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by members of the District Executive Committee and approved by the District  
Development Committee.

Rural Planning Department of the Office of the Vice President and Ministry of  
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revision of the guidelines and was also responsible for editing and publication of  
the plan.

The Plan is divided into five chapters.

Chapter One: Provides background information on the district's natural and  
human resource base and potential.

Chapter Two: Provides a portrait of the people of the district, the way they  
work and live, and their standards of living. It presents social and economic  
conditions of the district.

## **GARISSA**

# **DISTRICT DEVELOPMENT PLAN**

### **1994 - 96**

Selection and prioritization of projects and programmes was the responsibility  
of the DDC. The drafting of the plan was guided by the Sessional Paper No. 1 of  
1988 and other relevant national and sectoral policy documents.

Rural Planning Department  
Office of the Vice President and Ministry of Planning and National Development

This District Development Plan was prepared by the District Departmental Heads of various ministries under the co-ordination of the District Commissioner assisted by the members of the District Planning Unit. The plan drafts were discussed by members of the District Executive Committee and approved by the District Development Committee.

Rural Planning Department of the Office of the Vice President and Ministry of Planning and National Development provided overall guidance through seminars, formulation of the guidelines and was also responsible for editing and publication of the plan.

The Plan is divided into five chapters.

Chapter One: Provides background information on the district's natural and human resource base and potential.

Chapter Two: Provides a portrait of the people of the district, the way they earn their livelihood, and their standard of living. It presents social and economic levels of the district.

Chapter Three: Presents the major development constraints and the district's strategy for dealing with them in the 1994-96 plan period.

Chapter Four: Provides a situation analysis of HIV/AIDS of the District

Chapter Five: Lists in order of priority for each sector major projects and programmes which the DDC wishes to implement during the 1994-96 plan period.

Selection and prioritization of projects and programmes was the responsibility of the DDC. The drafting of the plan was guided by the Sessional Paper No. 1 of 1986 and other relevant national and sectoral policy documents.

Rural Planning Department  
Office of the Vice President and Ministry of Planning and National Development

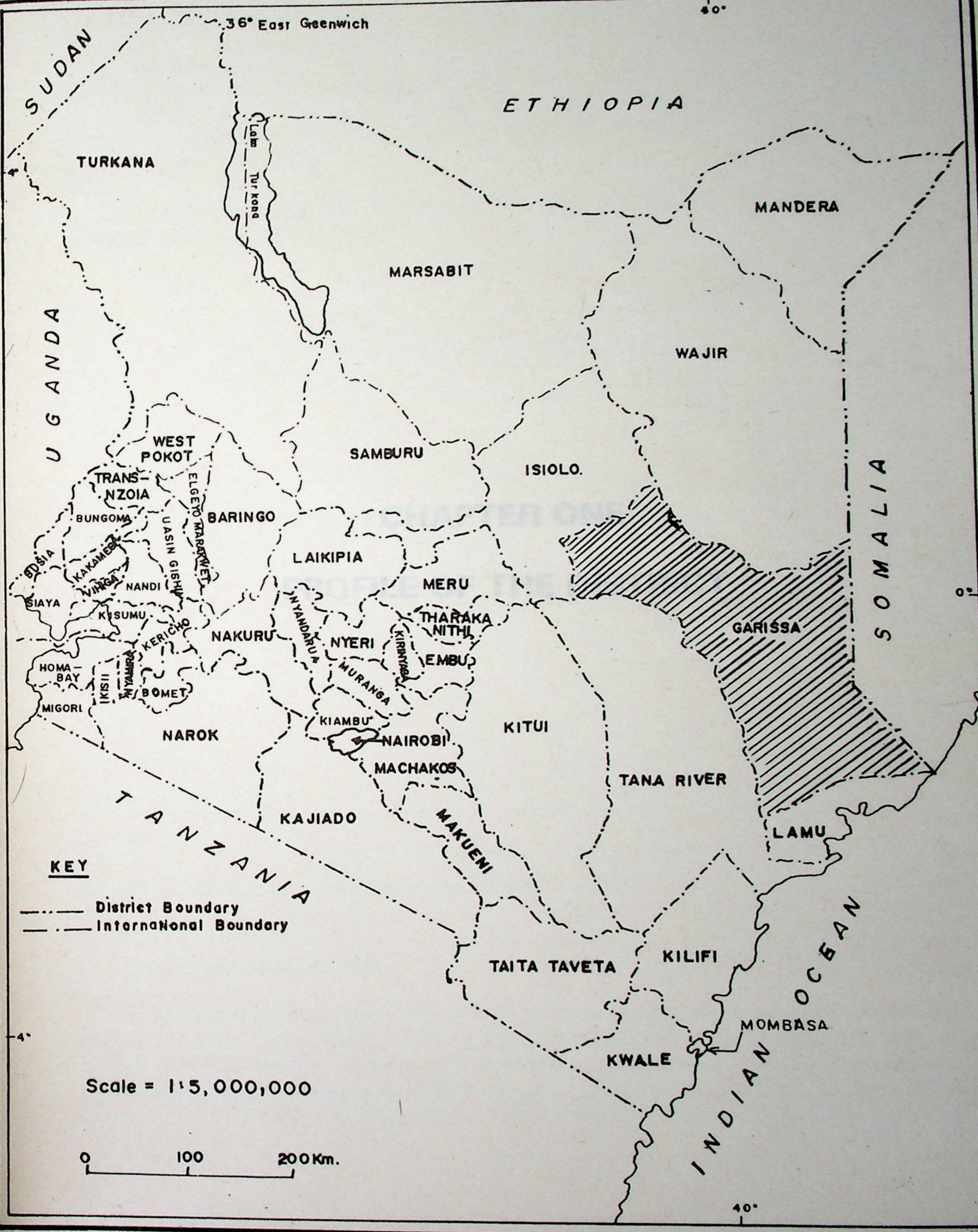
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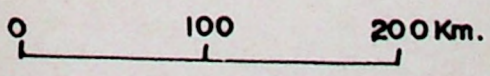
# LOCATION OF THE DISTRICT



### KEY

- District Boundary
- - - - - International Boundary

Scale = 1:5,000,000



40°

Location and Size

Garissa District is one of the three districts forming the North Eastern Province. The district borders the Republic of Somalia to the East, Lamu District to the South, Tana River District to the West and Wajir District to the North. The district lies approximately between latitude 0° 55' N and 2° 7' S and Longitudes 38° 34' E and 41° 32' E.

The district covers a total area of about 43,931 sq km. The breakdown of the total area by division is given.

Table 1.1

Area of the District by Division

Division	Area (Km <sup>2</sup> )
Balambale	2,167
Bura	10,843
Central	722
Dedash	7,074
Hulugua	4,884
Ilara	1,436
Jara Jira	5,481
Liboi	1,783
Masalani	2,452
Modogashe	7,218
Total	43,931

**CHAPTER ONE**  
**PROFILE OF THE DISTRICT**

Source: District Agricultural Office, Garissa, 1991

Topography and Geology

Garissa District is low lying with an altitude ranging between 70m and 400m above sea level. Tana River, running along the Western boundary of the district, is the only permanent river which though not confined within the district's boundaries has tremendous effect on the climate, settlement patterns and economic activities within the district. Given the arid nature of the whole district,

## PHYSICAL DESCRIPTION

### Location and Size

Garissa District is one of the three districts forming the North Eastern Province. The district borders the Republic of Somalia to the East, Lamu District to the South, Tana River District to the West and Wajir District to the North. The district lies approximately between latitude  $0^{\circ} 58' N$  and  $2^{\circ} 1' S$  and Longitudes  $38^{\circ} 34' E$  and  $41^{\circ} 32' E$ .

The district covers a total area of about 43,931 sq.km. The breakdown of the total area by division is given.

Table 1.1

### Area of the District by Division

Division	Area (Km <sup>2</sup> )
Balambala	2,167
Bura	10,843
Central	722
Dadaab	7,074
Hulugho	4,684
Ijara	1,496
Jara Jilla	5,481
Liboi	1,783
Masalani	2,452
Modogashe	7,219
Total	43,931

Source: District Agricultural Office, Garissa, 1991

### Topography and Geology

Garissa District is low lying with an altitude ranging between 70m and 400m above sea level. Tana River, running along the Western boundary of the district, is the only permanent river which though not confined within the district's boundaries has tremendous effect on the climate, settlement patterns and economic activities within the district. Given the arid nature of the whole district,



all the sedentary agriculture is practiced along the river and the potential for increased agricultural production lies in harnessing the river's water for expanded irrigation. The river also forms the single source of permanent water for the sprawling and fast growing Garissa Town. Seasonal river Laghas are found all over the district and greatly interfere with road transportation during the wet seasons.

Typical of arid lands, the settlement patterns tend to be dictated by the topographical influence on the harsh environment. Tana River provides a major influence on the permanent settlements found along it. It is due to its influence and partly to the coastal influence that explains the concentration of settlements in the southern divisions as compared to the scattered pattern found in the north. Garissa, Bura, Masalani, Korakora, Kamuthi and Nanighi are major permanent settlement centres whose growth is attributable to the river effect.

Given the nomadic nature of the inhabitants, migration to water and pasture points is influenced by the seasonal river laghas and water pans that provide pockets of temporary settlements generally determined by the length of the dry season.

**Climate**

The district is hot and dry most of the year except for some unreliable torrential rains which, when they come, fall in April and October. Table 1.2 shows the monthly rainfall figures for the period 1988 to 1992.

Division	1988	1989	1990	1991	1992
Balambale	1,250	1,450	1,350	1,550	1,650
Central	1,350	1,550	1,450	1,650	1,750
Dabod	1,450	1,650	1,550	1,750	1,850
Hulugho	1,550	1,750	1,650	1,850	1,950
Jara	1,650	1,850	1,750	1,950	2,050
Jara Jira	1,750	1,950	1,850	2,050	2,150
Lidol	1,850	2,050	1,950	2,150	2,250
Masalani	1,950	2,150	2,050	2,250	2,350
Mogadisho	2,050	2,250	2,150	2,350	2,450
<b>Total</b>	<b>18,950</b>	<b>20,950</b>	<b>19,950</b>	<b>21,950</b>	<b>22,950</b>

Source: District Agricultural Office, Garissa, 1991

**Topography and Geology**

Garissa District is low lying with an altitude ranging between 70m and 400m above sea level. Tana River, running along the Western boundary of the district, is the only permanent river which though not confined within the district's boundaries has tremendous effect on the climate, settlement patterns and economic activities within the district. Given the arid nature of the whole district,

Table 1.2

Monthly Rainfall During 1988 - 1992 (mm)

Month	1988	1989	1990	1991	1992
January	12.5	27.1	2.4	5.6	4.3
February	0.1	0.7	13.4	0.0	TR
March	81.8	4.6	108.1	34.5	2.2
April	103.3	270.1	78.1	117.2	43.2
May	0.8	5.7	1.6	7.2	6.1
June	15.7	TR	1.5	3.1	1.8
July	0.1	0.3	TR	14.4	0.6
August	4.1	1.4	TR	2.9	2.4
September	13.1	4.5	0.1	TR	5.6
October	7.0	87.0	18.7	10.9	4.6
November	69.2	225.4	124.1	22.1	135.5
December	76.3	6.0	49.6	64.8	118.4
Total	384.0	632.8	397.6	282.7	324.7
Mean Annual Rainfall	32.0	52.7	33.1	23.6	27.1

Source: Meteorological Department, Garissa, 1993.

Rainfall distribution tends to be even within the district but the southern divisions of Hulugho, Masalani and Bura receive relatively more rainfall than the northern part. Rainfall tends to decrease northwards which could be attributed to the coastal influence.

Given the arid nature of the district, temperatures are generally high most of the year and ranges between 20.5°C to 40°C. A relatively cooler spell is between the months of April to August. Table 1.3 gives the mean monthly temperatures (maximum and minimum recordings) for the period 1988 to 1992.

Table 1.3

Mean Monthly Temperature (In °C) 1988 - 1992

MONTH	1988		1989		1990		1991		1992	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
January	4.8	24.8	33.0	22.9	34.4	22.8	35.0	23.3	33.1	21.0
February	37.0	24.8	35.8	36.2	24.2	24.2	38.8	23.8	37.1	25.3
March	35.7	25.4	36.4	24.4	35.2	24.7	38.1	24.5	37.1	25.0
April	35.2	25.3	34.1	23.8	33.4	23.9	35.4	24.5	36.4	28.5
May	35.0	23.9	33.3	23.0	34.5	23.4	34.5	23.3	34.0	24.2
June	32.4	22.4	32.8	21.6	32.8	21.2	32.6	22.8	35.2	28.1
July	32.6	22.9	32.1	21.6	32.3	20.9	30.8	22.4	38.1	28.5
August	32.8	22.1	32.0	21.2	32.4	21.2	31.5	21.0	38.5	25.2
September	33.2	21.9	33.8	22.5	33.5	21.7	33.2	21.9	37.8	28.3
October	35.4	23.5	33.4	23.0	35.1	23.2	35.8	25.8	38.8	24.8
November	33.7	22.3	32.0	23.5	34.4	23.8	35.3	24.1	38.0	28.4
December	33.1	23.4	32.5	22.9	32.8	22.8	34.9	23.9	35.7	25.0
Mean Annual Temperature	34.2	23.6	33.4	22.7	33.9	22.8	34.3	23.4	36.4	25.2

Source: Meteorological Department, Garissa, 1993.

Rainfall distribution has a major influence on the agricultural and livestock practices in the district. Like the settlement patterns, much of the district's livestock mainly sheep, goats and cattle are found in the southern divisions with relatively more rainfall. The camel population tends to be concentrated in the north partly due to its ability to withstand the long dry period characteristics of the area.

Besides irrigation farming along the river, rainfed agriculture is dominant in the southern divisions where during the long dry seasons, the drought effect on the livestock resulting into losses becomes significant. As a result of the deaths, livestock farming tends to be concentrated around the few serving water points and mainly along river Tana.

Though the inhabitants have a strong attachment to livestock and overstocking is a phenomenon of the good seasons, sales of livestock and its products at rock bottom prices are inevitable. During the rainy seasons livestock rearing recedes to the interior and distant bushes away from the permanent settlements with a resultant decrease in sales, and very high prices for livestock and its products. The converse is true during the long dry spells.

## ADMINISTRATIVE AND POLITICAL UNITS

The district is subdivided into ten administrative divisions, thirty-four locations and forty three sub-locations. The inhabitants being pastoral nomadic creation of locations and sub-locations tends to be dictated by settlements.

Table 1.4

### Administrative Units by Division

Division	No. of Locations	No. of Sub-Location
Balambala	4	4
Burar	2	4
Central	3	5
Dadaab	3	4
Hulugho	5	6
Ijara	4	4
Jara Jilla	3	3
Liboi	2	2
Masalani	3	6
Modogashe	5	5
Total	34	43

Source: District Commissioner's Office, Garissa, 1993.

Politically the district is divided into two local authorities namely Garissa Municipal Council and Garissa County Council, with 26 electoral wards as indicated in Table 1.5.

Table 1.5

**Local Authorities**

Name and Type of Local Authority	No. of Wards
Garissa Municipal Council	6
Garissa County Council	20
Total	26

Source: District Commissioner's Office, Garissa, 1993.

There are four Parliamentary constituencies in the district; Fafi, Dujis, Lagdera and Ijara. Table 1.6 shows these constituencies and the administrative divisions they cover.

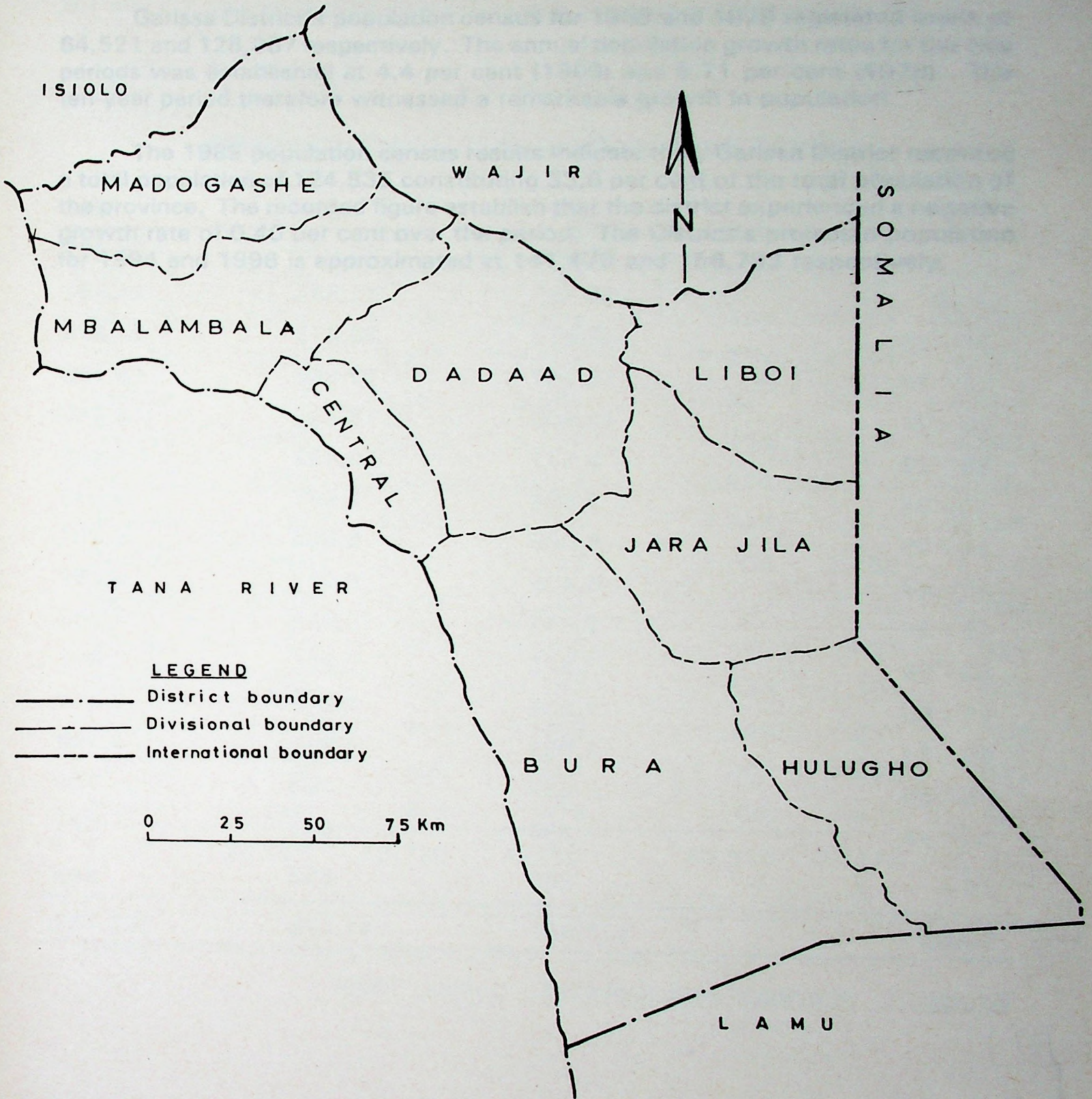
Table 1.6

**Parliamentary Constituencies by Division**

Constituency	Division(s) covered
Fafi	Jara Jilla Hulugho Bura
Ijara	Masalani Ijara
Lagdera	Modogashe Dadab Liboi
Dujis	Central Balambale

Source: District Commissioner's Office, Garissa, 1993.

