails enabling people to engage in economic activities.

### 3.6.4 Role of Stakeholders in the sector

Stakeholder	Role
Provincial Administration	Law enforcement
Police Department	Law enforcement
Judiciary	Administration of justice
NGOs	Training, capacity building and sensitising the communities on issues of governance, rights and advocacy
Ministry of Finance and Planning	Coordinate all development activities in the district.
Community	Establishment of DIDC and operationalisation of DMIS
Private Sector	Participate in community policing Financial support to fund Police stations/posts

### 3.6.5 Sub-Sector Priorities, Constraints and Strategies

Sub Sector	Priorities	Constraints	Strategies
Probation Services	Services to introduce counselling and education in entrepreneurship; Curbing child abuse and neglect	Lack of adequate staff in the probation department.	Expansion of the probation services to include counselling and education in entrepreneurship.
Legal Services	Effective Administration of Justice.	Congestion in the law courts; Lack of information on child abuse and the weak position of the child in terms of taking action against abuse.	The judiciary department to be expanded and more staff provided; Establish administrative system that will identify abuse and neglect of the child and mete out strict penalties.
Provincial Administration	Provision of office space for administrative officers.	Lack of funds.	Establish a budget for construction of non-residential buildings
Administration of Justice	Effective implementation of the law of succession.	Lack of knowledge by the community on law on succession; Lack of involvement of the administrative officers in sorting out the succession problems.	Sensitise the local community on the law of succession; Involve the chiefs in monitoring the status of widows and orphans.
Financial Management	Strengthen district treasury and streamline financial management.	Shortage of trained accounts staff; Lack of adequate office accommodation and financial resources.	Equip district treasury with computers and other resources; Train district treasury staff on accounting computer packages.

Local Governance	Improve on financial management by Local Authorities.	Narrow revenue base for Local Authorities; Poor management of financial resources..	Train chief officers on financial management; Expand on the revenue base for Local Authorities.
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### 3.6.6 Project and Programme Priorities

#### A: On-going Projects/Programmes: Provincial Administration

Project Name Location/Division	Objectives	Targets	Description of Activities
Construction of District Headquarters	To provide office space for DC and other district departmental heads.	To complete 2 storey block offices.	Construction of non-residential buildings.
Construction of Police Posts.	Improve on security of the area	To complete the police post and staff houses.	Construction and equipping of police post.

#### A: New Project Proposals: Provincial Administration

Project Name Location/Division	Priority Ranking	Objectives	Targets	Description of Activities
Construction of DCs Resident Awasi	1	To provide accommodation to DC.	To identify a plot and construct one bungalow.	Construction of a residential building. <b>Justification:</b> New district without housing facilities.
Construction of A.P lines Awasi	2	To provide accommodation to administration police.	Construct housing units.	Construction of residential buildings. <b>Justification:</b> New district without housing facilities.
Construction of DO's Office Miwani Division	3	To provide office accommodation to the DO.	Construct one building block.	Construction of non-residential building. <b>Justification:</b> The DO is currently operating from an old office.

### 3.6.7 Cross Sector Linkages

Being a new district, this particular sector requires to be well linked with other sectors especially with the physical infrastructure sector. This is because the district requires constructing district; divisional, locational and sub-locational headquarter offices for the departmental heads and other officers operating at those levels. Provision of other services such as improvement of the road network and other forms of communication (postal and telecommunication) will enhance the ability of the district to handle development problems. An improvement and maintenance in the network of health facilities and services will greatly enhance the quality of life in the district, with focus on areas with perennial droughts and floods.

With improvement in ICT, this sector will be posed to tackle development issues; particularly monitoring and evaluation of plan implementation, sourcing of funding, and marketing of the district produce in a more efficient and effective way. Data collection, retrieval and analysis will also be greatly enhanced.

The first part of the report discusses the need for a new approach to the management of the environment. It highlights the importance of a holistic approach that takes into account the social, economic, and environmental dimensions of development. The report emphasizes the need for a shift from a traditional focus on environmental protection to a more integrated approach that recognizes the interdependence of these three dimensions.