GARISSA DISTRICT  
ADMINISTRATIVE BOUNDARIES



ISILOLO

MADOGASHE

W A J I R

M B A L A M B A L A

D A D A A D

L I B O I

C E N T R A L

S O M A L I A

J A R A J I L A

T A N A R I V E R

LEGEND

- . — District boundary
- — — Divisional boundary
- — — International boundary

0 25 50 75 Km

B U R A

H U L U G H O

L A M U

# DEMOGRAPHIC AND SETTLEMENT PATTERNS

Garissa District's population census for 1969 and 1979 registered totals of 64,521 and 128,867 respectively. The annual population growth rates for the two periods was established at 4.4 per cent (1969) and 5.71 per cent (1979). The ten-year period therefore witnessed a remarkable growth in population.

The 1989 population census results indicate that, Garissa District recorded a total population of 124,835 constituting 33.6 per cent of the total population of the province. The recorded figure establish that the district experienced a negative growth rate of 0.40 per cent over the period. The District's projected population for 1994 and 1996 is approximated at 141,479 and 156,733 respectively.

Age Group	1969	1979	1989	1994 (Projected)	1996 (Projected)
0-4	10,492	12,809	12,809	13,895	14,980
5-9	10,492	12,809	12,809	13,895	14,980
10-14	10,492	12,809	12,809	13,895	14,980
15-19	10,492	12,809	12,809	13,895	14,980
20-24	10,492	12,809	12,809	13,895	14,980
25-29	10,492	12,809	12,809	13,895	14,980
30-34	10,492	12,809	12,809	13,895	14,980
35-39	10,492	12,809	12,809	13,895	14,980
40-44	10,492	12,809	12,809	13,895	14,980
45-49	10,492	12,809	12,809	13,895	14,980
50-54	10,492	12,809	12,809	13,895	14,980
55-59	10,492	12,809	12,809	13,895	14,980
60-64	10,492	12,809	12,809	13,895	14,980
65-69	10,492	12,809	12,809	13,895	14,980
70-74	10,492	12,809	12,809	13,895	14,980
75+	10,492	12,809	12,809	13,895	14,980
<b>Total</b>	<b>64,521</b>	<b>128,867</b>	<b>124,835</b>	<b>141,479</b>	<b>156,733</b>

Source: Provincial Statistical Office, Garissa, 1993.

## Population Structure

The structure of the district's population is given in table 1.7, 1.8 and 1.9.

Table 1.7

### District Population Structure by Cohorts (Projections)

Age Cohorts	1979	1994	1996
0 - 4	21,458	23,679	26,202
5 - 9	20,468	22,544	24,984
10 - 14	18,515	20,418	22,628
15 - 19	16,207	17,865	19,798
20 - 24	12,609	13,895	15,399
25 - 29	9,577	10,492	11,620
30 - 34	7,896	8,648	9,574
35 - 39	5,085	5,668	6,281
40 - 44	5,499	6,097	6,757
45 - 49	2,943	2,953	3,273
50 - 54	3,222	3,551	3,935
55 - 59	1,204	1,276	1,414
60 - 64	1,858	1,984	2,198
65 - 69	637	709	786
70 - 74	834	841	832
75 +	855	859	952
Totals	128,867	141,479	156,733

Source: Provincial statistical Office, Garissa, 1993.



Table 1.8

**District Population Structure by Cohorts and Sex (Projects)**

Age Cohorts	1979		1994		1996	
	Male	Female	Male	Female	Male	Female
0 - 4	10,917	10,541	12,053	11,626	13,387	12,864
5 - 9	10,655	9,813	11,722	10,822	12,991	11,993
10 - 14	9,998	8,517	11,025	9,393	12,218	10,410
15 - 19	9,009	7,198	9,933	7,932	11,008	8,970
20 - 24	7,357	5,252	8,101	5,974	8,978	6,421
25 - 29	5,076	4,501	5,561	4,931	6,163	5,455
30 - 34	3,883	4,013	4,254	4,394	4,714	4,863
35 - 39	2,590	22,495	2,814	2,854	3,118	3,163
40 - 44	2,933	2,566	3,250	2,847	3,602	3,155
45 - 49	1,756	1,187	1,947	1,006	2,158	1,115
50 - 54	1,786	1,436	1,964	1,587	2,176	1,759
55 - 59	761	443	806	470	893	521
60 - 64	1,085	773	1,159	825	1,284	914
65 - 69	421	216	469	240	520	266
70 - 74	439	395	447	403	495	447
75 +	360	374	416	434	461	481
Total	69,026	59,720	75,921	65,558	84,116	72,617

**Source:** Provincial Statistical Office, Garissa, 1993.

Table 1.9

**District Population Structure By Cohorts and Sex Ratio**

Age Cohort	1979			1994			1996		
	% Male	% Female	Sex Ratio	% Male	% Female	Sex Ratio	% Male	% Female	Sex Ratio
0-4	50.9	49.1	1.04	50.9	49.1	1.04	50.9	49.1	1.04
5-9	52.1	47.9	1.09	52.0	48.0	1.08	52.0	48.0	1.08
10-16	54.0	46.0	1.17	54.0	46.0	1.17	54.0	46.0	1.17
15-19	55.6	44.4	1.25	55.6	44.4	1.25	55.6	44.4	1.25
20-24	58.3	41.7	1.40	58.3	41.7	1.40	58.0	41.7	1.40
25-29	53.0	47.0	1.13	53.0	47.0	1.13	53.0	47.0	1.13
30-34	49.2	50.8	0.96	49.2	50.8	0.96	49.2	50.8	0.96
35-39	50.9	49.1	1.04	49.6	50.4	0.98	49.6	50.4	0.98
40-44	53.3	46.7	1.14	53.3	46.7	1.14	53.3	46.7	1.14
45-49	59.7	40.3	1.48	65.9	34.1	1.93	65.9	34.1	1.93
50-54	55.4	44.6	1.24	55.3	44.7	1.24	55.3	44.7	1.24
55-59	63.2	36.8	1.72	63.2	36.8	1.72	63.2	36.8	1.72
60-64	58.4	41.6	1.40	58.4	41.6	1.40	58.4	41.6	1.40
65-69	66.1	33.9	1.95	66.1	33.9	1.95	66.1	33.9	1.95
70-74	52.6	47.4	1.11	53.2	46.8	1.14	53.2	46.8	1.14
75+	42.1	57.9	0.73	48.4	51.6	0.94	58.4	51.6	0.94

**Source:** District Planning Unit, Garissa, 1993.

Table 1.10

**District Population Projections on Selected Age Group**

Age Group	1979		1994		1996	
	Male	Female	Male	Female	Male	Female
5 - 15	20,653	18,330	22,747	20,215	25,209	22,403
15 - 19	9,009	7,198	9,933	7,932	11,008	8,790
15 - 49 (Female)	-	27,212	-	29,758	-	32,962
15 - 59*	35,151	29,091	38,630	31,815		

**Source:** District Planning Unit, Garissa, 1993.  
\* Labour Force

It is evident from table 1.7 that the district's population is generally youthful with the age-group 0-19 representing 59.7 per cent of the total population. Furthermore, the age-group 0-14 accounts for 47 per cent of the total population which have cost implications on the investment packages that effectively serve this group of net consumers. It is noteworthy that this youthful population has prevailed since the recorded census of 1979 and will be the same throughout this plan period. The dependent population, theoretically taken as those aged 0-14 plus those in the 60+ category, is established to comprise half of the total population.

From Table 1.8 and 1.9, it is deduced that there is an insignificant difference in the structure of the population between the census figures of 1979 and projections for 1994 to 1996. Out of the total population, males constitute 53.7 per cent. The sex ratios for the different age groups reveal that numerically males exceed females save for age groups 30-39 and 75+ where females outnumber males. This latter finding probably attests to the general demographic premise that female life expectancy is higher than for males, even in a pastoral community.

The socio-economic implications of derivations from table 1.10 are equally important for decision making. The primary school age of 5-14 years comprise 30.4 per cent of the population while the secondary school age (15-19) constitute 12.6 per cent of the total. The District therefore has to cater for 43 per cent of investments mainly in education facilities for the youth.

Females of child bearing age (15-49) account for 21 per cent of the total population while their offsprings in the 0-5 category constitute 17 per cent of the population. These figures are important determinants of health care programmes involving maternal and child health.

The district's labour force is comprised of 49.8 percent of the total population in which the males account for 55 percent and females 45 per cent. The dependency ratio determined in Table 1.11 is an amalgamation of the relevant components of the preceding tables.

Table 1.11

District Dependency Ratio

Age Group (years)	1979	1994	1996
0 - 14	60,441	66,641	73,814
60 +	4,184	4,493	4,868
Total Dependents	64,625	71,034	78,682
Labour force (15 - 59)	64,242	70,445	78,051
Participating Labour (92% of Labour force)	59,103	64,809	71,807
Dependency Ratio	1.09	1.10	1.10

Source: District Planning Unit, Garissa, 1993.

The established dependency ratio of 1.10 is quite low since its derivation is based on the standard assumption in Labour Economics of a participation rate of 92 per cent. The assumption is inapplicable in this district with limited cooperant production factors.

Other factors affecting the labour participation rate in the district include the inclusion of the age group 15-19 in the labour force, while most of these are dependents, and the socio-cultural factors such as the marriage of young girls which affect their training and hence entry into the labour market. It is for the fore-going reasons that the district's dependency ratio is definitely much higher than the derived and could be as high as 1.64.

Population Distribution and Density

Given the arid nature of the district, settlement patterns conform to the dictates of water and pasture availability. It is for this fact that most settlements are concentrated to the West and South West of the district where the Tana River provides the livelihood. Tables 1.12, 1.13 and 1.14 give the distribution of the population by divisions and the densities

Table 1.12

District Population Distribution By Division

Division	1979	1994	1996
Modogashe	28,849	19,535	21,710
Balambala	19,002	13,882	15,348
Dadaab	7,603	7,324	8,096
Liboi	4,809	5,703	6,305
Central	22,886	40,319	44,789
Jarajilla	5,670	3,056	3,378
Bura	9,856	11,848	13,098
Masalani	16,009*	12,947	14,312
Hulugho	14,183	16,271	17,987
Ijara	-	10,593	11,710
<b>Total</b>	<b>128,867</b>	<b>141,479</b>	<b>156,733</b>

Source: Provincial Statistical Officer, Garissa, 1993

Note: \*Includes Ijara Division

Table 1.13

District Population by Division and Sex

Division	No. of Household 1993	1979		1994		1996	
		M	F	M	F	M	F
Modog.	3,256	15,793	13,056	11,779	7,756	13,083	8,627
Malamb.	2,314	10,304	8,698	7,001	6,882	7,740	7,608
Dadaab	1,221	7,188	6,069	3,068	3,793	4,193	3,903
Liboi	951	2,604	2,221	3,068	2,635	3,392	2,913
Central	6,720	12,456	10,430	21,574	18,745	23,961	20,828
Jarajira	509			1,681	1,375	1,868	1,520
Bura	1,975	5,222	4,634	66,689	5,159	7,395	5,703
Masalani	2,158	8,134	7,875	6,500	6,447	7,185	7,127
Hulugho	2,712	7,406	6,777	8,106	8,165	8,961	9,026
Ijara	1,766			5,318	5,275	5,879	5,831
<b>Total</b>	<b>2,3582</b>	<b>69,107</b>	<b>59,760</b>	<b>75,921</b>	<b>65,558</b>	<b>84,116</b>	<b>72,617</b>

Source: Provincial statistical Office, Garissa.

Note: 1979 figures for Jarajilla included in Dadaab while for Ijara in Masalani

It is deduced from Table 1.13 that, save for Hulugho Division, the sex ratios establish that males out-number females though the difference is negligible in Ijara, Masalani and Balambala Divisions. Though this finding, and particularly for the Hulugho case, is not explainable, it is noteworthy that these divisions fall within the wetter areas of the district if not adjacent to the Tana River. It would be assumed that more men are to be found in the other drier divisions as pastoralists. The assumption, however, does not hold in the case of Central Division.

Table 1.14

Population Density By Division

Division	1979	1994	1996
Modogashe	4.00	2.71	3.01
Balambala	8.77	6.41	7.08
Dadaab	1.07	1.04	1.14
Liboi	2.68	3.18	3.52
Central	31.70	55.84	62.04
Jarajilla	1.04	0.56	0.62
Bura	0.99	1.09	1.121
Masalani	4.08*	8.77	9.70
Hulugho	3.03	4.32	4.78
Ijara	-	4.32	4.78
Total	2.93	3.22	3.57

Source: Provincial Statistical Office, Garissa

Note\*. Includes Ijara Division.

The preceding table illustrates that over half of the district's population is settled within the four riverine divisions of Balambala, Central, Bura and Masalani. Precisely, these divisions, accounting for 10.7 per cent of the total area, is home to 55.8 percent of the total population. When Hulugho and Ijara Divisions are annexed to the riverine belt, then 65 percent of the district's population is contained. 35 percent of the population being sparsely settled in the more expansive northern divisions of Modogashe, Dadaab, Liboi and Jarajilla.

Table 1.14 illustrates that while the population density for the district is estimated at 3 per square kilometre, Central, Masalani, Balambala and Ijara Divisions register densities above the mean. Central Division in particular, recorded a population density of nearly 32 persons per km<sup>2</sup> in 1979 and is estimated at nearly 56 persons per km<sup>2</sup> during this plan period. This big deviation from the mean is attributable to the more permanent settlement in Garissa Town which apart from being the district headquarters is also a metropolis.

Jarajilla, Dadaab and Liboi are the lowest settled divisions and this, as expected, is due to water problems. It is also noteworthy that these divisions border the Somalia Republic, and of late, have been victims of banditry resulting from the influx of refugees from neighbouring countries.

It is important to note that the foregoing presentation and analysis of divisional distribution of the population does not conform to the 'nomadic way of life. Unlike in sedentary lifestyles, the district's population is not confined within administrative set-ups since migration is rampant. The 1990-92 long drought, for example, witnessed enmass migration to the divisional and district headquarters and even to the neighbouring districts in search of livelihood. It is, however, a reality that most migrants will always retreat to the mother soil when conditions become favourable. This, therefore, lends credit to the population distribution as portrayed. The distribution of population among the major towns and centres is given in Table 1.15.

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Table 1.15

Urban/Town and Market Centre Population (Estimated)

Division	Urban/Town/ Market Centres	Number of Households 1994	Estimated Population 1994
Modogashe	Modogashe	1,368	8,205
	Benane	502	3,010
	Goriale	300	1,800
	Garufa	161	966
Balambala	Balambala	995	5,970
	Saka	175	1,050
	Jarajilla	78	470
	Denyere	66	398
Dadaab	Dadaab	673	4,040
	Dertu	187	1,120
Liboi	Liboi	593	3,560
	Damajare	152	91
	Kulan	142	852
Central	Grarissa	6,470	38,822
	Korakora	142	850
	Waberi	87	520
	Galbet	75	488
	Sankuri	138	826
Jarajilla	Amuma	160	960
	Alinjugur	272	1,430
	Welmerer	80	480
Bura	Bura	537	4,220
	Masabubu	142	850
	Nanighi	219	1,315
	Garasweno	124	744
Masalani	Masalani	647	3,880
	Gabaata	165	990
	Kotile	200	1,200
	Korisa	144	865
	Bulawaride	133	795
	Hara	107	644

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Ijara	Ijara	701	4,205
	Sangailu	502	3,010
	Bothai	267	1,600
	Hadaro	158	950
Hulugho	Hulugho	993	6,060
	Gamagala	187	1,720
	Hadi	125	750
	Bulagolol	102	609
	Garabe	135	810
	Gubis	55	330
<b>Total</b>		<b>18,459</b>	<b>112,235</b>

Source: District Planning Unit, Garissa, 1993.

The urban, town and market centre population is estimated at over 112,000 people which represent nearly 80 per cent of the district's total population. This is an expected result since these centres provide the populace with the meagre basics for survival. This urban population represents an urbanization rate of 3.7 percent since 1989. This rate is, however, not uniform since intra-district migration is rampant between centres. Garissa Town is a major recipient of immigrants from other urban and market centres and hence has a much higher urbanization rate.

Modogashe and Hulugho contain the second and third highest urban population after Garissa. This is explained by their locations at the borders of Isiolo and Wajir and the Republic of Somalia respectively. It is evident from Table 1.15 that the divisional headquarters are the most settled in each division. These centres, and especially those along the River Tana, have great potential for further population growth when facilities to accommodate the same are provided.

The potential for growth of some of the centres is hampered by their remoteness. Accessibility of centres in such divisions as Jarajilla, Dadaab, Liboi, Balambala, Modogashe and Hulugho is difficult and becomes impossible during the wet seasons when most of the road-networks are impassable. Furthermore, road networks linking the centres are under-developed but the District Headquarter is connected to the centres by the seasonal roads.

### Migration

It is already mentioned that intra-district migration occur between centres, besides the normal migratory characteristics of a pastoral and nomadic community. The 1990/92 long drought, exacerbated the intra-district migration with the major recipient being Garissa Town. Some of the remote centres population like in

Masalani, Hulugho, Jarajilla and Liboi were almost tripled within this period resulting into the development of slums and the squatter menace.

Reference needs to be made to the "Drought Baseline Study" of March 1993 in which the district's population is reported to have experienced a negative growth of -0.04. It is believed that this occurrence resulted from migration to the neighbouring districts and other major towns with the major driving force being the search for survival opportunities. This migration is believed to have began at the very beginning of the preceding plan period with the advent of the signals of the long drought.

A most remarkable change in the district's population was experienced in 1990 when the district began playing host to an increasing number of refugees from the neighbouring war-torn Somali Republic. At the height of this immigration in 1992, the total refugee population exceeded 300,000 which was more than double the district's estimated number of local inhabitants. This additional population has not been accounted for in the district's data since their stay is considered temporal. Furthermore, the refugees have been confined to their camps in Liboi, Ifo and Dagahale save for a few errant numbers that roam within the district in search of better life-styles.

## **ECONOMIC POTENTIAL**

### **Land and Soils**

Vast areas of the district's land may be described as semi-arid rangeland with soils ranging from the sandy stones, dark clays in some patches, to alluvial soils along the River Tana Basin. Basically five types of soils exist in the district.

**Fertile Alluvial Soils:** This type of soil occurs along the riverine zone of the Tana and is derived from alluvial deposits brought down by the water from the highlands. These soils are generally dark, in sharp contrast to others further from the river. The soils support a woody tree vegetation as compared to the scanty shrubs further inland. These soils have the potential for increased agricultural production through irrigation as is evidenced in the existing farms along the river. The productivity of these soils can be immensely increased with improved crop husbandry.