#### 4.1. THE NEED FOR A NEW APPROACH TO ENVIRONMENTAL MANAGEMENT

The second part of the report discusses the need for a new approach to the management of the environment. It highlights the importance of a holistic approach that takes into account the social, economic, and environmental dimensions of development. The report emphasizes the need for a shift from a traditional focus on environmental protection to a more integrated approach that recognizes the interdependence of these three dimensions.

The third part of the report discusses the need for a new approach to the management of the environment. It highlights the importance of a holistic approach that takes into account the social, economic, and environmental dimensions of development. The report emphasizes the need for a shift from a traditional focus on environmental protection to a more integrated approach that recognizes the interdependence of these three dimensions.

### CHAPTER FOUR

## IMPLEMENTATION, MONITORING AND EVALUATION

The fourth part of the report discusses the need for a new approach to the management of the environment. It highlights the importance of a holistic approach that takes into account the social, economic, and environmental dimensions of development. The report emphasizes the need for a shift from a traditional focus on environmental protection to a more integrated approach that recognizes the interdependence of these three dimensions.

#### 4.1. THE NEED FOR A NEW APPROACH TO ENVIRONMENTAL MANAGEMENT

The fifth part of the report discusses the need for a new approach to the management of the environment. It highlights the importance of a holistic approach that takes into account the social, economic, and environmental dimensions of development. The report emphasizes the need for a shift from a traditional focus on environmental protection to a more integrated approach that recognizes the interdependence of these three dimensions.



## **4.0 INTRODUCTION**

This chapter presents the implementation, monitoring and evaluation process in the district by looking at the institutional set up for monitoring and evaluation of development projects and programmes. It is important to have in place an efficient and effective monitoring and evaluation system to ensure that the district achieves its planned objectives. This will be done through an implementation, monitoring and evaluation matrix presented below. The chapter also gives a summary of monitoring and evaluation impact and performance indicators. Monitoring will be done regularly as a continuous process while evaluation will be done in the mid term and at the end of the plan period in 2008.

### **4.1 INSTITUTIONAL FRAMEWORK FOR MONITORING AND EVALUATION SYSTEM IN THE DISTRICT**

At the community (village, sub locational, locational) level, monitoring and evaluation will be the onus of the various project committees basing their assessment on the project plans.

Divisional Monitoring and Evaluation Committee (Div.M&EC) will execute the monitoring and evaluation of projects at the divisional level. The committee will be composed of the District Officer, Divisional Departmental Heads, NGOs, donor agencies and other stakeholders. Monitoring will be done on quarterly basis and during field days. Subsequent reports will be presented to the Divisional Development Committee for perusal, discussion, adoption, intervention and submission to the District Development Committee.

District Monitoring and Evaluation Committee (DMEC) will be endowed with the responsibility of monitoring and evaluation of projects at the district level. The committee will be composed of the District Commissioner, NGOs, representatives of the civil society, donor agencies and other stakeholders. Reports from DMEC will be presented to the District Development Committee for endorsement, and perusal before submission to Provincial Monitoring and Evaluation Committee, for onward transmission to the M & E Committee at the national level. Reporting at the District level, as with lower levels, will be on a quarterly basis, with reports being sent regularly to the Ministry of Finance and Planning.

### **4.2 IMPLEMENTATION, MONITORING AND EVALUATION MATRIX**

The implementation matrix giving project name, cost, time frame, monitoring indicators/instruments, implementing agency and the role of stakeholders is provided below to help in the monitoring and evaluation of projects/programmes in this plan.

## 4.2.1 Agriculture and Rural Development

Project Name	Cost Kshs	Time Frame	Monitoring Indicators	Monitoring Tools	Implementing Agency	Stakeholders Responsibilities
National Agriculture and Livestock Extension Programme	20.5m	2002-2008	No. of farmers reached; No of focal areas established.	Reports from department.	MOARD	MOARD - Technical support SIDA – Funding Community.
Livestock Development Programme	5m	2002-2008	No. of bull schemes started; No. of dairy cows per year; No. of crosses; No. of farmers. trained	Reports from department.	MOARD	MOARD – Technical support and training; Women Groups – management Farmers – livestock rearing.
HPI	3m	2002-2008	No. of dairy goats.	Report from department.	MOARD	MOARD – Technical support; Women groups- Management; Farmers – keeping dairy goats.
C.C.F. Christian Children Fund Catholic Project	3m	2002-2008	No. of cows given.	Reports from DEC.	C.C.F	MAOARD – Technical support; Widows, disabled - management.
I.D.C.C.S. Inter Diocesan Christian Community Services	3m	2002-2008	No. of cows given.	Reports from DEC.	I.D.C.C.S	MOARD – Technical support; IDCCS – Funding and management.
Beekeeping	1m	2002-2008	No. of lungstroths introduced; No. of KTBH introduced.	Reports from department.	MOARD	MOARD – Technical support; Farmers to adopt use of lungstroth and KTBH
Tick Control	5 m	2002-2007	No. of cattle dips revived; No. of farmers trained.	Reports to the DEC.	DVO	Veterinary Dept – Technical support, Veterinary services, purchase drugs; Farmers pay for vet-services and manage revolving fund.
Artificial Insemination	2.6 m	2002-2005	No. of AI runs; No. of cooperative societies members trained.	Reports to the DEC; Reports from co-operatives.	DVO	Veterinary Department: Vet service delivery, training of Co-operative members, co-ordination; Farmers –Pay for AI Services manage A.I scheme.

Tsetse Control	3 m	2002 - 2007	No. of traps purchased; No. of communities trained; No. of surveys carried out.	Reports to DEC; Results of surveys; Reports from communities.	DVO	Veterinary Department – training communities, carry out services to establish tsetse fly areas; Farmers to replace old traps, plough tsetse fly breed areas.
Disease and Pest Control	1.5 m	2002 - 2008	No. animals vaccinated against various diseases; No. of birds vaccinated against various diseases.	Reports to the DEC; Reports from communities.	DVO	Veterinary Department- vaccination and baiting; Farmers to pay for vaccination services.
Veterinary Extension	6m	2002 - 2008	Percentage of dipping achieved; No. of inseminations per year.	Reports to DEC.	DVO	Veterinary Department -provide veterinary extension services and technical advice; Farmers to construct and manage dips and pay for insemination services.
Cotton Production Revitalization	4m	2002- 2008	Cotton acreage.	Reports from department.	MOARD	MOARD – Technical support; IDCCS – To develop the project; KNFU – Farmers mobilization; Farmers–cotton production.
Accelerated Cassava Multiplication Programme	2 m	2002- 2008	No. of cassava bulking plots established; No. of secondary and tertiary sites established.	Reports from department.	MOARD	MOARD – Technical support; IDCCS – To develop the project KNFU – Farmers mobilization; Farmers cotton production.
Safe Use of Pesticides	0.7 m	2002- 2008	No. of pesticides users trained.	Reports from department.	MOARD	MOARD – Technical support and training; Agro-chemical Association of Kenya – collaborator.
Promotion of Small Holder Community Based Rice Production in the Kano Plains (ATIRI)	0.6 m	2002- 2008	No. of schemes started.	Reports from department.	MOARD	MOARD – Technical support – training; Committee members – management; Water Department undertakes management of water resources.
Fruits/Fruit Tree Production and Processing	0.5 m	2002- 2008	Hectares put under fruits annually; No. of groups trained annually.	Reports from department.	MOARD	MOARD – Technical support – training; Farmers – To organise themselves into groups.
Horticultural Vegetable Production	0.5 m	2002- 2008	Percentage increase in yield;	Reports from department.	MOARD	MOARD – Technical support, training; Farmers to organise