**Fertile Grey Cotton Soils:** These can also be described as dusty-soft-grey soils and occur in the southern divisions of Hulugho, Ijara and Masalani. They are also found in parts of Modogashe Division in the north. The soils are fertile and support thick vegetation. Where it is cropped, little fertilizer is used with good results. The soil has a high water retention capacity and has been used for the construction of water pans.

**Black Salty Cotton Soil:** This type of soil is infertile. The soil is highly saline which hinders crop growth and besides salinity, it also has other minerals like

phosphorus, making it unsuitable for cropping. Salt residues on these soils can be seen as a white or grey powder.

**Red Soils:** The soils occur in various parts of the district and have a low infiltration rate with a high clay content. They are not suitable for agricultural production.

**White and Red Sandy Soils:** These soils are generally stony and occur mainly in Balambala Division where the terrain is relatively uneven and are well drained. Closely related to these are the sandy red soils which occur generally in the northern divisions of Liboi, Dadaab, Balambala and Modogashe plus parts of Central and Bura Divisions. The soils are well drained and hold no water but support vegetation which remain green long after the rains. It also has a good infiltration capacity.

Generally, like in other semi-arid areas, the soils in the district are saline with high Exchangeable Sodium Percent (ESP). The soils are characterized by low organic matter and poor soil structure.

On the surface, the soils look sandy which is basically because the finer particles on the surface have either been blown by wind or washed deeper into the soil profile, sealing the pores and leaving the larger particles on the surface. This explains why the soils, though sandy, have low infiltration rates with a resultant enormous run-off. The soils are highly erodible and once gullies are formed, become difficult to heal.

The exploitation of the district's soil resource must take into account conservation measures given their fragile nature. However, the use of the soils is not impossible. Presently, over 80% of the land area is under livestock production. Over 700,000 hectares have the potential for rainfed agriculture but only 600 hectares are utilized though not intensively.

The potential for increased agricultural production mainly lies in the southern divisions and along the riverine zone. In the south, the fertile alluvial and grey cotton soils are greatly underutilized in an area with relatively higher rainfall than the rest of the district. Along the riverine zone, the fertile alluvial soils have great potential for increased agricultural production and out of over 20,000 hectares available for irrigated agriculture, only 1,200 hectares are so far extensively under use.

### Water Resources

The district has only one permanent surface water, the Tana River, which runs along its western border.

Rainwater, when it occurs, provides the other alternative surface run-off and is harvested in earth pans which have been constructed at various points in the district to serve both livestock and human needs. This source of water is rather

temporal and its durability depends on the size of pan, soil retention capacity and duration of dry spell.

There is need for serious geophysical studies to determine the actual ground water potential. A number of dams have been constructed with differing results. Whereas some have dried up after a while, saline water has been struck in others and in certain cases no water was struck. However, exploitation of the ground water potential, particularly in the south, has not been done but because of the nature of soils in the region the potential of the resource is promising.

There is clear evidence that the vast area of the district is water starved. Besides the distance from one point to another, the average distance to water is further aggravated by non-operating machinery or dried up pans. The average distance to water points is estimated at between 15 -30 kms except along the River Tana where the distance is negligible.

The available water points adequately serve about 30% of the human population and 20% of the livestock with the rest surviving under very difficult conditions of aridity.

### Forestry

The district has a total forest area of 383,500 ha. situated mainly along the river Tana and the southern part of the district. The southern forests are an extension of the coastal forest. Forests in the district are not gazetted except for Bon Forest, to the south east, which is gazetted as a National Reserve under the Kenya Wildlife act. Three types of forests are distinguished and included:

- The natural high forest which cover an area of 39,000 ha. in the south east and along the river
- The woodland or Miombo (Savanna) covering about 75,400 ha. and
- The mangroves.

Except for Balambala Division to the north, the forests in the district are found in the southern divisions of Ijara, Bura, Masalani and Hulugho. Table 1.16 gives the divisional distribution of the district forests.

Table 1.16

**Forest Distribution By Division (in Ha)**

Division	National Parks	Reserve Area in Ha.	Trustland Area in Ha.	Total Area in Ha.
Modogashe	-	-	-	-
Dadaab	-	-	-	-
Liboi	-	-	-	-
Central	-	-	-	-
Jarajilla	-	-	-	-
Balambala	110,000	-	-	110,000
Ijara	45,000	-	49,000	94,000
Bura	40,000	-	5,000	45,000
Masalani	14,000	-	500	14,500
Hullugho	60,000	-	60,000	120,000
<b>Total</b>	<b>269,000</b>	<b>-</b>	<b>114,500</b>	<b>383,500</b>

Source: Kenya Forestry Management Plan (KFMP) Garissa District, 1990.

**Wildlife**

The district is endowed with diverse wildlife and has the three gazetted national reserves namely: Rahole, Arawale and Boni Reserves located in Balambala, Bura and Ijara Divisions respectively. These National Reserves are under the jurisdiction of Garissa County Council but are yet to be fully developed.

The species of plain game found in the district include elephants, lions, cheetahs, leopards, hippopotamus, crocodiles, hunters, hartbeast, Grants gazelles, Thompson gazelle, gerenuk African, civil jackals, spotted hyena, buffaloes, grey zebras, topi, and giraffes. The species of birds include both the game birds (plain birds) and the water fowls mostly along the Tana River and the areas to the south with relatively more and frequent rains.

The wildlife effect on the economic activities in the district need some mention. Because of the dominant nomadic pastoralism in the area of undeveloped game reserves, cases of wildlife attacks on people, mainly children aged between 8-19 years, while grazing livestock often occur. Evidence of high compensations by the District Compensation Committee as a result of such attacks exists in the committee's reports. There is also conflict between human beings and livestock

on the one hand and wildlife on the other, over the use of scarce resources mainly the water points.

Along the Tana River, where irrigation agriculture is practiced, the damage to crops by wildlife is significant given the arid nature of the area. It is also along the same crocodile infested river that attacks mainly on children and livestock is experienced.

The human effect on wildlife comes by way of hunting for game meat. The so called bandits usually turn to wildlife whenever the need and opportunity arises.

### **Commercial Minerals and Material**

There are yet no known minerals of commercial value. Exploration for minerals particularly oil, has been done in some parts of the district but the results have not been availed. The only resource in this category is sand that is abundantly available throughout the district and is used in construction.

### **Tourist Attractions**

The potential for tourism development is quite evident given the diverse species of wildlife mentioned. Due to the unique climatic conditions, which in some seasons is cool and windy, and given the proximity to the coast, the district promises to be a haven for tourists. The completion of the bitumenization of Mwingi-Garissa road will definitely open up the district, leading to the full exploitation of tourism in the region. The single most important constraint to the development of tourism in this area remains banditry but this is expected to be insignificant with improved security measures.

## **SUPPORTING DEVELOPMENT INSTITUTIONS**

### **District Development Committee (DDC) and Its Sub-Committees**

The Garissa District Development Committee comprising of eighty members is quite active in the planning and implementation of projects and programmes. Over the last plan period, the committee held its regular meetings at the rate of four meetings per year with an attendance of over 70% by the members. The committee deliberated on all development activities and recognized technical advises from the District Executive Committee (DEC). This latter committee is also effective, with monthly sittings to deliberate on technical issues concerning various departments. The DDC Monitoring and Evaluation tours have been held regularly with positive impacts on implementation.

The Divisional Development Committees (DVDCs) have been fairly effective in recommending new projects and monitoring on-going ones. Project planning and evaluation has been one area of these committees' weaknesses. The absence of divisional technical staff in almost all sectors has been the greatest impediment to

the effectiveness of these committees. Even in cases where the divisional technical officers are in place, their role in the committees has been nil and even records of attendance to meetings do not portray their existence. Due to the distance to divisional headquarters and timing of meetings, the secretarial role in the DVDCs has been insignificant. In essence, the meetings have been irregular and only convened when issues arise.

From the foregoing, not much would be expected from both the Locational Development Committee (LDC) as well as Sub-Location (SLDC) Committees. These committees have existed only by name in most areas though their role in identifying projects is quite clear.

Other special sub committees such as District Agricultural Committee (DAC), District Education Board (DEB), District Water Board (DWB), Children Advisory Committee, District Security Committee (DSC), and District Health Management Team (DHMT) are effective and functional.

The ineffectiveness identified in the lower level development committees does not have a corresponding effect on both the District Executive as well as Development Committees. Because of sparse population and clearly defined settlement points, the D.D.C. members have effectively filled the missing gap. However, the effectiveness of the lower committees will remain important if they are to catch up with the dynamism in development.

#### District Planning Units (DPU)

The District Development Office has operationalized the functions of the DPU and has over the last plan period effectively performed the secretarial role to the DEC and DDC. Regular recorded meetings were not held but the day-to-day consultations between the District Development Officer and his Assistant, though not recorded, effectively coordinated the planning and implementation work in the district. The evidence of effectiveness of the unit is seen through regular DEC and DDC meetings and tours, preparation of Annexes and other project documents such as Bills of Quantities and Progress Reports.

The role of the District Statistical Officer was not clear in the last plan period. This was partly attributed to the absence of that office in the district. The Provincial Statistical Office is expected to double as the District representative but this arrangement is functionally inoperative. The result is weakening in the effectiveness of the District Planning Unit.

The Garissa District Information and Documentation Centre (D.I.D.C) is currently accommodated by the Kenya National Library services where the Library's Conference Hall is occupied by the D.I.D.C. staff and materials. The centre is under the care of one clerk and an additional volunteer from a Canadian based NGO, Mennonite Central Committee. Except for shelves, and some furniture, there are no other equipments to fully operationalize the centre.

## Local Authorities

The local authorities in Garissa District are Garissa Municipal Council (GMC) and Garissa County Council (GCC). The geographical features and borders of GCC covers the present Garissa District boundaries. Within the area of jurisdiction of the GCC are all towns and centres outside Garissa Municipality boundaries. Major towns within the realm of operation of GCC are Balambala, Modogashe, Dadaab, Liboi, Bura, Masalani, Amuma, Hulugho, Ijara, Alinjigur, Nanighi Korakora, Sangailu and Galma-gala.

Garissa Town was upgraded to Municipality status in 1992. The Township forms a major focal point that interlinks all other urban centres in the district to the external markets. Garissa Town is unique in its location because it forms the gateway and link to North Eastern Province. It therefore forms a major regional urban centre that can spearhead inter-district (regional) development.

The Physical Planning Department in the Ministry of Lands and Settlement have the Provincial and District Planners in Garissa Town. The department is closely linked to the local authorities (Local Government Ministry), because in its operations it offers advisory services on:

- Project Planning for the GCC and GMC in the Town Planning Committees.
- Preparations of site plans and development plans for gazetted rural centres.
- Reports preparation for physical development policies and strategies at the district level.
- Preparation of reports on land-use potential and conflicts for the district.
- Analysis of urbanization process and strategies.

Most town and market centres have sprung up at the district and divisional headquarters or along the River Tana. The preparation of development plans for the town centres is important in guiding growth process and availing land for all users i.e. residential, commercial utilities, public purpose and industries. The physical plans for Benane, Modogashe, Liboi, Amuma, Ijara, Balambala, Masalani Hulugho, Dadaab, Daghale, Halghadera and Bor-algy are already prepared.

During the plan period 1994 - 1996, it is expected that the implementation of the 12 development plans will take-off. The construction of slaughter slabs in the townships and opening of roads to serve the resident population will be put into effect as priority projects (for short-term implementation). The small markets development and upgrading will spread economic growth to the rural areas. It will enhance sedentary settlement within the rural settling in the nomadic community.



Table 1.17

**Revenue Collection for Garissa County Council**

Year	Income Revenue (Ksh)
1988	2,863,837.00
1989	3,496,803.00
1990	4,004,468.00
1991	3,110,989.00
1992	3,494,431.00
Total	16,970,528.00

Source: Garissa County Council Office, 1992.

The GMC has within its jurisdiction, a highly commercialized and elitist resident community. It boasts of major developments (i.e. the Garissa Urban Water Supply, the commercial shops, two commercial Banks, co-operative groups, Women groups and agricultural activities along River Tana) that depend on power supply from the diesel engines and an elaborate communication network (i.e. the postal services and the class A road that links the town to Nairobi, Mandera and Liboi). It is a major town that relates the urban and the rural systems in the development process.

The major development activities that are priority for the town, is the construction of a modern market, upgrading of the livestock market, marketing of the street roads and establishment of a housing scheme. Registration of plots and survey has not been done for proper revenue collection and supplement development loan from the potential revenue shown hereunder.

Table 1.18

Revenue For Garissa Municipality, 1987-91.

Section 1987/88	1988/89	1989/90	1990/91	1991/92
Administration (Re. A/C General	-	-	-	-
Clerk Department	44,810	57,510	49,500	60,310
Treasurer Dept.	28,760	51,540	99,590	78,050
Veterinary Dpt.	38,700	42,000	45,750	67,300
Sewerage Dept.	-	-	-	-
Community Dept.	-	-	-	-
Conservancy Dept.	-	4,500	4,500	-
Councilors Dept.	-	-	-	-
<b>Total</b>	<b>115,070</b>	<b>1,555,500</b>	<b>199,340</b>	<b>211,450</b>

Source: Garissa Municipality Council.

Voluntary Agencies

A number of voluntary agencies operate in the district and below is the available information on the agencies.

**Table 1.19**  
**Voluntary Agencies in Garissa District**

Name	Activities	General Remarks
Action Nord-sud (France)	- therapeutic feeding - TB control - Mobile dispensary - Relief assistance	Working in conjunction with Provincial Hospital
Al-Haramain Islamic foundation (Saudi Arabia)	- Construction of religious institutions - Orphanage - Relief assistance	Working in Garissa town and refugee camps Most work is in the divisions
CARE (Kenya)	- Relief Assistance	Mainly assisting destitute of Garissa Town
Catholic Church Mission	-	Mainly assisting destitute of Garissa Town
CPK/Relief Development	- Economic Development - Relief Assistance - Technical Training	
Danish International Development Agency (Danida)	- Irrigation Programme - Grants for Health and education programme	In cooperation with Ministry of Agriculture
Food for the Hungry International (Kenya USA)	- Irrigation/Livestock Programme - Child Sponsorship	
International Federation of the Red Cross and Red Crescent		
Life Ministry (Kenya)	- Income generation - Relief assistance	
Medicos sin Fronteras (MSF) (Spain)	- Dispensary - Community Health - Income generation	Primary work with displaced people
Mennonite Central Committee (USA/CANADA)	- Adult education - District information & documentation centre	Volunteers seconded to civil service

North Eastern Muslim Welfare Society (Kenya)	-	Grants for religious institutions	Work carried out by volunteers
	-	Relief assistance	
	-	Income generation	
	-	Orphanage	
Rotary Doctors (Sweden)	-	Provision of doctors to Provincial Hospital	
	-	Small grants for education	
Swedish International Development Agency (SIDA)	-	Soil conservation	In cooperation with Ministry of Education
Tenrikyo Society (Japan)	-	School construction	In cooperation with Ministry of Education
	-	Provision of schools equipment	
United Nations Children Fund (UNICEF)	-	coordination of District Intersectoral Committee for Nomadic Primary Health care	
United Nations High Commission for Refugees and implementing agencies	-	Refugee camp coordination	Three camps near Dadaab and one camp in Liboi
Young Muslim Association (Kenya)	-	Education	
	-	Orphanage	
	-	Relief Assistance	

### Harambee Movement

Given the low level of development resulting from poor economic base, local contributions to development programmes via the Harambee Movement have not been impressive.

Though lack of data on self-help contributions hamper a detailed establishment of its level in the district, much of the realized contributions earmarked social projects, mainly schools and water. Table 1.20 give the collections realized over the years indicated.

Table 1.20

Harambee Collections 1988 - 92

Year	Kshs.
1988	1,412,730.00
1989	4,093,479.70
1990	1,114,146.55
1991	838,688.10
1992	270,818.45

Source: District Social Development Office, Garissa.

The foregoing depict a market reduction in Harambee contributions since 1989. The reduction is attributable to two factors namely the effect of drought and lack of personnel to monitor more closely the community's involvement in some grassroot projects.

Regional Authorities and other Major Parastatals

The impact of Regional Authorities in the development programmes within the district is yet to be realized. The western portion of the district falls within the operation area of both the Tana and Athi River Development Authority (TARDA) and the newly launched Coast Development Authority (CDA). It suffices to say that TARDA's programmes have not been felt in the district while CDA is yet to take-off. Nevertheless, it is the strong hope and commitment of the District Development Committee to realize tangible development results from the two authorities within this plan period. Also there is newly created Ewaso Nyiro River Development Authority being awaited to start its operations in the district.

The Kenya Power and Lighting Company supplies Garissa Town with power and though the source is diesel generated, its reliability and output has so far met the consumer needs. However, because of the ever increasing demand resulting from the growth of the town, the capacity of the power station is already stretched to the limit. A new and bigger power station is already planned, for improved and extended services within the town, and as a potential for extension to the other settlements in the suburbs.

The Kenya Post and Telecommunications Corporation provides postal and telecommunication services. While postal services permeate all the corners of the district, telecommunication services are being developed to reach at least all the divisional headquarters.

## MAJOR ECONOMIC ACTIVITIES

This chapter focuses on the socio-economic profile of the district and examines the major economic activities. These activities are broadly divided into two parts namely, Primary Production and Commerce, Trade and Manufacturing. This chapter examines the exploitation levels of the district's potential already established in the preceding chapter.

### Primary Production

#### Livestock

Given the arid nature of the District, the major primary production activity is livestock-keeping. It is estimated that over 90 per cent of the total population derives its livelihood from this sector.

The livestock production system practiced involves extensive grazing characterized by seasonal movements in search of pasture and watering points. Because of the semi-aridness of some watering points and the influence of River Tan this form of livestock-keeping can be described as nomadic and semi-sedentary pastoralism involving the rearing of beef-cattle. However, the arid climate experienced along the district also allows for the keeping of some dairy cattle in the District Division.

## CHAPTER TWO

### SOCIO ECONOMIC PROFILE

Table 2.1

Livestock Population, 1988-1991

	1988	1989	1990	1991	Percentage 1988-91	Change 1991-88
Cattle	27778	40880	50430	70000	47	42
Sheep	42400	50000	60000	60000	41	18
Camels	5000	7000	7000	7500	23	25
Donkeys	4000	4500	5000	5000	25	10
Total	86708	122380	127430	137500	43	56

Source: District Division Office, October 1993.

From the foregoing table it can be deduced that a significant increase of 43 percent in livestock population was realized between 1988 and 1991. The exact

## MAJOR ECONOMIC ACTIVITIES

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The main types of livestock reared include cattle, sheep and goats (shoats), camels and donkeys. Table 2.1 gives the livestock population over the last five years.