			No. of groups trained annually.			groups.
LVEMP	6 m	2002-2008	Reports on water quality status.	Construction structures establishment; No of micro-catchments; No. of H/H reached.	MOARD	MOARD – Technical support Farmers to participate in conservation activities.
Promotion of Community Based Small Holder Irrigation (mini project)		2002-2008	No. of farmers trained.	Reports from department	MOARD	MOARD – Technical support; Farmers – To adopt irrigation technologies.
Promotion of Individual Irrigation, Systems in the Higher Potential Areas		2002-2008	No. of individual irrigation systems started.	Reports from department.	MOARD	MOARD – Technical support; Farmers to adopt irrigation technologies.
Post Harvest Loss Reduction	60 m	2002-2006	No. of fish handling facilities improved; No. of training sessions for fishermen and other fish handlers.	Reports from department to DEC.	MOARD (Fisheries)	Fisheries Department: technical advice and maintenance of the facilities.
Streamlining of Fish Marketing Channels	20 m	2002-2006	No. of fishermen Co-operatives reactivated; No. of storage facilities.	Reports from department to DEC.	DFO DCO	Co-operatives Department – technical support; Fisheries Department – Technical advice Fishermen – maintenance of the storage facilities.
Improvement of Accessibility to Credit	20 m	2002-2007	No. of fishermen loan schemes reactivated.	Reports to DEC.	DFO	Co-operatives Department technical support; Fishermen to form co-operative societies.
Improvement of Sanitary Conditions at Fish Landing Sites	3 m	2002-2006	No. of VIP latrines constructed; No. of fish bandas constructed; No. of bandas provided with water.	Reports to DEC.	MOARD (Fisheries)	Fisheries Department – technical support; Public Health Department - technical advice; Fishermen – contribute resources, maintain facilities.
Control of Exploitation of the Fisheries Resource in the Lake	3 m	2002-2007	No. of awareness fora held; No. of additional fish farmers.	Reports to DEC.	MOARD (Fisheries)	Fisheries Department – technical support; Farmers – Adopt fish farming.
Improvement of Fish	2 m	2002-2007	No. of demonstration	Reports to DEC	MOARD (Fisheries)	Fisheries Department – technical support;

Harvesting From FishPonds			ponds constructed; No. of sensitisation fora held; No. of ponds provided with quality seed.			Farmers – Adopt fish farming.
Nyando Flood Control	837 m	2002-2008	Length of dykes built.	Reports of DEC	MENR (Water)	Water Department: dyke construction; Maintenance of construction, machinery; Community- control of soil erosion along the constructed dykes.
Tamu Water Supply	12 m	2002-2007	No. of people supplied with potable water.	Report of DEC.	MENR (Water)	Water Department: to undertake rehabilitation works and provide technical support; Community: timely payment of water charges.
Koru/ Mnara Water Supply	10 m	2002-2003	Per cent of increase in water production.	Reports to DEC.	El-Nino Emergency Programme	Water Department: to undertake rehabilitation works and provide technical support; Community: timely payment of water charges.
Awasi Water Supply	50 m	2002-2003	Per cent increase in water production.	Reports to DEC.	MENR (Water)	Water Department: to undertake rehabilitation works and provide technical support; Community: timely payment of water charges.
River Awach Oroba Flood Protection	500 m	2002-2007	No. of km of dykes, drainage constructed No of check dams built.	Reports to DEC.	MENR (Water)	Water Department: to undertake rehabilitation works and provide technical support. Community: timely payment of water charges.
Nyabondo Water Supply	18 m	2002-2007	Percent of community members served.	Reports to DEC.	MNR (Water)	Water Department: to undertake rehabilitation works and provide technical support. Community: timely payment of water charges.
Kibigori Water Supply	32 m	2002-2005	Per cent of community members served.	Reports to DEC.	MENR (Water)	Water Department: to provide technical support and supervision of the works.



Muhoroni Water Supply	12 m	2002-2005	Per cent of community members served.	Reports to DEC.	MENR (Water)	Water Department: to undertake rehabilitation works and provide technical support; Community: timely payment of water charges.
Sinking of Boreholes and Shallow Wells	80 m	2002-2008	No. of boreholes drilled; No. of shallow wells dug	Reports to DEC.	MENR (Water)	Water Department: to provide technical support e.g. surveys, to provide drilling equipment; Community-to organise themselves to maintain, meet cost of equipping boreholes, wells and pumps.
Afforestation Agro-forestry Training and Extension	1.6 m	2002-2008	No. of hill tops planted % increase in tree coverage.	Reports to DEC.	MOARD (Forest)	Forest Department: technical support; Community – protection of planted trees.
Establishment of Central Tree Nurseries	0.3 m	2002-2005	No. of tree nurseries started.	Reports to DEC.	MOARD (Forest)	Forest Department: technical support, provide materials; Farmers – plant trees.
Demonstration Farms	0.5 m	2002-2005	No of demonstration farms started.	Reports to DEC.	MOARD (Forest)	Forest Department: Technical support and planting seedlings; Farmers to protect planted trees on their farms.
Tree Planting Along the Highways in Nyando District	0.8 m	2003-2008	No. of km of high way covered.	Reports to DEC.	MOARD (Forest)	Forest Department: to provide seedlings, technical support; Provincial Administration to protect planted trees; Community – to protect planted trees.
Nyando/Miriu River Flood Control/Afforestation Programme	0.8 m	2003-2008	Per cent of embankment covered.	Reports to DEC.	MOARD (Forest)	Forest Department: to provide technical support; Community – to protect planted trees.
Construct 6 Offices in Each Division.	2.4m	2003-2008	No. of divisional offices constructed.	Report by DFO.	MOARD (Forest)	Forest Department to provide funding; MRPW to supervise the construction.
Storage of Fish	6 m	2003-2008	No. of cold room storage facilities.	Reports to DEC.	MOARD (Co-operative)	Funding; Expertise; Provision of facilities.
Maintenance of Quality Fish	5 m	2003-2008	No. of bandas constructed.	Reports to DEC.	MOARD (Co-operative)	Expertise
Hygienic Storage of Processed Fish	2.5 m	2003-2008	No. of dry fish stores constructed.	Reports to DEC.	MOARD (Co-operative)	Expertise
High Quality Seed for Fish Farmers	2 m	2003-2008	No. of fry production facilities constructed.	Reports to DEC.	MOARD (Co-operative)	Expertise; Provision of seeds.

## 4.2.2 Physical Infrastructure

Project Name	Cost Kshs.	Time Frame	Monitoring Indicators	Monitoring Tools	Implementing Agency	Stakeholders Responsibilities
Road D311 Kapere-Songhor	200 m	2002-2008	No. of Km tracked.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road E1134 Katito-Miruka	20 m	2002-2008	No. of Km covered.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road D 293 Ahero-Mwani	70 m	2002-2008	No. of km covered.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road E 248 Chiga-Kibigori	60 m	2002-2008	No. of km done..	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road D 218 Sondu-Kusa	50 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road E220 Katito-Awasi	40 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road D290 Kɔrowe-Nduru	10 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road D311 Songhor-Muhorni	50 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road E219 Kapserok-Bodi		2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Korowe-Kodi	50 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Korowe-Kabonyo	40 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road E239 Kori-Fort Tannau	10 m	2002-2008	No. of culverts built.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support
Road E 235 Chemelil-Tamau	16 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road E236	10 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road E 121 Boya-Oren		2002-2008	No. of km covered.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road E 120 Ahero-Mao	10 m	2002-2008	No. of km covered.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road D218 Sondu	10 m	2002-2008	No. of km tarmacked.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road D 293	10 m	2002-2008	No. of km tarmacked.	Reports: quarterly, annual	MRPW	MRPW: funding and technical support.
Muhoroni-Londiani	50 m	2002-2008	No. of km recarpeted.	Reports: quarterly, annual	MRPW	MRPW: funding and technical support.
Road C34	50 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.

Road Siolo Mwani-Obumba	25 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road S2050 Koru-Gilmani	10 m	2002-2008	No. of km done.	Reports: quarterly annual.	MRPW	MRPW: funding and technical support.
Road S1911/7 Koru-Mnara	20 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road R42	15 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road S1031 Miwani-Magogo	10 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road R17 Rabuor-Nyangande	15 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road R79B Omo-Wangaya	10 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Angnecha Kanganlo River	10 m	2002-2008	No. of km box culverts.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road R16 Ahero-Kahore	10 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Kanyamlori Cherwa	10 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road R76 Alendu Migihgo	5 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.
Road R13 Sondu-Nyamarimba	35 m	2002-2008	No. of km done.	Reports: quarterly, annual.	MRPW	MRPW: funding and technical support.