Table 2.1

Livestock Population, 1988 - 1992

	1988	1989	1990	1991	1992	Percentage 1988-91	Change 1991-92
Cattle	477700	600500	600400	700000	280000	47	-60
Shoats	424400	550000	600000	600000	240000	41	-60
Camels	60968	70000	70000	75000	60000	23	-20
Donkeys	4010	4500	4000	4000	3200	-0.25	-20
Total	967078	1225000	1211400	137900	583200	43	-58

Source: District Livestock Office, Garissa 1993

From the foregoing table it can be deduced that a significant increase of 43 percent in livestock population was realized between 1988 and 1991. The onset

of the 1991-92 severe drought led to the decimation of livestock population. The fall was particularly heaviest amongst the cattle, sheep and goat population. The sheep, in particular, declined by about 80 per cent. It is also noteworthy that the loss was relatively less severe amongst the camels and donkeys due to their ability to withstand drought.

The impact of the observed loss of livestock, the major economic activity, on the socio-economic fabric of the district is noticeable. A large number of the pastoralist were rendered destitutes and took refuge in and around urban and divisional centres (including refugee camps) as dependants on food aid from the government and Non-Government Organizations.

Even though the foregoing analysis paints a gloomy picture on this important activity, the advent of some rain at the end of 1992 is expected to restore the past trend in the district's livestock farming.

Urbanization resulting into changing food habits has encouraged the development of a strong and growing poultry industry. This form of production provides a new kind of employment to several individuals and women groups. Egg production and consumption is therefore a new adoption in the district whose effect has a potential over this plan period.

**Distribution of Livestock in the District:** The extensive method of livestock rearing renders it difficult for estimates of livestock to be confined within the administrative boundaries. However, sixty percent of the district's cattle population is found in the southern divisions of Masalani, Ijara, Hulugho and Bura while the northern divisions of Balambala, Modogashe, Dadaab, Jarajilla and Liboi are home to ninety and eighty percent of the district's camels and shoats respectively.

Table 2.2 gives the main type of livestock by division with estimated households dependent on the same for livelihood.

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Cattle	477700	802000	600700	700000	280000	47
Sheeps	434000	500000	600000	600000	240000	41
Goats	80888	70000	70000	70000	60000	33
Donkeys	4070	4000	4000	4000	3200	0.38
Total	957078	1322000	1317400	1370000	983200	43

Source: District Livestock Office, Garissa 1993

From the foregoing table it can be deduced that a significant increase of 43 percent in livestock population was realized between 1988 and 1991. The onset



Table 2.2

Livestock Distribution by Division with Dependent Households.

Division	Area in km <sup>2</sup>	Rural H/H	Main Livestock	Major Livestock Products
Central Masalani	750	2,887	Cattle	Ghee, Milk
Ijara	5,800	1,820	Cattle	Ghee, Hides, & Skins
Bura	6,200	1,602	Cattle	Ghee, Hides & Skins
Hullugho	5,450	1,935	Cattle	Ghee, Hides & Skins
Balambala	3,500	2,172	Sheep, Goats	Ghee, Hides & Skins
Modogashe	7,001	1,748	Goats, Camels	Ghee, Hides & Skin
Dadaab	5,800	1,003	Goats, Camels	
Liboi	3,040	672	Goats, Camels	Ghee, Hides & Skin
Jarajilla	5,700	1,137	Goats, Camels, Cattle	Ghee, Hides & Skin

Source: District Livestock Office, Garissa, 1993

The described distribution is explained by the socio-cultural as well as ecological factors. The southern inhabitants, mainly the Abdallas are traditionally apathetic to camels unlike the northerners predominantly the Abduaks and Aulihans. Besides this, the northern divisions receive lesser rainfall and hence more suitable for the relatively drought resistant camel. Furthermore, the coastal influence together with the Tan River effect on the southern division provide home to the tse-tse fly and consequently a constraint to camel survival in the region.

Livestock Marketing : The sources of income from livestock are mainly sale of animals, hides and skins, milk and occasionally ghee in good years.

The major markets for the animals have remained predominantly urban centres including Garissa, Nairobi, Mombasa, Lamu, Athi River, KMC and Dagoretti. The contribution of livestock to the national economy through these markets is significant. Milk is consumed locally and its sale is seasonal. Hides and skins have been used in the leather tanning industries outside the district since the closure of the single tanning firm in the district. Its opening will definitely boost income from this trade.

The estimated total income to farmers from livestock and livestock products totalled Kshs.110m in 1992. Revenue from sale of livestock that accrued to local council over the same period totalled Kshs.1.6m. Milk sales generated a staggering Kshs.30m.

Table 2.3, 2.4, 2.5 and 2.6 give the total sales and output of livestock and livestock products over the last five years.

Table 2.3

Sales of Livestock 1988-92

	1988	1989	1990	1991	1992
Cattle	15,300	38,942	30,020	35,927	37,618
Shoats	10,400	24,475	26,388	31,328	40,285
Camels	3,430	1,212	1,248	1,252	1,300
Donkey	274	568	389	162	331
Total	29,404	65,197	58,045	67,669	79,634

Source: District Livestock Office, Garissa, 1993

Table 2.4

Hides and Skins Production and Sales Figures 1988 to 1990 (in Tonnes)

Year	1988	1989	1990	1991	1992
Cattle Hides	8,121	10,190	2,521	20,701	4,232
Goat Skins	84,791	108,798	82,169	73,334	105,767
Sheep Skins	70,950	90,716	72,026	59,480	88,842
Camels Hides	1,657	1,281	748	362	2,539
Total Income in KShs.	3,510,280	740,750,200	462,850	187,978,660	122,506,300

Source: District Livestock Production Officer, Garissa, 1993

Note: Total income to dealers exclusive of cess. Income figures shown are not column totals.

Table 2.5

Poultry Production 1990 to 1992 (in Tonnes)

Year	Hybrid	Local	Total
1990	450	13,000	13,450
1991	100	12,900	13,000
1992	600	15,000	15,600

Source: District Livestock Production Officer, Garissa, 1993

Table 2.6

Bee Keeping 1990 - 1992

Year	KTB Hives	Log Hives	Total
1990	98	13,000	13,098
1991	315	1,684	1,999
1992	315	1,684	1,999

Source: District Livestock production Officer, Garissa, 1993

From Table 2.3, it is evident that cattle, sheep and goats are the major subsistence and cash animals to the inhabitants. The rising trend in sales is indicative of a transformation from a predominantly subsistence pastoralism into the beginning of commercial livestock production.

## Agriculture

Garissa District's agricultural production is largely concentrated along the Tan River through irrigation on individual, but mainly on group farms. Flood receding cultivation is practiced along the river on the river flood zones and slightly further inland in depressions where laghas empty their water.

Pockets of rainfed agriculture is practiced in the southern divisions of Masalani, Ijara, Bura and Hulugho which receive relatively higher rainfall than the rest of the District.

There is a large potential for irrigated agriculture whose exploitation will be a milestone in the district's food production and employment. Currently, there exists some 43 small-scale and four large-scale irrigation schemes whose exploitation necessitates increased efforts to realize maximum results. These farms are situated along the Tan to the South-West and North-West of the district.

Tables 2.7 and 2.8 give the type of farms, acreage, main activities and households dependent on the same.

Table 2.7

### Large Farm Sector

Division	Number of Farms	Total Area (Ha)	Main Cropping Livestock Activities	% of District Cash Crop	No. of District Employees
Central	3	142	Horticultural Crops, Dairy Livestock	20%	426
Balambala	1	20	Rice and Bananas	5%	60

Source: District Agricultural Office, Garissa, 1993

Table 2.8

### Small Farm Sector

Division	Farm Area sq.km.	Rural H/H	H/H per sq.km.	Main Food Produce	Main Cash Crops
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Central	5.4	2,887	3.85	Maize, Rice, Sorghum	Bananas, Tomatoes, Onions, pawpaws
Masalani	0.7	985	0.235	Maize, Rice, Sorghum	Bananas & Mangoes
Bura	0.9	1,602	0.335	Maize, Rice, Sorghum	Bananas & Mangoes
Hulugho	0.8	1,935	0.355	Maize & Sorghum	None
Ijara	0.5	835	0.287	Maize & Sorghum	None
Balambala	1.09	2,172	0.62	Maize, Rice & Sorghum	Bananas, Pawpaw
Dadaab	0.1	1,003	0.173	Maize & Sorghum	None
Modogashe	0.4	1,748	0.25	Maize & Sorghum	None
Liboi	0.06	672	0.221	Maize & Sorghum	None
Jarajilla	0.2	1,137	0.199	Maize & Sorghum	None

Source: District Agricultural Office, Garissa, 1993

The foregoing indicate that the bulk of the district's agricultural production is undertaken in the small farms covering a total of 1015 ha while large farms occupy 162 ha.

The schemes provide a livelihood to, 1200 farm families who would otherwise join the pauperized lot dependent on food aid. The farms provide casual employment to a number of people who have been deprived of livestock due to drought. The number of families within the irrigation schemes and practicing sedentary agriculture grew from 200 in 1984 to over 400 in 1988 and to over 1,000 in 1992. Their activities have resulted into increased horticultural production which, being labour intensive, has provided additional casual employment to others displaced from livestock rearing.

The large-scale parastatal, the ADC irrigation project has continued to be the main employer of casuals, especially during the peak seasons of harvesting citrus, bananas and papaws.

Indirect beneficiaries from the farms are the over 400 women and children actively engaged in the transactions of horticultural crops mainly in Garissa Town and other market centres in the divisions. Transportation of the farm produce by use of donkey carts has immensely benefitted a number of donkey owners and in addition provided employment to those in donkey-cart fabrication workshops.

The major food crops grown in the district comprise of bananas, tomatoes, onions, melons, mangoes, maize, cowpeas and sorghum. Others include brinjals, kales, spinach, capsicum, pepper, guavas, citrus, sweet potatoes, green grams and some rice.

Table 2.9 gives the major food crops produced over the last plan period.

Table 2.9

Major Food Output, 1988-1992

	1988 Tons	1989 Tons	1990 Tons	1991 Tons	1992 Tons
Maize	240	132	134.4	138.5	324
Bananas	960	1,000	864	880	1,092
Tomatoes	50.4	200	320	600	480
Sorghum	25	29	30	50	156
Cowpeas	5.4	6.0	8.75	15.4	41

Source: District Agricultural Office, Garissa, 1993

It is implicit from the table that the district's food production falls far short of demand resulting into a net importation of food-stuff from other districts. The major staple foods currently obtained from other areas are sugar, rice and beans all of which are mainly obtained from the K.N.T.C. and N.C.P.B. stores. Table 2.10 shows the levels of consumption of these food items over the last five years.

Table 2.10

N.C.P.B. And K.N.T.C. Sales of Sugar, Maize Rice and Beans

Bags	1988	1989	1990	1991	1992
Sugar	36,629	52,737	25,709	67,371	59,177
Beans	N/A	2,640	4,622	8,905	5,339
Rice	N/A	10,887	8,463	7,421	5,138
Maize	N/A	7,887	8,284	23,054	16,296

Source: N.C.P.B. and K.N.T.C. Offices, Garissa, 1993

Note: N/A refers to not available but does not imply no sales.

The production of foodstuffs to meet local demand and sales to other areas is, however, promising given the land potential for agricultural production. Table 2.11 depicts the present land potential and utilization level.

Table 2.11

Agricultural and Utilization- 1992 Estimates

Division	Total Area (Km <sup>2</sup> )	Potential Agricultural Land Ha.	Potential Irrigationn Agricultural Land Ha	Developed Irrigation Agricultural Land Ha	Potential Rainfed & Flood Receding Agricultural Land Ha.	Develope Rainfed & Flood Receding Agricultural	Total Developed Agricultural	Undeveloped or unutilised Agr. Land Ha.
Balambala	3,500	6,450	6,000	45	450	72	117	6,333
Modogashe	7,001	800	N/A	N/A	800	50	50	750
Central	750	6,080	6,000	510	80	68	578	5,502
Bura	6,200	12,000	12,000	40	160	60	100	11,900
Masalani	5,800	244,000	4,000	N/A	240,00	150	150	243,780
Ijara	5,800	244,000	N/A	N/A	240,000	70	70	243,860
Hulugho	5,450	500,00	N/A	N/A	500,000	140	140	499,860
Liboi	3,040	80	N/A	N/A	80	8	8	72
Dadaab	5,800	160	N/A	N/A	160	16	16	144
Jarajilla	5,700	320	N/A	N/A	320	32	32	288

Source: District Agricultural Office, Garissa, 1993

NOTE: Not all the potential rainfed and flood receding agricultural land is available for expansion of crop production activities. It is also the only suitable land for livestock grazing for most part of the year. Part of this potential is also under forests and game reserve.



Area put under crop, rainfed and flood receding agriculture, varies each year depending on rainfall amounts and distribution.

It can be deduced from Table 2.11 that nearly 20% of the total land is potential agricultural land while only 0.16% is presently developed or utilized agriculturally. The potential for agricultural expansion and intensified use of developed land remain challenging for the realization of the national food policy.

### Other Primary Production Activities

Fisheries: The fishing industry along the Tan River remains largely unexploited. The situation is aggravated by lack of research to establish the river's potential for fishing. Though the river's infestation by crocodiles partly explain the deficiency in research and exploitation of the resource, the socio-cultural eating preference of the district's inhabitants also explain the low level of the industry's development. The influx of other communities into the district has increased demand for fish leading to noticeable fishing activities.

Quantification of those engaged in fishing has not been possible since they operate clandestinely from various points along the river. There are only four licensed fishermen operating in Central Division in the proximity of Garissa town and supply fish to the residents of the town on bicycles. Their supply falls far short of demand since the fish never reaches the market place and is sold on transit.

The main types of fish known include labeo, Tilapia, Mudfish, Synandontis and eel which accounted for 70%, 9%, 2%, 7% and 4% respectively of the total landing of 17,155 kgs. recorded for the year 1992. This fish landing was valued at over Kshs.256,000. Other species available include Barburs and Schilbe though no landings have been recorded.

Fish farming is still undeveloped though with great potential. The fisheries department maintains a single fish pond stocked with Tilapia fish in the Central Division. The potential of fish farming in the southern divisions is evidenced in Masalani, Hulugho and Ijara Divisions with some reliable rainfall and where exists some water collecting basins presently stocking Tilapia, mudfish and lung fish. These basins include Jerei, Bodhai and Hara Water ponds in Hulugho, Ijara and Masalani Divisions respectively.

Forestry: About 98% of all domestic energy requirements is met from the district's scanty forest resource. Woodfuel is gathered by women and young girls and provide income to many who sell to other users.

The influx of the refugees exacerbated demand for woodfuel as this remained the single source of energy and building materials. In the Northern Divisions of Liboi and Dadaab, trade in the commodity became a booming source

of income much to the detriment of the already battered environment resulting from increased refugees population.

The production and use of the forests can be classified into three categories as below:-

-The Roundwood: This has an annual production of 170,000m<sup>3</sup> and is used locally as poles and posts in the construction industry.

-Fuel Wood: The annual production is estimated at 343,000m<sup>3</sup> and provides fuelwood and charcoal. This forms the most important energy source in the district.

-Non-Wood Products: These are extracts from trees and other vegetation of high monetary value but with minimal exploitation which is not yet quantified. These products include gum arabic, tanmins and dyes, aromatics, honey and beeswax, palm fronds and palmwine. The uses of these products include basketry, mats, thatching and medicines. The sap of the doum palm can be used to make a very coarse and stern palm today.

Given the absence of gazetted forests in the district, forestry activities have been concentrated on its service role and less on production except in areas of concentrated population. The production and consumption of roundwood is estimated in Tale 2.12.

Table 2.12

Roundwood Production and Consumption

	Govt. Projects	Large Farms	Others (m3)	Imports (M3)	Consumption
Industrial Wood	-	-	-	2000	2000
Fuelwood	-	-	343000	-	343000
Transmission Poles	-	-	-	1000	1000
Building Poles	-	-	150000	120000	270000
Total	-	-	493000	123000	616000

Source: District Forest Office, Garissa, 1993

## **COMMERCE, TRADE, MANUFACTURING AND OTHER SERVICES**

Garissa district has no major manufacturing undertakings except for one small textiles firm and a bakery. One vital tanning factory has not been operating over the last plan period but plans are underway to make it operational in the very near future.

Wholesale and retail trade form the major economic undertaking in this sector and is mainly concentrated in Garissa Town.

Within Garissa town, there are vegetable vendors in the open-air market and some streets of the town dealing in fresh farm produce such as tomatoes, cabbages and potatoes. These hawkers comprising of women and teenage boys deal in items which also include fruits obtained from farms found along the River Tan and these fruits include bananas and tomatoes. This form of trade provides a livelihood to over 300 people.

Nearly 100 hawkers deal in coloured ice-cubes that are packed in plastic containers and stored in ice-boxes. These are quite popular especially with children in this arid climate.

There are a few Jua Kali artisans operating in the district predominantly in Garissa town. Their main trades include making of charcoal jikos, metallic water buckets, dust-bins, pangas and Somali swords and knives. Welding and repair of domestic and office equipment are also undertaken by these artisans whose number is estimated at 200. Other Jua-Kali operations of significance include the small-scale motor vehicle garages, tailoring, carpentry, shoe repair and trades in miscellaneous wares in the main markets.

Food donations to the refugees and other destitutes find its way to the major market centres and has enabled over 400 people engage actively in the sales of wheat, rice, maize, edible oils, tinned milk and other wares. In other centres such as Liboi, Dadaab, Modogashe, Bura and Hulugho, small scale trade in different forms of merchandise provide a livelihood to many.

Another important form of trade found within the confines of Garissa municipality is the Donkey-cart-water trade in which about 200 men, boys and a few women are fully engaged from dawn to dusk in supplying raw water drawn from River Tan to the town's residents. It is estimated that over 300,000 litres of water get supplied daily to the town's residents with good income accruing from the trade and by extension to those fabricating the donkey-carts.

## EMPLOYMENT

### Labour Force

The District's current labour force comprising the 15 - 59 age group is estimated at 73,010. Both men and women are engaged in one activity or another though the participation rate for men is much higher given the pastoral nature of the community and marginalisation of women from formal employment. This arises from the Islamic faith that restricts women to household chores. However, a recent development within the community is high divorce rates and increasing number of female headed households. This has resulted into the engagement of women in the irrigation farms, formal employment and small-scale trades. It is also note worthy that even in the absence of the new development that places women in income generating activities, it is them who build houses, i.e. Manyattas.

Child labour though not included in the labour force is a significant contributor. In areas where boarding schools are not fully operational, children are actively engaged in herding the livestock along side their parents. Collection of fuelwood and other related chores are performed by women and children. In urban Centres, child-labour is witnessed in informal sector activities such as donkey cart operations, and vending. In Garissa Town children offer valuable services in forms of Car-wash and household duties mainly to the large number of elite public servants.

The participation rate of the district's labour force though difficult to determine could be considered low. Apathy towards tedious work is wide spread among the local community. Dependence on the neighbouring district of Tana River for menial jobs is high and mainly common in Garissa Town.

The observed quality of the labour force is attributed to the Somali way of life given the traditional non-sedentary lifestyle. However, with the new developments in agriculture and the pressures of a dynamic socio-economic world, the participation of labour is beginning to show positive signs of response to the market.

## Distribution of Labour

Table 2.13 gives the approximate distribution of labour in the various categories.

Table 2.13

### Employment Profile in the District

	1989	1994	1996
<u>Labourforce</u>	98,460	73,010	78,057
<u>Agricultural Labour</u>			
Small Farm	1,483	1,670	1,737
Large Farm (perm)	506	584	608
Migrant/Seasonal	-	820	853
Pastoral	79,780	55,179	58,842
<u>Other Rural Self Employment</u>			
Fishing	-	20	37
<u>Wage Employment</u>			
Public Sector	3,925	3,715	3,790
Private Sector	81	148	201
<u>Urban Self-employment</u>			
Commercial/Business	5,723	7,644	8,428
Informal Sector	1,600	3,230	3,561

Source: District Planning Unit, Garissa, 1993

The district's labour force has been extracted from the population aged 15-59 with an assumption of a 92% participation rate. From table 2.13 it is evident that the district's labour force is distributed as follows:-

Pastoral	-	75.5%
Formal Employment	-	5.3%
Agriculture	-	4.2%
Commercial/Business/ Informal	-	15.0%

Pastoralism accounts for the bulk of the labour force. It is important to mention that due to loss of livestock as a result of drought, nearly 20% of the pastoralists are openly unemployed and leading a pauperized lifestyle dependent on food aid in Urban centres. It is also in this sector that hidden or disguised unemployment is widespread with very low productivity of labour. It is important to clarify that this labour force has been estimated as a residual after estimating

the other activities where data, though unreliable, is obtainable.

Formal employment comprise a labour force with reasonably high participation rate, with the bulk of this labour force being in the public service. The growth of the public service has been curtailed but is expected to increase by one per cent over the plan period. Private sector employment is still low due to absence of industrial and other manufacturing firms. It is expected that employment creation in this sector will grow at 35.8% as in the last plan period. The fast expanding construction industry is expected to create more jobs in addition to the efforts of other firms.

Urban self-employment with its highly motivating labour force is assumed to maintain a five-per cent growth rate. This sector is expected to create more jobs given the support from the expanding manufacturing and agricultural sectors.

Agricultural Employment is mainly generated in the developed irrigation farms along the Tana River and the ADC farm. Assuming a growth rate of two per cent as was the case in the last plan period, the sector's employment creation is expected to increase with forward linkages to the other sectors.

The fishing industry though insignificant in this district has the potential for increased employment.

The projected labour force in 1996 is estimated at 78.057 which represents an overall growth rate of 6.9%

### Conditions of Employment

Seasonal Employment: Given the migratory nature of pastoralism in a district prone to long dry seasons, a significant fraction of the pastoral labour force becomes seasonally employed during the good seasons. It is during the good seasons that women, men and children find themselves engaged in livestock activities. The advent of long dry seasons results into either loss of livestock that renders some labour redundant or the relief of the other labour as young men travel longer distances with the livestock in search of pasture and water. It is estimated that over 70% of the pastoral labour are seasonally unemployed during the drier seasons.

Seasonal employment also occur among the women horticultural traders whose source of merchandise is the irrigation farms along the Tana River. This form of employment is quite important and its seasonality depends on the seasonal production of horticultural produce. The period, July - October, represent the peak season for this form of employment.

Open Unemployment: Seasonal employment is a major cause of open unemployment given the absence of alternative employment opportunities in the remote parts of the district. It results into the influx of the displaced labour into

the district and divisional headquarters in search of relief aid. The food for work programme is already planned by some NGOs to engage a fraction of the openly unemployed whose basic occupation is seasonal livestock farming.

Another form of open unemployment exists in Garissa Town where a good number of the labour force is openly in pursuit of job opportunities. The district employment office has registered about fifty people as seeking for employment over the past year but thousands have yet to register when made aware of the exercise.

#### Structural Unemployment/ Disguised employment/

Under-Employment: Structural unemployment is prevalent among the pastoralists since the pastoral labour though attending to some livestock activity is not fully engaged. This form of disguised employment is characterized by low productivity of labour quite relevant in the pastoral system. Removal of even a good portion of the labour will have no negative effect on productivity. In this pastoral community the existence of underemployment given the nature of activity goes side by side with structural unemployment.

Frictional Unemployment: This form of unemployment exists within the District's informal sector and mainly occurs in the construction industry and other trades such as motor repairs. In Garissa district, these sectors are frequented with short and sometimes long periods of work stoppages resulting from lack of financing and low business.

The Gender Factor in Employment: The socio-cultural practices within the local community restricts the females to household duties. This is further worsened by high illiteracy rates among women which marginalizes them from wage employment. The situation is further aggravated by the strong Islamic faith that places the females at the peripheries of lucrative income activities.

However, the increasing number of divorces and dynamism in the economy has forced women to seek for income earning activities mainly in the business and commercial trades. Some few educated females are engaged in the wage sector.

## **SOCIAL AND ECONOMIC INFRASTRUCTURE**

### Health Facilities

Health services in the district are provided through some 19 institutions comprising one hospital, 3 health centres and 15 dispensaries. Whereas the single hospital, the Provincial General Hospital, is located in Garissa Town, each division is served with at least either a health centre or dispensary. The distribution of these facilities by administrative divisions is illustrated in map 3 and Table 2.14.

# GARISSA DISTRICT DISTRIBUTION OF HEALTH FACILITIES





Table 2.14

Distribution of Health Institutions by Divisions - (1989-1993)

Division	Hospitals		Health Centres		Dispensaries	
	1989	1993	1989	1993	1989	1993
Central	1	1			2	2
Bura					2	3
Ijara					1	2
Masalani			1	1		
Balambala					2	2
Modogashe			1	1	1	2
Liboi			1	1		
Hulugho					1	2
Jarajilla					1	1
Dadaab					1	1
<b>Total</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>11</b>	<b>15</b>

Source: Medical Office of Health, Garissa, 1993

The illustration in table 2.14 indicates that the three health centres are located in Masalani, Modogashe and Liboi, the rest of the divisions being served with the dispensaries. It is also evident that four new dispensaries were established within the concluded plan period, three of which were in the southern Divisions of Bura and Ijara and one in Modogashe to the North. The Central Division is served with two dispensaries in addition to the Hospital. It is also noteworthy that 8 operating private clinics are all located in Garissa Town.

These health facilities are all maintained by GOK except for the provincial Hospital which has received assistance from NGOs such as GTZ and Action Nord Sudd (ANS).

Given the vast nature of the district coupled with a scattered settlement pattern, the catchment areas of these institutions remain limited except for the Provincial Hospital. Long and weary distances to reach treatment centres exacerbated by lack of transport make these facilities beyond the reach of very needy cases. It is therefore a common phenomenon to come across an under-utilized health facility in one centre whereas morbidity cases are prevalent in another settled area some kilometres away.

Apart from the Provincial Hospital which is over-utilized, under-utilization of the other centres is attributable to lack of other complementary facilities and personnel for delivery of services. Table 2.15 gives the cadres of available medical personnel for 1989 and 1993.

Table 2.15

Medical Personnel 1989 - 1993

Cadres	1989	1993	Shortfall
Doctors	1	2	8
Dentists	1	1	
KRN		24	
KEN		157	
RCO		18	
Pharmacists		Nil	
Pharmaceutical Tech.		4	5
Dental Tech.		1	2
Lab Technologists		4	2
Lab. Technicians		14	6
Occupational Therapists		6	2
Orthopaedic Tech.		2	1
Physiotherapist		8	4
Radiographers		3	4
X-ray Film Processors		1	3
P.H.O.	4	5	
P.H.T.	38	41	

Source: Medical Office of Health, Garissa, 1993

List of Abbreviations:-

K.R.N	-	Kenya Registered Nurses
K.E.N.	-	Kenya Enrolled Nurses
R.C.O.	-	Registered Clinical Officer
P.H.O.	-	Public Health Officer
P.H.T.	-	Public Health Technician

The shortage of medical personnel of all cadres affect the effective use of the existing health institutions. The divisional health centres and dispensaries are run by either one or two nurses with the consequences of lack of services incase the personnel travel to Garissa or elsewhere in pursuit of other necessities. The implication is under-utilization of these facilities resulting from shortage of

personnel. Most of the same centres lack equipment such as beds to enable operationalising some completed maternity wards.

Over-utilization of the Provincial Hospital is evidenced on the pressures on the personnel and other facilities. The doctor patient ratio is approximately 1:67,000 compared to the national average of 1:7,000.

There are only 171 beds in the Provincial Hospital catering for an average daily inpatient population of 210. Given this state, congestion in the wards is common and is further aggravated by shortage of wards. The other inpatient facilities in the divisions are over-utilized since there exists only 6 beds in Masalani, 6 in Modogashe and 2 in Hulugho.

Supplementary to the existing health institutions and personnel is the training component. The Garissa Medical Training Centre established in 1980 offers courses in Kenya Enrolled Community Health Nursing with a total enrolment of over 90 students. The institute with an annual output of over 30 graduands provide complementary services to the Provincial Hospital.

### Education Facilities

The provision of education facilities has conformed to the dictates of the migratory way of life of the inhabitants. Boarding schools have been preferred in areas where permanent settlements is not guaranteed. Table 2.16 gives divisional distribution of primary and secondary schools for 1989 and 1993.

Table 2.16  
Number of Educational Institutions by Division 1988 and 1993

Division	Primary		Secondary	
	1989	1993	1989	1993
Central	10	13	3	5
Bura	5	5		1 <sup>P</sup>
Hulugho	7	7	None	None
Masalani	5	5	None	None
Ijara	6	6	None	None
Liboi	2	2	None	None
Dadaab	2	1	None	None
Jarajilla	3	3	None	None
Balambala	4	5	None	1
Modogashe	4	4	None	1
Total	48	51	3	8

Source: District Education Office, Garissa, 1993

Note: 1<sup>P</sup> - Proposed and construction on-going

The district's 51 primary schools serve all the divisions with a higher concentration in Central Division. Only three divisions are served with secondary schools namely Central (5), Balambala (1) and Modogashe (1). An additional secondary school is planned for Bura division and construction on-going though stalled due to funding difficulties.

Most of the schools operate boarding facilities but it suffices to mention that lack of physical facilities in the majority of the primary schools is a notable problem with some operating the Manyatta type of classrooms. However, a few have established modern facilities and able to fulfil the 8-4-4 requirements.

Three new primary schools, all in Central Division, were established between 1989 and 1993 while the five new secondary schools were spread amongst central (2), Balambala (1) Modogashe (1) and Bura (1).

The mere number of schools in a community prone to high rates of illiteracy and school drop-outs would not reflect the utilization levels of the institution without effective enrolment.

Tables 2.17 and 2.18 give the Enrolment in Both Primary and Secondary Schools over last five years.

Table 2.17

Total Primary School Enrolment 1989-1993

	1989		1990		1991		1992		1993	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
No. by Sex	8044	4327	8818	3751	8653	3628	8299	3415	8356	3384
Total	12421		12569		12281		11714		11740	
Girls %	35.2		29.8		29.5		29.2		28.8	

Source: District Education Office, Garissa.

Table 2.18

Total Secondary School Enrolment by Form and Sex

FORM	1989		1990		1991		1992		1993	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
I	180	90	226	102	320	88	232	111	340	115
II	180	88	190	96	251	91	333	114	318	107
III	176	80	119	94	194	89	242	81	307	78
IV	173	64	160	81	187	86	193	80	246	79
TOTAL BY SEX	849	322	735	373	952	354	1000	386	1211	379
GRANT TOTAL		1711		1108		1306		1386		1590
Girls %		27.5		33.7		27.1		27.8		23.8

Source: District Education Office, Garissa, 1993

Tables 2.17 and 2.18 show an increasing trend in total enrolment over the years for both primary and secondary levels.

The lowest percentage increase in enrolment, especially for primary schools, was witnessed in the last two years which could be attributable to drought that culminated into the desertion of some day primary schools by migration to other habitable parts of the district.

It is also evident that the increasing trend in enrolment accompanied a fairly stable percentage of girls' enrolment at nearly 30% at all the two levels of education with a notable drop in their enrolment in 1993. This would again be explained by the effect of the long drought. Nevertheless, the observed steady enrolment of girls in this particular community, is an encouraging achievement in human capital development.

The observed enrolment conforms to the divisional distribution of the schools with Central Division accounting for 53% of the total. This is an expected result given the established infrastructure and population in the division.

Complementary to the available facilities and enrolment levels is the availability of teachers which is reflected in table 2.19 for 1989 and 1993.

Table 2.19

The Teacher - Pupil Ratio - 1989 and 1993

Teachers	Primary		Secondary	
	1989	1993	1989	1993
Trained	208	104	47	12
Untrained	165	290	31	70
Total	373	394	78	82
No. of Pupils	12421	11740	1711	1590
Teacher to Pupil Ratio	1:33	1:30	1:22	1:19

Source: District Education Office, Garissa, 1993

It is evidenced from the foregoing that the teacher to pupil ratio has remained fairly low and steady in 1989 and 1993 at 1:30 for primary schools and 1:20 for secondary schools. This ratio, however, requires a cautionary statement since the pupil population is not evenly spread district-wide.

The utilization of school facilities remain fairly high in Central, Balambala, Dogashe, Bura and Masalani Divisions. On average, all schools at the divisional headquarters remain over-utilized and lack of enough physical facilities has resulted in congestion which is more severe in some schools in Central Division. The over-utilization of day schools in remote parts of the divisions is evidenced in the case of severe drought when nomadism is irresistible. The case is not true for boarding schools.

Other educational facilities include the Medical Training Centre (M.T.C.), Farmer Training Centre (F.T.C.) and two Youth Polytechnics. The Garissa Medical Training Centre with an enrolment of over 80 students offers training in Kenya Kalled community Health Nursing (K.E.C.H.N.) with a yearly output averaging 30 students. The centre with a complementary role to the General Hospital is marked for re-sitting to be in close proximity to the hospital plus expansion of premises with the present premises reverting to the school of Environmental Health.

The Farmers Training Centre, established during the last plan period, caters for the training of farmers and technical staff in addition to offering conducive meeting and seminar facilities to other government departments.

The two youth polytechnics, namely Garissa and Bura offer training complementary to the 8-4-4 education system in the trades of carpentry, masonry, cabinet-making, leather work, agriculture and basic education. The provision of physical facilities and equipment remains wanting to enable their expansion in

terms of enrolment and courses offered. The other technical institution of major importance is the NEP Technical which offers certificate courses in secretarial, accounts, carpentry, welding and clothing. Total enrolment is currently 150 up from less than 80 in 1989.

A major educational facility at the implementation stage is the Provincial Teacher Training College which is a land-mark institution in the district and promises to revolutionize the training and availability of teachers in the whole district and Province.

### Roads

The district is served with a total of 1681 km of classified road networks with none existing as unclassified. The other roads are regarded as security roads but no information is available on them. They are also of no significance. Map No. 4 illustrates the distribution of the classified roads and Table 2.20 gives the distribution by administration divisions.

Table 2.20

#### Distribution of Roads in Km

Division	1989	1993
Central	195	195
Jarajilla	100	100
Modogashe	185	185
Balambala	206	206
Dadaab	114	114
Liboi	225	225
Bura	330	330
Masalani	63	63
Ijara	155	155
Hulugho	78	78
<b>Total</b>	<b>1681</b>	<b>1681</b>

Source: District Works Office, Garissa, 1993

The above distribution prevailed through the last plan period since no additional roads were opened.

The most over-utilized roads include Garissa-Liboi on A3, Garissa-Balambala-Modogashe on C81, Garissa-Bura-Hulugho, Bura-Masalani. The rest of the roads, especially in Jarajilla and Balambala remain largely under-utilized.

The present road network can adequately serve the needs of the district when improved to all-weather status and well maintained.

Distribution of roads in Km

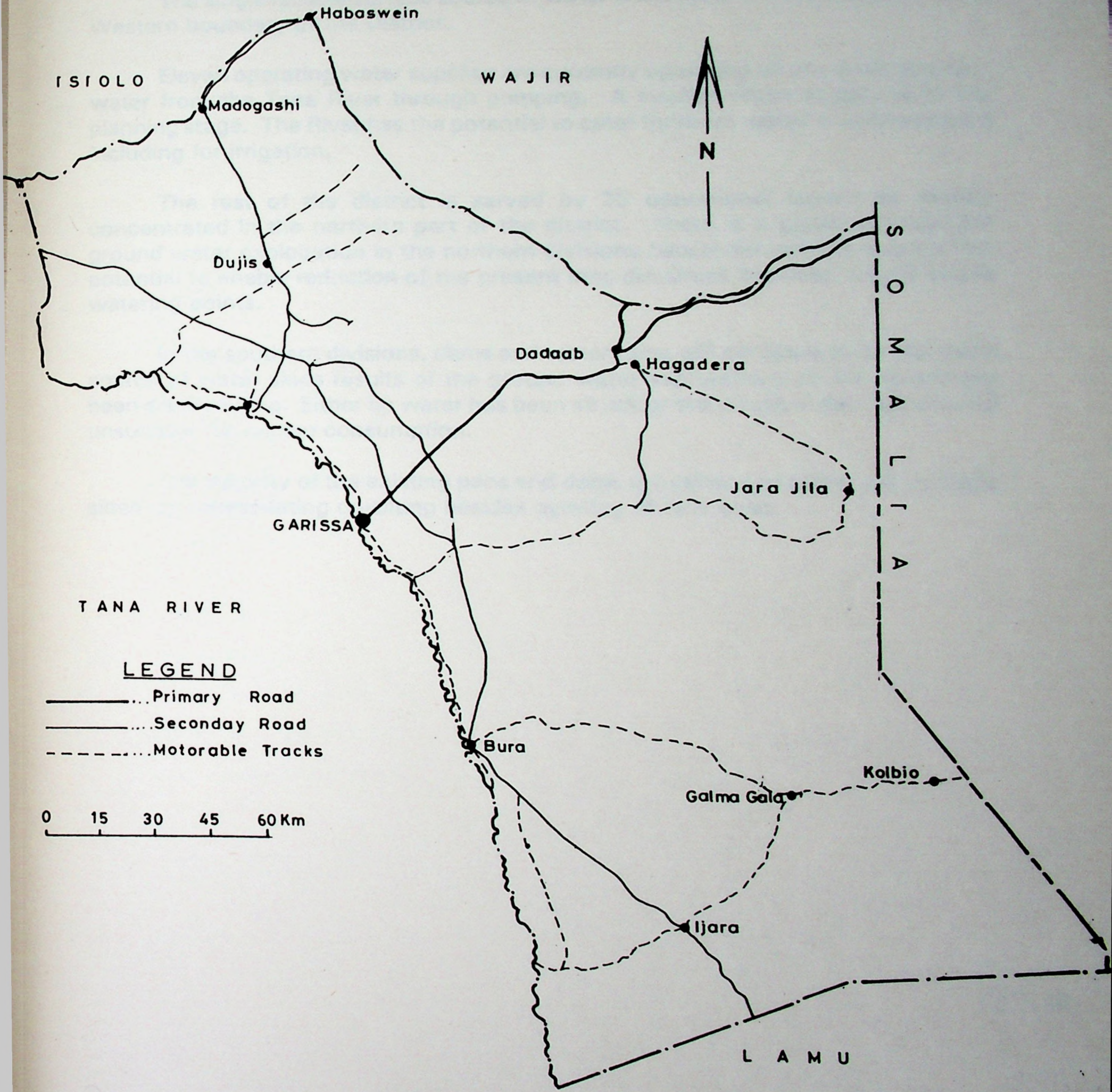
Division	1988	1993
Central	185	195
Jarajilla	100	100
Modogashe	155	165
Balambala	208	208
Dabab	114	114
Liboi	225	225
Bura	330	330
Masalani	63	63
Jara	155	155
Hulugho	78	78
Total	1681	1681

Source: District Works Office, Garissa, 1993

The above distribution prevailed through the last plan period since no additional roads were opened.