#### 4.2.3 Human Resource Development

Project Name	Cost Kshs.	Time Frame	Monitoring Indicators	Monitoring Tools	Implementing Agency	Stakeholders Responsibilities
Malaria Prevention and Control	798,000	2002-2008	Per cent reduction of malaria mortality	Reports from MOH	MOH	MOH: to develop malaria control strategies, mobilize resources to fight malaria and provide preventive and curative services; Community to participate in malaria control activities; NGOs; to provide resources, funds
Reproductive Health	12.8 m	2002-2008	Per cent of increase in family planning services	Reports from MOH	MOH	MOH to develop District Reproductive Health Strategies and sensitise on a wide range of contraceptive methods; NGOs collaborate with MOH in the provision of reproductive health services

HIV/AIDS/TB Prevention and Management	12 m	2002-2008	Per cent of reduction in HIV prevalence; Per cent of reduction in STI.	Reports from MOH	MOH	MOH: to develop District HIV/AIDS/TB control strategies, surveillance screening of HIV/AIDS/TB/STI; DACC: to mobilize resources for HIV/AIDS activities, develop district HIV/AIDS strategic plan and promote intersectoral collaboration; NGOs/CBOs: to provide resources for HIV/AIDS intervention and participate in HIV/AIDS control activities
Integrated Management of Childhood Illness (IMCI)	6.7 m	2002 - 2008	Per cent of reduction in mortality attributed to measles, diarrhoea and malnutrition.	Reports from MOH	MOH	MOH to develop strategy for IMCI
Expanded Programme on Immunization (EPI)	13.4 m	2002 - 2008	Per cent of Immunization coverage; % of reduction in measles, morbidity, mortality and reduction in ENT.	Reports from MOH	MOH	MOH to come up with EPI programme Community to participate
Community Based Rehabilitation (CBR)	5.6 m	2002 - 2008	per cent of physically handicapped rehabilitated; No of communities trained on identification.	Reports from MOH	MOH	MOH to develop CBR strategy Physical handicapped to benefit participate Community to be involved
Preventive Maintenance of Infrastructure (Buildings, medical and Laboratory Equipment etc)	14 m	2002 - 2008	No. of buildings rehabilitated or improved.	Reports from MOH	MOH	MOH to develop maintenance programme; Community to contribute in terms of management and resources.
Control of Other Vector Borne Diseases (Bilharzias)	6.8 m	2002 - 2008	% of reduction in bilharziah cases	Reports from MOH	MOH	MOH to develop strategy on control of vector borne diseases.
Health Management Support Systems Development	10.5 m	2002 - 2008	Availability of health management support system.	Reports from MOH	MOH	MOH to develop HMSS.

Mental Health/Drug and Substance Abuse	6.3 m	2002 - 2008	% of reduction in cases of drug and substance abuse.	Reports from MOH	MOH	MOH to develop strategy to control drug and substance abuse.
Control and Prevention of Environmental Health Related Communicable Diseases	8 m	2002-2008	% of reduction in cases of environmental health related diseases.	Reports from MOH	MOH	MOH to develop control and prevention strategy for environmental health related diseases.
Provision of Physical Facilities in Secondary Schools	50 m	2002-2008	DEO's Report	No. of facilities provided	PTA/BOG, Community	BOG/PTA: fundraising; Community – financial support
Provision of Physical Facilities in Primary Schools	100m	2002-2008	DEO's Report	No. of facilities provided	PTA/BOG, Community	BOG/PTA: fundraising; Community – financial support
School Bursary Programme	5 m	2002-2008	DEO's Report	No. of students assisted	MOE	BOG/PTA: fundraising; Community – financial support
Provision of Text Books to Schools	18.5 m	2002-2008	DEO's Report	No. of books provided	MOE	BOG/PTA: fundraising; Community – financial support
Gender Mainstreaming and Empowerment of Women	3 m	2002-2008	No. of women organisations trained.	Reports from DSDO	Department of Social Services	DSDO – Develops training strategy for women groups
Capacity Building	2 m	2002-2008	No. of women, youth and handicapped groups trained.	Reports from DSDO	Department of Social Services	DSDO – develops training strategy for women, youth and the handicapped involved.
Credit Provision	5 m	2002-2008	No. of groups provided with credit	Reports from DSDO	Department of Social Services	DSDO – to identify source of credit.
Development of Monitoring and Evaluation Systems	1 m	2002-2008	A suitable monitoring and evaluation system is put in place.	Reports from DSDO	Department of Social Services	DSDO – develop to the M & E system
Community Mobilization	1.5 m	2002-2008	No. of groups sensitised on development.	Reports from DSDO	Department of Social Services	DSDO – to mobilize women, youth and the handicapped for sensitisation.
Community Based Nutrition Programme	4 m	2002-2008	% reduction of poverty and malnutrition among children.	Reports from DSDO	Department of Social Services	DSDO – to co-ordinate CBNP district facilitation team to facilitate communities in planning and implementation.