# GARISSA DISTRICT ROAD NETWORK



ISILOLO

WAJIR



S  
O  
M  
A  
L  
I  
A

Madogashi

Dujis

Dadaab

Hagadera

Jara Jila

GARISSA

TANA RIVER

## LEGEND

- Primary Road
- - - Secondary Road
- · - · - Motorable Tracks

0 15 30 45 60 Km

Bura

Galma Galma

Kolbio

Ijara

LAMU

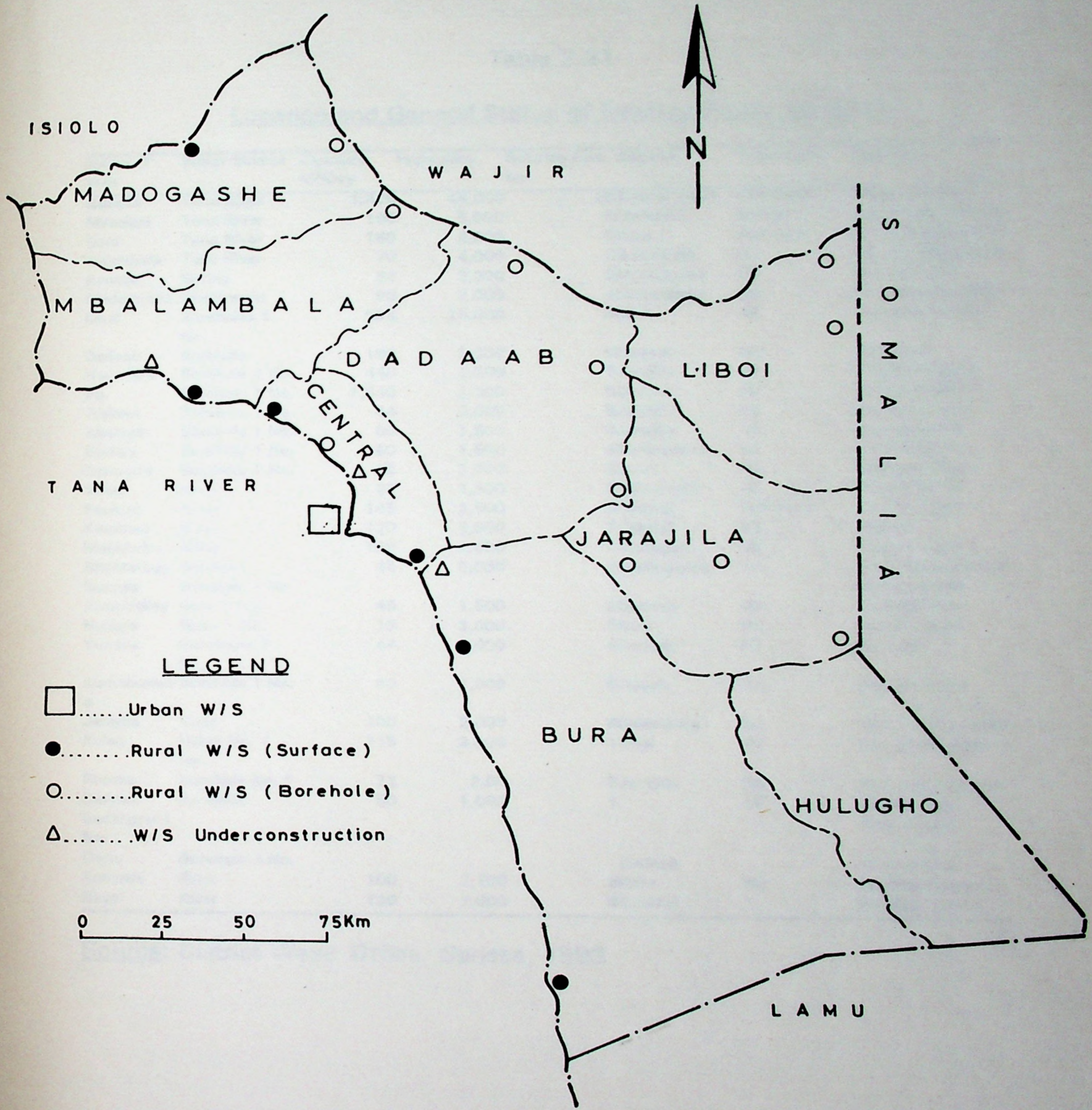
The single reliable surface source of water is the River Tana which forms the Western boundary of the District.

Eleven operating water supplies are currently operating all of which abstract water from the Tana River through pumping. A twelfth water supply is in the planning stage. The River has the potential to cater for more water supply systems including for irrigation.

The rest of the district is served by 25 operational boreholes mostly concentrated in the northern part of the district. There is a great potential for ground water exploitation in the northern divisions hence the need to exploit this potential to enable reduction of the present long distances between the available watering points.

In the southern divisions, dams and water pans will continue to be the main source of water since results of the ground water explorations so far done have been discouraging. Either no water has been struck or the struck water has proved unsuitable for human consumption.

The majority of the existing pans and dams are either completely or partially silted up necessitating de-silting besides opening of new ones.



LEGEND

- .....Urban W/S
- .....Rural W/S (Surface)
- .....Rural W/S (Borehole)
- △.....W/S Underconstruction

0 25 50 75Km

Table 2.21

Location and General Status of Existing Water Supplies

Name of W/S	Water Source	Capacity M <sup>3</sup> /Day	Population	Scheme Size Km	Division	Treatment	Remarks	
Garissa	Tana River	1,400	48,000	25	Central	treat	Full treat	Urban centres
Masalani	Tana River	160	5,000	6	Masalani		Partial	Div. Headquarters
Bura	Tana River	160	8,000	5	Bura		Full treat	Div. Headquarters
Balambala	Tana River	70	4,000	5	Balambala		Nil	Div. Headquarters
Benane	Spring	80	3,000	5	Modogashe		Nil	Human Lives
Modogashe	Shallowells	90	7,000	4	Modogashe		Nil	Div. Headquarters
Liboi	Boreholes 3 No.	594	25,000	4	Liboi		Nil	Refugee Camp
Dadaab	Borehole	190	5,000	6	Dadaab		Nil	Div. Staff
Hagadera	Borehole 3 No.	440	2,000	5	Jarajilla		Nil	Refugee Camp
Ifo	Borehole 7 No.	1,540	2,000	5	Dadaab		Nil	Refugee Camp
Welmer	Borehole 1 No.	44	2,000	5	Jarajilla		Nil	Human Lives
Alinjugur	Borehole 1 No.	60	1,500	4	Jarajilla		Nil	Human Lives
Goriale	Borehole 1 No.	60	1,500	4	Modogashe		Nil	Human Lives
Damajale	Borehole 1 No.	80	3,000	5	Liboi		Nil	Refugee Camp
Saka	River	90	1,500	5	Balambala		Nil	Human Lives
Sankuri	River	145	2,500	5	Central		Full treat	Human Lives
Korakora	River	120	3,000	7	Central		Nil	Human
Masabubu	River	100	2,000	5	Masalani		Nil	Human Lives
Shanta-bag	Borehole	45	5,000	5	Modogashe		Nil	Div. Headquarters
Guruga	Borehole 1 No.							Human Lives
Abakalailey	Bore 1 No.	45	1,500	6	Dadaab		Nil	Human Lives
Nanighi	River 1 No.	18	3,000	5	Bura		Nil	Human Lives
Yumbis	Boreholes 1 No.	44	2,000	4	Dadaab		Nil	Human
Kumahumat	Borehole 1 No.	80	3,000	5	Dadab		Nil	Human Lives
Jarajilla	River	100	2,000	8	Balambala		Nil	Div. Headquarters
Kulan	Kulan No. 1 No.	115	3,000	1	Liboi		Nil	Div. Headquarters
Rhowa	Borehole No. 1	72	2,00	5	Jarajilla		Nil	Human/Livestock
Darken	Borehole	50	1,000	5			Nil	Abandoned
Sedargosi 1 No.								Abandoned
Dertu	Borehole 1 No.				Dadaab			Abandoned
Kamuthi	River	100	2,100	5	Bura		Nil	Market Centre
Raya	River	120	2,000	5	Central		"	Market Centre

Source: District Water Office, Garissa, 1993

Name	Division	Location	Year Completed	Capacity	Remarks
Hulugho I	Hulugho	Town Centre	1977	Small	
Hullugho II	Town Centre	Town Centres	1978	Small	
Hullugho III	Hullugho	Town Centre	1978	Small	
Hullugho IV	Town Centre	Town Centre	1990	Small	
Shangalu	Ijara	Sangailu	1985	8100m <sup>5</sup>	Silted
Wardeijab	Hullugho	Wadeijab		Small	Silted
Galamagala	Hullugho	Galmagala	1985	Small	Good
Ege	Jarajilla	Halinjur	1986	45000 <sup>m</sup>	Good
Amuma I	Jarajilla	Amuma	1986	Medium	Good
Ellein	Jarajilla	Jarajilla	1986	Small	Silted
Fafi	Jarajilla	Jarajilla	1986	Small	Silted
Liboi I	Liboi	Liboi	1984	27000m <sup>3</sup>	Silted
Liboi II	Liboi	Liboi	1988	6.4 Million Gallons	New
Alango arbs	Liboi	Liboi		Small	Silted
Damajalla	Liboi	Liboi		Small	Silted
Shiddle	Dadaab	Dadaab		Small	Silted
Hullogorara	Dadaab	Abakaile		Small	Silted
Fafi Kalala	Dadaab	Fafi	1979	8100m <sup>3</sup>	Silted
Sabena	Dadaab	Abaile		Small	Silted
Gubkibir	Dadaab	Abakaile	1978	8100m <sup>3</sup>	Silted
Guyo Bombi	M/Gashe	M/Gashe	1984	Small	Silted
Gunjis	M/Gashe	M/Gashe	1984	Small	Silted
Lolo	M/Gashe	Shantaabag	1984	Small	Silted
Darruwayo	M/Gashe	Shantaabag	1984	Small	Silted
Rig	M/Gashe	Shantabag		Small	Silted
Aba-wodow	M/Gashe	Benane		Small	Good
Maalimin	m?Gashe	Benane		Small	Good
Belgis	M/Gashe	Benane		Small	Silted
Bofa Geri	M/Gashe	Benane		Small	Silted
Gura Injiris	M?Gashe	Benane		Large	Silted
Lanta Bish	M/Gashe	Benane		Large	Good
Dayhelyed	M/Gashe	Benane		Small	Pair
Bulo	M/Gashe	Benane		Small	Silted
Ijara	Ijara	Ijara	1966	Small	Silted
Dunjis	Balambala	Dujis	1986	27000m <sup>3</sup>	Good
Dunjis	Balambala	Dujis	1978	53125m <sup>3</sup>	Clean
Reitab	Balambala	Dujis	1978	Small	Pair
Reitab	Balambala	Dujis		Small	Silted
Ashdin	Balambala	Dujis		Small	Silted
Aghatarr	Balambala	Dujis		Small	Silted
Ohia	Balambala	Dujis		Small	Silted
Udhole	Balambala	Dujis		Small	Silted
Anow	Balambala	Dujis		Small	Silted
Goshai	Balambala	Balmbala		Small	Fair
Dido	Bura	Dido	1972	Medium	Silted
Daghigha	Bura	1973	1973	Medium	Silted

Source: District Water Office, Garissa, 1993

Tables 2.21 and 2.22 give an impression of commendable efforts to avail this scarce but vital resource to the district's human and livestock populace over the last plan period. Table 2.23 provides a comparison of established water supplies between 1989 and 1993

Division	1989			1993		
	Piped Schemes	Bore Hole	Pans	Piped Schemes	Boreholes	Pans
Central	2	-	-	4	-	-
Balambala	2	-	1	2	-	-
Bura	3	-	2	4	-	-
Hillugho	-	-	5	-	-	6
Ijara	-	-	3	-	-	1
Masalani	1	-	1	1	-	-
Jarajilla	-	3	3	-	9	4
Dadaab	-	3	4	-	11	5
Liboi	-	2	3	-	5	2
Modogashe	-	3	10	1*	4	11
<b>Total</b>	<b>8</b>	<b>11</b>	<b>38</b>	<b>12</b>	<b>29</b>	<b>47</b>

Source: District Water Office, Garissa, 1993

It is evident from table 2.23 that Central, Balambala, Bura and Masalani are the only divisions endowed with the piped schemes which is attributable to their close proximity to the Tana. The rest of the divisions are dependent on the boreholes and pans.

The pans are under heavy threat of silting and their reduced capacities call for action. The divisions worst affected include Hulugho, Jarajilla, Liboi and Dadaab. The latter two played host to the Somali Refugees whose influx in great numbers heralded the displacement and predicament of the indigenous inhabitants and livestock as their traditional watering points became polluted, dried or simply usurped. However, efforts by U.N.H.C.R and U.N.I.C.E.F. in providing boreholes to the refugees have been encouraging and additional ones already provided to cater for the displaced communities. It is expected that the return of the refugees will leave these divisions better endowed with supply of water.

Over the last plan period 3 piped schemes were established in Raya, Sankuri and Kamuthi in central and Bura Divisions.

The demand for water from the existing water points far exceeds the supply. The frequent breakdowns of engines in piped schemes and boreholes due to over-use attests to this premise. The over-reliance by a good population of the Garissa Town residents on the donkey-cart water is a further confirmation of the over-

Generally, the existing water points are far inadequate but the intensity of use is greater to the north, with relatively more drier days, than it is to the south where accessibility to the Tana is guaranteed. It is also in the northern divisions where evapo-transpiration is relatively higher and even more than four times the rainfall receipts.

### Electricity

Garissa District is not yet connected to the National power grid and the only electricity is diesel-engine generated and serving only Garissa Town and its environs.

Apart from serving the four small scale industrial and manufacturing concerns, the bulk of electricity demand is domestic. This demand has, however, stretched the capacity of the generating set to the limit with a resultant need for an expanded output. The over-utilization of the power has resulted from increased demand from the sprouting real estate investments.

A new power generating station whose output is expected to be thrice the current one is already planned for implementation in the immediate future. It is hoped that the new station will accommodate extension of power lines to the suburbs mainly Korakora, Sankuri, Raya, Bour Algi and Nanighi all of which are strong candidates in the Rural Electrification Programme.

### Cattle Dips

Garissa district has no operational dips since the five existing dips are not usable for one reason or another. Four of the dips are cracked and require rehabilitation before use. The only one in good condition is located in Bodhai but requires supply of acaracide and water. There is not much emphasis on construction of more dips because of the migratory nature of the pastoralists and the resistance capacity of the stock.

The only substitute services available is spraying which is available in the A.D.C. and Maendeleo farms.

in Central Division with the extra one being in Masalani division to the south. While the single society in the south is for livestock marketing, the five societies in Central Division comprise of one for horticulture, one multipurpose, one for farming/Livestock and the rest two for livestock marketing.

Over the last plan period, the movement experienced an improvement as three cooperatives were newly registered. The societies' performance in terms of membership, share capital and turnover was not impressive and table 2.24 gives their status.

Table 2.24

Share Capital, Membership and Turnover of Cooperatives 1989 - 1992

Year	Membership (No.)	Share Capital Ksh. Millions	Turnover KSh. Millions
1989	1075	2.0	0.62
1990	1125	3.2	0.75
1991	1300	3.3	1.50
1992	1651	3.9	0.77

Source: District Cooperative Office, Garissa, 1993

An increasing trend is observed in all the three variables save for a fall in turnover between 1991 and 1992. This is explained by the prolonged drought over the same period. The percentage increase in membership, share capital and turnover remains less significant compared to the need and potential. It is for this reason that the need for public education to popularize the movement within the district is strongly advocated.

Other Marketing Facilities

The only organized livestock auction market in the district is established within Garissa Municipality and operates once weekly. The market thus caters for the rest of the district and is hence over-utilized. Livestock traders in Hulugho and Modogashe usually organize auction markets either weekly, fortnightly or monthly. Other remote divisions from the livestock auction market operate unorganized



marketing system with sales mainly destined to the neighbouring districts namely Lamu, Tana River, Kitui, Isiolo and Wajir.

The marketing of cereals is undertaken by the National Cereals and Produce Board (N.C.P.B) from its Central store located in Garissa Town. It is from there that traders obtain cereals for sale in the divisional centres and other settlements. There are no major market centres operating on a daily or periodic basis save for the Garissa Municipal Market which operate daily albeit with the less developed infrastructure. The market serve the community with assorted merchandise including cereals such as wheat, rice, maize and beans whose source is the refugee and relief food donations. Divisional headquarters are served with unorganized markets not confined to a market place boundary and operated on daily basis. The major ones are found in the border centres namely Liboi, Modogashe, Bura and Hulugho.

### Banks and Credit Facilities

The district is served by two Banks namely Barclays and Kenya Commercial (K.C.B). Whereas Barclays Bank started operating a fully fledged branch in 1965, K.C.B. opened its branch in 1992 and the two are fully operational.

The Banking facilities are under-utilized by as much as between 40 and 50 per cent which is attributable to the under-listed reasons.

- Nomadic pastoralism keep the district's major economic players out of reach since there are no mobile banking services.
- Cash transactions is preferred to other means such as cheques due to high levels of illiteracy and low levels of income. Illiteracy further results into lack of knowledge about banking merits.
- The would-be-borrowers lack tangible securities since most of plot owners have no title deeds or leases while the vast land in the countryside is not surveyed to enable the issuance of land titles.

Other credit institutions include the Industrial and Commercial Development Corporation (ICDC) and the Kenya Industrial Estates (K.I.E.). These two play an important role in availing credit province-wide.

## WELFARE INDICES

### Incomes

#### Agriculture/Livestock Production Values

The non-availability and unreliability of agricultural and livestock income data is a common problem in a semi-sedentary life-style. However, recorded estimates indicate that agricultural produce earned a total of Ksh.10 million while livestock and livestock products were valued at Ksh.594.6 million in 1992.

Wage Earnings: Total earnings from wage employment is obtained from the total census of numbers employed given as 3863. The average income for this category is assumed at Ksh.48,000 per annum. This provides total earnings at Ksh.185.4 million.

Informal Sector: Estimation of earnings from this sector is difficult but with an estimated earning of Ksh.30,000 p.a, the total income for this sector is approximated at Ksh.326.9 million. This income is estimated based on total labour force of 10894.

From the foregoing it is estimated that income accruing from economic activity within Garissa District in 1992 totalled Ksh.1116.9 million.

The per capital income derived from the above estimates at Ksh.7894.4 p.a. This income is below the recorded national per capital income of Ksh.9034 in 1992 at current prices.

Activity	Kshs. M
Agriculture	10.0
Livestock	594.6
Wage Earnings	185.4
Informal Sector	326.9
<b>TOTAL</b>	<b>1116.9</b>
Total Population (1993)	141,479
District per Capita Income (Kshs.)	7894.4
National Income per Capita at Current prices (Kshs.)	9,034.0

Source: District Planning Unit, Garissa, 1993

### Distribution of Income

The income described in the preceding section is skewly distributed with over 75 per cent of the population with almost no income. The district's income is concentrated in a few hands within Garissa Town and the divisional centres. The district's economy is further worsened by little expenditure of the income within the district with a resultant lack of multiplier effects to generate additional income.

## **OTHER ASPECTS OF WELFARE**

### Infant mortality rates

The low levels of immunization coverage within the District implies a high rate of infant mortality. It is estimated that infant mortality rate ranges between 96.5 per 1000 in Garissa Town and 160 per 1000 in the remote areas. The rate is believed to have escalated in the 1991-92 drought. This established rate compares very unfavourably with the 1989 national average of 58.6 per 1000.

## Nutrition

Nutrition levels in this food deficient district is low. The community's nutrition status deteriorated during the 1990-92 long drought. Consequently, migration to urban centres ensued. A sample study by Medicus San Frontiers (M.S.F) - Spain, an N.G.O. operating in the district established the rate of malnutrition among children in Garissa Town at 39.7% out of which 7.5% are severely malnourished especially amongst the new immigrants from the divisions.

Intervention measures to assist the established cases have been instituted by M.S.F. (Spain) and Action Nord Sud (A.N.S) and involve general and supplementary food distributions and therapeutic feeding in selected centres. The general dependence on food relief by the community exemplifies the low level of nutrition. Over 110,000 people are recorded to be recipients of food aid but this does not improve informed nutrition.

## Pockets of Rural and Urban Poor (Destitutes)

Given the arid nature of the district with pastoralism as the major activity, the incidence of poverty is common. This is mainly because of drought that renders pastoralists vulnerable to destitution. Available data indicate that about 110,000 people in 1992 received food aid from the government and other N.G.Os. This indicates that about 75% of the population are recipients of food aid. This high figure though includes those whose meagre incomes are supplemented with food aid, poverty cases increased by 1991. In Garissa Town, for example, over 2500 families are squatters from the divisions and survive on food aid.

## Family Planning

A family planning clinic is fully operational in Garissa Town and is used largely by the non-indigenous residents of the town. There is very low utilization by the local community. The causes of this include high illiteracy (rampant among women); nomadism; high infant mortality; Socio-cultural factors i.e son-preference and polygamous life-style and high divorce rates. Religion - Islamic Religion does not accept family planning

The level of utilization of modern family planning methods is believed to be one of the lowest in the republic.

### Literacy (Adult Education)

Low literacy rates are evident in the district despite the availability of adult education classes in all the divisional headquarters. The current enrolment represents a meager 4.5% of expected adult learners. Their percentage was over 6% in 1989 but the drop is explainable by the high rates of migration witnessed in the last years of the plan period.

Causes of low levels of literacy apart from nomadism include male apathy, poverty and inadequate infrastructure and facilities including personnel.

### Food Availability

Food production in the district falls far short of demand. The big deficit is met by supplies from the N.C.P.B. stores and food aid by government and non-government organizations. Other foodstuffs, mainly milk and horticultural is obtained from Nairobi and Thika by road.

### In and Out-Migration in the District

Garissa district is believed to have experienced a negative population growth over the years due to prolonged drought. Most of the out-migrants have been males in search of other survival means in other towns. Migration into the district reached its peak in 1991 with the influx of over 300,000 refugees from Somalia to the northern divisions of Liboi and Dadaab.

### Status of Women

Literacy among the women is still low. Recent developments evidenced in stable enrolment of girls at both secondary and primary levels are encouraging signals. Though percentage enrolment for girls maintained a rate of 30% from 1989, the secondary enrolment was rather low averaging 27% which is indicative of the drop-out problem. Adolescent mothers are still common in rural communities and is a major cause of school drop-outs.

Primary health care is increasingly gaining prominence and popularity especially among the town residents currently dependent on aid and feeding programmes.

## MAJOR CONSTRAINTS TO DEVELOPMENT

The various elements affecting the development of the district can be examined from the factors listed below.

**Drought and non-availability of water:** Drought in the district is recognized as a major handicap to pastoral development, since it leads to animal deaths and widespread proportions leading to high death rates and very low rates of livestock. The situation is further compounded by lack of basic information on animal occupations, animal health and pastoral migration patterns. It is estimated that drought occurs in a cycle of 2 to 4 years.

Watering points for livestock and human use have remained inadequate and unevenly distributed. The water points are in the north where the rainfall is more scanty. Where the water points exist, their reliability is being undermined due to frequent pump break-downs resulting from poor or lack of maintenance. The water points are being fenced lowering their capacity and thus giving no room with a short period of drought.

**Administrative:** The influx of refugees in the district resulted into instability and adversely affecting the implementation of development programmes. It is hoped that the district will be able to overcome this problem.

## CHAPTER THREE

### STRATEGY FOR DEVELOPMENT

The inhabitants of the district form the basis for the realization of development. However, literacy and cultural factors which are negative to development.

As is the experience elsewhere, polygamy results in high fertility rates with a resulting high dependency ratio amongst a community naturally dependent on agriculture. Coupled with this is the incidence of male chauvinism marginalizing women to the periphery of viable economic activities.

Illiteracy, coupled with poverty, has a negative effect on the community's participation in the identification and implementation of development projects. This has resulted in low levels of self-help, components in project implementation with a consequent lack of physical facilities in schools, with the introduction of the cost sharing system. Though lack of Hararite contribution is attributable to poverty levels and the migratory nature of the community, the effect on the development is serious and has far reaching implications.

## **MAJOR CONSTRAINTS TO DEVELOPMENT**

The central elements affecting the development of the district can be examined from the factors listed below.

Drought and non-availability of water: Drought in the district is recognized as a major handicap to pastoral development, since its toll on animals reaches unprecedented proportions leading to high death rates and very low prices of livestock. The situation is further compounded by lack of basic information on animal populations, animal health and pastoral migration patterns. It is estimated that drought occurs in a cycle of 2 to 4 years.

Watering points for livestock and human use have remained inadequate and unevenly distributed. The worst affected divisions are in the north where the rainfall is more scanty. Where the water points exist, their reliability remains unpredictable due to frequent pump break-downs resulting from poor or lack of maintenance. The water pans are silting hence lowering their capacity and thus drying up even with a short period of drought.

Insecurity: The influx of refugees into the district resulted into insecurity hence adversely affecting the supervision of development programmes. It usurps work morale and destroys what has been established.

High Illiteracy Levels and Low Levels of Community Participation in Development: School enrolment for the indigenous communities is still low, accompanied with high drop-out rates mainly among the girls. Illiteracy is rampant with higher levels amongst the females. As a result of illiteracy, language barriers exist.

The inhabitants of the district form the basis for the realization of development. However, illiteracy perpetuates socio-cultural factors which are negative to development.

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Poor Communication and Transport Services: Garissa District's roads are all seasonal and become impassable during the rainy seasons. The resulting inaccessibility of most areas of this vast district with scattered settlements, becomes a major impediment to development. The local community finds it difficult to obtain vital services such as health and veterinary services. The result is low coverage of immunization and vaccination services, with a consequence of high infant mortality rates, among other effects. It is also during such periods that nutritional levels worsen in the remote divisions, as food supplies fail to reach the people.

Poor Marketing Services and Processing Plants: Though overstocking of animals is a common practice in pastoral communities and is heightened during the good seasons, a restricted market is a major bottleneck to the development of a pastoral community. The situation restricts livestock marketing to the sale of animals for immediate slaughter since sales to other ranches is inhibited by the control of movements of livestock by the Government. The result is a higher supply against demand, hence low prices and unwillingness to sell in order to reduce stock levels. Marketing is further worsened by bad roads.

The lack of processing plants for livestock products such as milk, meat, hides and skins, stifles vital income generating opportunities that would accrue to the district with resultant multiplier effects.

The non-operation of the single tanning firm and the absence of milk plants have obvious implications on the development of small-scale but major manufacturing activities.

The underdeveloped marketing system for fresh and perishable farm produce from the irrigation farms is a handicap to agricultural development. The loss of produce due to lack of appropriate technologies for post-harvest management affect farm incomes.

Inadequate Extension Services and Veterinary Care: The migratory nature of the pastoralist negates the instant provision of education and other services when necessary. The capacity to provide health and education service is inadequate.

Extension services have been less effective due to inadequate coverage and follow-up. Pastoral education on proper husbandry, marketing and veterinary care has not permeated the length and breadth of the community. This arises from logistic and funding problems which include:

- Shortage of transport
- Shortage of funds
- Shortage of technical staff i.e. inadequate extension staff and veterinary officers. (No additional Animal Health Assistants and Veterinary Officers have been availed to the district since 1989 and 1992 respectively despite transfers and study leaves).



- Lack of incentives such as housing, offices and other social amenities, especially in the divisions.
- Vaccination crushes which lack district-wide, making vaccination difficult thus affecting extension work.
- Lack of Laboratory facilities which slows disease surveillance as samples have to be taken as far as Kabete, with an ensuing delay of results.
- Poor roads inhibit extension and veterinary services mainly during the rains.

Land Ownership: Land being a central variable in the production matrix, its ownership determines the direction and magnitude of development. Garissa District's land is largely trust land vested in Garissa County Council with its use based on the local customary laws. The exception is urban land which has been set apart in some centres.

The lack of land adjudication is a major drawback to development since absence of title deeds stifles development of all sectors as access to credit funds for development becomes impossible.

The land factor is further worsened by the fact that land 3 miles (4.8 Km) from the River Tana falls within the jurisdiction of Tana River District. The ownership and development of this strategic and productive agricultural land becomes unpredictable and hence an impediment to development.

Technology and Capital Investment: Despite the existence of a large potential for irrigated agriculture, the high capital investment required, besides high maintenance cost, is a major constraint. This is exacerbated by additional handicaps within the farming community which include:

- Lack of credit schemes to avail necessary capital for investment. Ineffective or underdeveloped cooperatives to enable the pooling of resources for better farm management.
- Poor farm management, low technical know-how of economic crop production practices among the farmers and high running and maintenance cost of pump-fed agriculture.
- Lack of spare parts for the pump sets.
- Inadequate research and data availability. Data generation is very low resulting in little research and information on various aspects requiring intervention. This is exemplified in the lack of reliable data on infant mortality, energy needs and levels of exploitation and potential of the fishing industry:
- Poor revenue collection methods which have remained undeveloped with very high evasions, including rate defaulting by plot owners and businessmen. The result is a poor revenue base for meaningful investment especially by the Local Authorities.
- Closely related to the foregoing is the unwillingness of the few recipients of collateral-free credit schemes such as the Joint-Loan

Board, to repay loans. This hinders the availability of the funds to other viable activities.

## **DEVELOPMENT STRATEGY FOR 1994 - 96**

The major constraints to the district's development as identified above require concerted socio-economic and political measures if proposed activities in this plan period are to be realized.

Overcoming the constraints will call for an integrated approach where the central government, local authorities, regional authorities, parastatals, NGOs and the local community join efforts in the implementation of the plans. These strategies will include the under-listed:

- Provision of more permanent and temporary water points to cater for livestock. Attention is to be biased towards the north, which is established to be less endowed with rain and naturally distanced from the river.
- Opening and development of livestock markets currently inaccessible due to movement controls. These lucrative markets include ranches in the Coast Province, Machakos, Kitui and Laikipia Districts. This can be realized through improved vaccination, treatment and development of holding grounds for cleansing of animals. This strategy envisages a move from the present confinement to the slaughter markets where prices are low and it encourages better animal husbandry. It also entails the establishment of markets for livestock products at the local levels as a measure against exploitation by middlemen.
- An important strategy in this plan period is the drought management to safeguard against unexpected loss of livelihood due to drought. It is envisaged that an early-warning-system be established to enable the creation of precautionary measures. Most important, is the formulation and implementation of a Plan of Action to counteract drought. The implementation of the proposed Drought Action Programme is expected to penetrate all sectors and supplement efforts by other programmes.
- Extension services, including veterinary care, will be improved as this forms the core for a sustainable programme. The government's popular policy of District Focus Strategy envisages the location of technical officers at the grassroot levels. This development strategy emphasizes the need to practically place these vital extensionists at the area of most need.
- Improving the existing road networks through provision of all-weather

surface roads connecting the district to divisional headquarters, will go along way in improving communication and transport services.

- It is envisaged that the refugee population will be reduced to zero level and hence efforts will be intensified to rid the district of the banditry menace. The return of refugees will also enable livestock and local people have access to established water points in the camps.
- Data generation will be intensified through strengthening the D.I.D.C. with funds and personnel.
- Implicit in this strategy is the expectation that improved extension services for all the major programmes will, with the strong help from the administration, allow the penetration of groups and individuals with positive results on the stringent socio-cultural values still upheld.
- In agriculture, the development strategy will include the following:-
  - Seek appropriate credit facilities for the small scale farmers.
  - Encourage and advice spare parts dealer's to stock pumpset parts that wear out easily.
  - Train farmers on the maintenance of pumpsets and how to produce economically.
  - Carry out investigations on the potential gravity-fed irrigation systems that have low running and maintenance cost.
  - Intensify extension services.
  - Liaise with the Kenya Wildlife services to look into ways and means of reducing the wildlife menace.
  - Identify, appoint and advice stockists of farm inputs throughout the district.
  - Develop an appropriate marketing system for farm produce. Construction of a large market is necessary.
  - Intensify soil and water conservation activities through holding seminars, carrying out demonstrations and developing agro-forestry tree nurseries.
  - Develop appropriate technology in land preparations and post harvest management and extend the same to target groups.
  - Develop appropriate water harvesting techniques for crop production

and extend to farmers.

- Public barazas and other information systems to be effectively used to disseminate government policy as regards illiteracy and provision of education to children. More boarding schools to be established and existing ones properly equipped for better results hence reducing drop-out rates.
- The same media will be used to educate the community on self-help projects so that development programmes can identify with the needs of local inhabitants for continued sustainability.
- Local Authorities and other revenue generating departments will intensify the collection of revenue and should justify the use of the same through tangible results. On the same premise, the newly created Municipal Council will aggressively seek for funds within and without the district, for development of necessary social amenities and improvement of other income generating activities.
- 'Jua Kali' and other trades will be encouraged through the provision of infrastructure. The re-allocation of 'Jua-Kali' sheds to the centre of human traffic will activate the sector. Credit facilities will be encouraged and training courses and seminars will be conducted on business management as a surety against inefficient use of credit and guaranteed repayment.
- A move from customary land management to individual or group farms will be instituted. The strategy proposes the development of grazing blocks via land adjudication in group ranches. This proposes the establishment of the department of Land Adjudication and Settlement, presently not in place.
- Equally important in its plan period, is the establishment of the final position of the three mile strip along the Tana River administratively under the district, but officially part of Tana River District. This would enable strategies earmarked for this land to be reviewed to conform with reality.

## **DISTRICT-SPECIFIC OBJECTIVES AND TARGETS**

The objective and targets in this section are derived from the preceding development strategies on a sectoral basis.

## Agriculture, Livestock Production and Marketing

Objectives: Increase crop production and income generation through developing more irrigation schemes and an efficient marketing system.

Targets: Complete the implementation of the five pump fed irrigation schemes in progress i.e. Balambala, Women Group farm and Ganalmare in Balambala, Dolomide Bara, and Maramtu 11 in Central Division.

Rehabilitate two degenerated pump fed irrigation schemes i.e. Nanighi and Masabubu schemes in Bura Division.

Develop two new pump-fed irrigation schemes at Saka in Balambala and Masalani.

Carry out investigations on gravity fed irrigation systems at eight sites in Balambala, Central, Bura and Masalani divisions.

Prepare project documents and solicit for funds for implementation where appropriate.

Seek credit facilities for starting small scale irrigation projects.

Objectives: Increase reliability of food marketing for better income.

Targets: Construction of a large market in Garissa Town where farmers or farmers groups and middlemen can hire stalls to market their agricultural produce and farm inputs centrally to stabilize prices and returns for farmers.

Encourage development of five strong cooperative to market farm produce.

Objectives: To reduce the effects of erosion through increased efforts to reduce river bank, gully, and sheet erosion. Development of agro-forestry tree nurseries and encouraging agro-forestry district-wide.

Targets: Seminar for leaders, farmers, teachers and technical staff on soil and water conservation throughout the district.

Develop agro-forestry tree nurseries in the whole district at thirty sites, mainly where intensive agricultural activities take place and water is available.

Set up 30 sites for demonstrations on soil and water

harvesting for crop production, livestock and domestic use.

Protect all irrigation schemes (catchments) from flooding and erosion.

**Objectives:**

Increase oil production through promotion of oil crop production and processing.

**Targets:**

Develop appropriate technologies in land preparation and post harvest management and extend to farmers in Balambala, Central, Masalani, Bura, and Ijara.

Increase area under oil crops in Masalani, Ijara and Hulugho by 15% p.a.

Procure oil crop seeds and carry out bulking and distribution programmes in Masalani, Ijara and Hulugho.

Carry out demonstrations, field days, seminars and barazas on promotion, production and processing of oil crops at least twice in all the divisions named.

**Objectives:**

Self sufficiency in food production by exploiting the potential in rain fed agriculture.

**Targets:**

Develop demonstration plots at eight sites in Masalani, Ijara and Hulugho.

Increase food crops by improving land preparation techniques in the seven schemes.

Improve extension services in Masalani, Ijara and Hulugho.

**Objectives:**

Increase stock off-take through improving stock marketing facilities.

**Targets:**

Improve the existing stock auction markets and develop three holding grounds in Masalani, Bura and Dadaab Divisions.

**Objectives:**

Increase vaccination coverage.

**Targets:**

Establish two crushes in each division to ease and hasten vaccination of animals.

**Objectives:**

Improve the treatment of livestock mainly against CBPP with minimum delay.

**Target:**

Complete the stalled Veterinary Investigations Laboratory and

operationalize it.

**Objectives:** Improve the availability of water to livestock.

**Targets:** Develop permanent water sources in the northern divisions by drilling 2 boreholes in Modogashe West Block, 2 in Modogashe East Block, 3 in Liboi, 2 in Jarajilla and another 2 in Dadaab.

De-silt 20 large pans in Modogashe and Dadaab Divisions and scoop 5 large ones in Jarajilla. Four large pans to be constructed in each of the southern divisions namely: Hulugho, Bura, Masalani and Ijara.

**Objectives:** Improve and intensify extension services.

**Targets:** Posting of animal Health Assistants and Veterinary Officers to the ten divisions and provide transport, drugs, vaccines and accommodation.

**Objectives:** To provide a buffer against drought.

**Targets:** Establish a District Drought Management Team specifically to reduce the drought effect through tangible programmes in livestock, water, agriculture, roads and health.