#### 4.2.4 Tourism, Trade And Industry

Project Name	Cost Kshs.	Time Frame	Monitoring Indicators	Monitoring Tools	Implementing Agency	Stakeholders Responsibilities
Entrepreneurship Training	2.5 m	2002-2008	No. of entrepreneurs trained per division	Reports by District Trade Development officer (DTDO)	DTDO	Trade Department; Preparing training curriculum; Seek funding for training.
Joint Loan Scheme	5 m	2002-2008	Amount given out as loans to business people.	Reports by DTDO	DTDO	Trade Department; Co-ordinate and manage the loan scheme
Exhibition for SSE	3 m	2002-2008	No. of SSE exhibitions held.	Report by District Industrial Development Officer (DIDO)	DTDO	Industry Department to organise the exhibitions and seek funds, for the exhibitions.
Construction of Ministry's Office block	10 m	2002-2008	Office block constructed.	Report by DIDO	DTDO	Industry Department to provide funds.

#### 4.2.5 Information Communication Technology

Project Name	Cost Kshs	Time Frame	Monitoring Indicators	Monitoring Tools	Implementing Agency	Stakeholders Responsibilities
Completion of DIDC Building	0.4 m	2002-2003	DIDC Completed	Reports from DDO	MOFP	MOFP to provide funds

#### 4.2.6 Public Administration, Safety, Law and Order

Project Name	Cost Kshs	Time Frame	Monitoring Indicators	Monitoring Tools	Implementing Agency	Stakeholders Responsibilities
Construction of District Headquarters	20 m	2001-2002	Office block completed.	Reports from the PA.	Provincial Administration.	Provincial Administration to solicit for funds from well wishers.
Construction of Police Post		2001-2002	Police post building completed.	Reports from the PA.	Provincial Administration.	Police Department to provides funds.
Construction of DC's Residence	8 m	2002-2004	DC's residence constructed.	Reports from the PA.	Provincial Administration.	Provincial Administration to provide funds; MRPW to undertake supervision.
Construction of AP Lines	8 m	2002-2004	AP lines constructed.	Reports from the PA.	Provincial Administration.	Provincial Administration to provide funds; MRPW to undertake supervision
Construction of Miwani DO's Office.	2 m	2002-2005	DO's Office constructed.	Reports from the PA.	Provincial Administration.	Provincial Administration to solicit for funds from well wishers.

### 4.3 SUMMARY OF MONITORING AND EVALUATION IMPACT AND PERFORMANCE INDICATORS

The following is a summary of impact and performance indicators of projects and programmes in the various sectors over the plan period.

Sector	Indicators	Present Situation	Mid Term	End of Plan Period
		2001	2004	2008
Health	Infant Mortality rate	89/1000	80/1000	75/1000
	Doctor /patient ratio	1:50,000	1:40,000	1:30,000
	HIV/AIDS Prevalence	29 %	25%	20%
	Life Expectancy	49 Years	52 Years	55 Years
Education	Primary school dropout rate	4.6%	4%	3.5 %
	Teacher Pupil ratio	1:31		
	Literacy level	42.7%	48%	52%
Rural Development	Absolute poverty	68.9%	60%	50%
	Households with access to potable water	22,110	27,000	32,000
Energy	Households with electricity connections	1,801	2,200	2,600
	Households using firewood/charcoal	90%	75%	60%
	Households using kerosene, gas, biogas	20%	25%	30%
Telecommunication	Households with telephones	232	270	310
	Number of telephone booths	73	100	120
	Mobile phone coverage	30%	100%	100%