### **Commerce, Trade and Manufacturing**

**Objectives:** Promote the establishment of a strong 'Jua Kali' particularly in Metal fabrication, furniture and motor repairs.

**Targets:** Provide a suitably site for 'Jua Kali' sheds in Garissa Town and encourage, by popularizing use of available funding services namely: Banks, KIE and ICDC which have unexploited and cheap sources of credit finance to 'Jua Kali' operators. Encourage artisans to produce farm implements and spares that can be used in the agricultural sector.

**Objectives:** Upgrade business skills for better income and credit management and disburse funds to traders.

**Targets:** Conduct courses in business management for businessmen and 'Jua Kali' operators. The Joint Loan Board to disburse KShs.1.5 m. a year, and to make follow-up on repayment through Provincial Administration. Loans amounting to KShs.2.45 million issued through the Rural Enterprise Fund be recovered and made available to over 100 traders per year.

Courses be held to cover over 200 traders every year.

**Objectives:** Promote growth of manufacturing enterprise to provide market for livestock, agricultural and other sectors.

**Target:** Encourage the revival of the only existing tannery and establishment of a dairy and honey plants through use of credit facilities from ICDC, banks, and KIE. Existing firms be encouraged to use same facilities for expansion as dictated by market conditions.

### **Human and Social Resources**

**Objectives:** Increase enrolment at all levels of education with greater emphasis on the girls in secondary schools and discourage school drop-outs.

**Targets:** Improve boarding facilities in schools already served to accommodate more students. Liboi, Hulugho, Bura, Ijara, Mbalambala and Modogashe divisions to be given priority in Primary school expansion.

Boarding and science facilities be improved in secondary schools mainly, Mbalambala, Modogashe and Central Divisions. New secondary schools to be started in Bura and Ijara.

Complete and operationalize the Teacher Training College.

Increase enrolment in Youth Polytechnics by introducing new courses.

**Objectives:** Encourage greater participation in family planning and reduce the rate of infant and early childhood mortality.

**Targets:** Conduct 5 courses each year on family planning targeting opinion leaders, chiefs, women groups and farming groups. Immunization to be made mandatory and coverage to be expanded.

**Objectives:** Reduce illiteracy rates especially among women.

**Targets:** Open up 10 classes in every division and provide 5 trained/untrained teachers in every division. Local Authorities to employ fifty additional staff on part time basis. Improve performance of teachers by holding two seminars every year targeting 127 teachers. Provide a district and two divisional offices in Masalani and Modogashe.



Objectives: Expand technical training to absorb school drop-outs.

Target: Uplift standards of two existing youth polytechnics in Garissa and Bura by availing physical and technical facilities to encourage expansion of courses and enrolment.

Objectives: Increase the level of community participation in development activities.

Target: Recruit 10 Social Development Assistants to activate the moribund Divisional Intersectoral Committees which would disseminate government policy on self-help activities more effectively.

Objectives: Improve the management of women group projects and cooperatives and solicit participation.

Targets: Conduct 2 courses every year on simple management targeting ten women groups in each division including cooperatives. Encourage the formation of 5 new women groups and 3 cooperatives in each division by offering incentives such as ownership of plots/land and availing monetary assistance.

Objectives: Increase the availability of clean water for human use.

Targets: Improve the functionality of existing boreholes and provide additional ones in settled areas. Complete the on-going expansion of Garissa Water Supply during the first year. Revive stalled dam construction unit to de-silt existing pans and open up new ones as the need dictates.

Objectives: Improve provision of health services.

Targets: Increase the number of doctors to eight and other cadres of medical personnel as per the establishment. Open up dispensaries in Jarajilla, Hulugho and Masalani and re-activate the performance of existing institution through provision of equipment and adequate drugs.

Objectives: Improve communication networks.

Targets: Increase grading programme by 30 per cent and gravel at least 100km every year and provide 3 drifts every year and two bridges during the plan period. Bitumenise Garissa-Liboi road, improve postal and telephone facilities in all divisional headquarters.

**Objectives:** Improve child survival and development.

**Targets:** Encourage UNICEF programmes aimed at improving Maternal and Child Health. The Children's Department to improve services to children in addition to establishing a Juvenile Home and Approved School.

**Objectives:** Improve land utilization.

**Targets:** Revise the Garissa Development Plan and complete development plans for all divisional centres. Physical planning department in conjunction with local authorities to ensure opening of road reserves and reserves for other public amenities. Divisional Headquarters to be gazetted.

Council to enforce building regulations to safeguard developments which overtake planning.

**Objectives:** Increase the coverage of the afforestation programme and reduce environmental degradation.

**Targets:** Implement the Environmental Action Plan which includes afforestation programmes in Liboi and Dadaab, flood controls and establishment of tree nurseries in all divisional and locational headquarters and schools. Provide and popularize energy saving jikos and other alternative energy sources district-wide.

## **CHAPTER FOUR**

# **SPREAD AND IMPACT OF HIV/AIDS**

## INTRODUCTION

### HIV and AIDS

Acquired Immune Deficiency Syndrome (AIDS) is the name given to the fatal clinical condition that results from long-term infection with HIV (Human Immunodeficiency Virus). Being infected with HIV does not automatically mean that a person has AIDS or is ill. It does, however, mean that a person can transmit HIV to someone else. HIV gradually disables an important part of the body's immune system. Its main target are cells in the blood called "T-helper cells" which HIV invades and eventually destroys. These cells normally help protect the body from attack by infection. As the immune system is progressively damaged, a person becomes increasingly vulnerable to a range of infections. The average time of progression from infection with HIV to the onset of AIDS (as defined by WHO and US Centre for Disease Control in 1987) - the incubation period - is approximately 10 years. Some people stay healthy for a much shorter period than this, but few develop AIDS within the first three years of infection. Researchers estimate that others may be infected with HIV for up to 20 years before the onset of serious illness.

It is not known exactly why some people stay longer than others after infection with HIV. One reason is thought to be that HIV mutates frequently into slightly different forms, some of which appear to be more harmful or to replicate more quickly than others. Another possibility is that people who already have a weak immune system, as the result of other infections such as malaria, tuberculosis or malnutrition, may succumb more quickly to the effects of HIV infection.

### HIV/AIDS Situation in Kenya

In Kenya the first AIDS case was recognized in 1984 and by the end of the same year 7 more cases were identified. In 1985, the National AIDS Committee was established by the Ministry of Health to advise the Ministry in all matters pertaining to AIDS Control but despite all the effort made, the epidemic continues unabated. AIDS became a notifiable disease in 1987.

Since 1990 the HIV prevalence rates have been rising rapidly from 3.3% in 1990 to 4.4% in 1991 and 5.6% in 1992. The Kenya National AIDS Control Programme estimates that the prevalence rate might rise to over 7.5% by the end of 1993. The urban prevalence rate is estimated to rise to 14-15%. It is thus estimated that for every 18 adults in Kenya, one is infected with the HIV virus. In urban centres one in every 9 adults is infected. Since the epidemic started in the country a cumulative number of over 39,000 AIDS cases have been reported to the National AIDS Control Programme by the end of August 1993. However, it is estimated that the actual number of AIDS cases is over 120,000. This is based on the experience of under-reporting of cases in the country. It is estimated that only about 1/3 of the cases ever gets reported to the National AIDS Control

Programme. Since there is no cure for AIDS, this disease threatens the social and economic well being of this country.

Over 70% of the AIDS cases are aged between 15-49 years. These are men and women of reproductive age and expected to contribute more in the economic development of the country. In Kenya the sex ratio of the AIDS cases is 1:1. Most of these cases are in urban and peri-urban centres. The main provinces most affected are the Coast Province, Nyanza, Western and Nairobi Province. However, there is no single district which is spared from this scourge and the infection continues to spread.

### Modes of Transmission

**Sexual Transmission:** The majority of new HIV infections are transmitted through unprotected heterosexual intercourse. It is estimated that this mode accounts for about 80% of all HIV infections.

Although the probability of transmitting HIV in a single act of intercourse can be quite low, a number of factors increase the risk of infection dramatically. The most important are the presence of a sexually transmitted disease (STD), such as syphilis, chancroid or herpes virus. A significant number of Kenyan adults do suffer from STDs and many have a number of sexual partners. As a result most new HIV infections are due to heterosexual contact. Programmes designed to slow the spread of HIV will need to focus on reducing transmission through sexual contact.

**Blood Transfusion:** Transfusion with infected blood will almost always transmit HIV. However, in Kenya most blood for transfusion is screened for HIV, therefore, only a few new infections are due to blood transfusion.

**Perinatal Transmission (Mother to Child):** Many children are infected perinatally, that is, they receive the infection from their infected mothers during pregnancy, at the time of birth or through breast milk. About 30-40% of babies born to infected mothers will themselves be infected. The other 60% may not be infected but are at risk of becoming orphans when their parents die from AIDS.

HIV has been isolated from breast milk, and small-scale studies indicate that some mother-to-infant transmission occurs through breast feeding. However, in view of the immunological, nutritional, psychological and child-spacing benefits of breast feeding, as well as risks associated with bottle-feeding, WHO recommends that breast feeding should remain standard advice to pregnant women, including those who are known to be HIV infected, where primary causes of infant deaths are infectious diseases and malnutrition.

**Transmission through unsterile surgical and skin-piercing instruments:** Infection with contaminated needles and syringes, as well as exposure to other non-sterile skin-piercing instruments, may play a role in HIV transmission. This

reflects the interplay of at least four factors: patients strong preference for injections, medical services' excessive reliance on parenteral treatment (through injections), the high prevalence of HIV infection among non-symptomatic and ill persons in some areas leading to unsuspected contamination of needles and other instruments with HIV, and the lack of adequate sterilization practices, compounded by financial and other practical constraints.

## PREVALENCE OF HIV/AIDS IN THE DISTRICT

### Reported Cases and Trends

The nationally established number of growing AIDS cases and its high prevalence in specific areas provides a reason for examining the districts rating in order to seek for early solutions to a time bomb.

Global statistics portray Islamic regions and Eastern Countries as relatively less affected with HIV/AIDS as compared to the rest of the world. African statistics on AIDS also attest to this premise and the Horn of Africa, mainly the Republic of Somalia, ranks very low in AIDS prevalence. It is important to note that the indigenous inhabitants of Garissa District, the Somali, share common religion, culture, language and other attributes of lifestyles with the inhabitants of the Horn. If the Global and African AIDS statistics are to hold then by extension, North Eastern Province would be expected to be least infected by the virus as compared to the rest of the Kenyan Republic.

The foregoing argument may have been true for the past years but may not be the case within this plan period since the community does not operate a closed society devoid of external influences.

North Eastern Province; and Garissa district in particular, is no longer remote from other parts of the country. The movement of citizens in and out of the district has increased tremendously over the years penetrating even to the very remote divisions of the district. Furthermore, the location of the district at the border with Somalia encourages trade with the other districts down south especially during a the time when Somalia was peaceful.

The war in Somalia has even accelerated mobility of the people especially towards the capital city in search of merchandise and other means of survival now not forthcoming from Mogadishu. Even without the border effect, the district's interaction with the rest of the country has increased with years as development opens up new avenues that attract other ethnic groups into the district and vice versa.

Given the above and the contention that 75 per cent of AIDS cases result from sexual intercourse, it is necessary to examine the district's vulnerability to the deadly scourge with the objective of curbing its spread to unprecedented levels.

Following the national concern for the spread of AIDS, Garissa District's Health authorities embarked on HIV/AIDS tests towards the end of 1990. It is from this time that all donor blood and some patients get tested for HIV. Table 4.1 illustrates the district's general status and prevalence of AIDS.

Table 4.1

Garissa District Sero-Positive Cases, 1991- 1993

Year	No. of cases Tested	Donor	In-patient	Out-patient	Total Positive	% Positive
1991	1054	8	7	17	32	3
1992	854	58	20	14 (28*)	92	11
1993 (January-July)	772	11	7	-	18	2
Total	2680	77	34	31 (28*)	142	5.3

Source: M.O.H., Garissa, 1993

NOTE:\* These represent sero-positive cases recorded from mothers attending ante-natal clinics. Tested cases were not recorded.

Table 4.1 shows that while 3 per cent of the tested cases in 1991 were seropositive about 11 percent of the tested cases were positive in 1992. For the recorded first half of 1993, 2 percent of the tested cases were positive.

Assuming that there occurred no double-testing over the reported period, then statistically, 0.1 per cent of the total district population were HIV positive in 1993. This percentage though much lower than the national estimate of 2.9 per cent is significant and necessitates programmes to contain its spread.

Available data on the district's AIDS prevalence fails to offer clues to the spread of these cases across the divisions and between sexes. It is noteworthy that all the reported tests have been done at the Provincial Hospital but have erroneously overlooked the donor or patient's resident address. In the absence of this data, it would be argued that the majority of the sero-positive cases occur within the Central Division with isolated cases in the rest of the divisions. This reasoning is based on two factors viz:

- Arithmetically, the division contains nearly 30% of the district's population.
- Garissa Town being the district headquarters, is home to a multi-ethnic community and composed of a highly mobile, elitist and sexually active group.

It is important to observe that the tested cases in Table 4.1 were mainly from blood donors which implies that most of the population have not been

covered. Be that as it may, the mere presence of the virus in the district is a point of great concern. Since the gestation period of the virus is quite long, embarking on concerted efforts for its control remains a challenge to the district's central players.

### Socio-cultural Factors Responsible for the Spread of the Disease

The modes of transmission of AIDS have been highlighted and sexual intercourse established as accounting for 75% of the cases. However, the following are some specific social and cultural practices that can encourage its spread in the district.

**The Marriage Institution:** Though the Somali and Islamic culture regard sex before marriage, especially among females, is forbidden which is quite admirable, more so in the HIV era, the close bondage between man and wife loosens with years as the husband becomes more polygamous. This polygamous lifestyle allows the man to completely withdraw from the matrimonial house(s) of the older wife or wives. In so far as the wife is beyond menopause or even older, the practice remained perfect. However, modernization is having its toll on this noble culture and the marriage bondage is loosening amongst even younger couples. The result has been increased in number of divorces. And even without divorce, the lack of closeness to a sexually active young wife resulting from polygamy encourages extra-marital sex. This development the environment in which HIV thrives best.

**The Condom and Control:** Islam does not condone birth control and since condoms were mainly popularized as a birth control measure, it has yet to find its bearing in the Somali Culture as a means for 'Safe Sex' free from HIV and other sexually transmitted diseases.

**Single Lifestyles:** Given the absence or inadequate social-amenities, most civil servants and other workers within the district do not live with their spouses. The other category of the same workers are the unmarried younger men and ladies. Given the limited recreational facilities to occupy this class, the pull factors towards promiscuity tends to outweigh other consideration, hence creating room for the spread of HIV/AIDS. It is also noteworthy that this group is quite mobile sexually and active.

**Poverty:** Abject poverty is widespread in the district. Existing studies have established a high correlation between poverty and vulnerability to the virus, a correlation that has led to high rates of infection in the most economically deprived population in some cities of the world.

Poor communities have less access to health care. The poor tend to receive less education. The abounding illiteracy limits their access to information about HIV/AIDS. Illiteracy leads to lack of information and knowledge of the means of preventing HIV/AIDS or other STDs. Even with awareness of HIV, people may not be able to afford condoms or the developed infrastructure to distribute them



effectively, free or for sale, may not exist.

Poverty is also forcing more people to leave their families and migrate in search of work. This disruption to social and family patterns has implications for the spread of HIV/AIDS.

Poverty also affects attitudes to risk-taking. To people struggling to meet their immediate needs for food and shelter, avoiding a disease which might not materialize for years will be low on their list of priorities. Priorities like getting the next meal press on people much more than AIDS.

**The Gender Gap:** The poorest and most dependent segment of the society tend to be women. Poverty breeds powerlessness. Women are also the most disadvantaged by social and cultural notions of what is acceptable behaviour, sexual or otherwise. The result is that women's inferior economic and social status directly increase their vulnerability to HIV, and limits their ability to control their sex lives and protect themselves.

As a result of formal and informal discrimination, few women are literate to a level of deciding on their destiny. The dependence reduces women's ability to determine the terms on whether their regular partner is sexually faithful. Women's poor bargaining position leaves them in a state of conditioned helplessness and they cannot say no to unprotected sex.

Economic dependence may also determine with whom a woman has sex. In extreme economic hardship a woman may offer sexual intercourse in return for support for herself and her children. This differs from prostitution.

## **SOCIO-ECONOMIC EFFECTS OF THE DISEASE**

AIDS is an expensive illness, and the true extent of its impact depends on the resources a nation can make available for its treatment, prevention, education and research. Due to the scarcity of resources, the epidemic poses as a serious threat to the resource allocation mechanism already in place. As Zambia's former president, Dr. Kenneth Kaunda once remarked: 'It is more important to know where AIDS is going than where it has come from, and the debate about HIV's origin is largely irrelevant to immediate action against the disease.'

The repercussions resulting from the effects of HIV/AIDS can be classified into two groups i.e. health costs (direct costs) and social costs (indirect costs).

### **Health Costs**

The direct costs of HIV/AIDS that threaten to drain resources for other more productive investments include the hospital costs of doctors, nurses, drugs, equipment, administration as well as costs of out-of hospital care such as

hospices, health visitors and counselling. HIV/AIDS is characterized by intermittent bouts of illness hence placing heavy demands on hospital, medical staff and health budgets.

These costs are not within the means of the present economy and even if the funds would be availed, the opportunity cost is too high for a project with almost zero returns.

### Social Costs

HIV/AIDS is not simply an individual problem but a community crisis. The effect of AIDS operates at three levels: the individual, the family and the wider society.

The social costs resulting from AIDS include:-

- The burden of caring for orphaned children.
- Possible rise in destitute cases.
- The family's and societal strain in caring for the victims who are bed ridden for long periods - the resulting loss to family income further impoverishes the community.
- The dependence on members of a community on one another through the extended family implies a greater effect on many people when the primary bread-winner is infected.
- Community's valued traditional ceremonies like circumcision are threatened.
- Since the development aspirations depend upon increasing levels of education and literacy, the HIV effect education adversely. Families affected by the epidemic cannot afford to keep children in school, because reduced income may mean lack of fees and uniforms. Children may have to be withdrawn from school to care for the sick parents.

While the poorest of the poor are hardly reached by the benefits of development, it is not hard for the virus to reach them. HIV/AIDS helps to highlight existing inequalities in the provision of health, and education services.

Specific and notable socio-economic variables that may have far reaching consequences are examined below.

## Population Growth

The Malthusian theory of population growth envisaged a population growth rate at by geometric progression. If the HIV/AIDS spread continues unchecked then both Malthus' theory as well as those developed by his critics could be negated.

Since AIDS is seems to target the most vital segment of the population i.e. young adults 20-49 years old, the loss of a good number of this group may have implications on population growth. Though AIDS is expected to reduce life expectancy and increase both adult and infant mortality, it is difficult to predict with certainty its full impact on fertility and mortality. The dynamic nature of the epidemic means that future patterns of its spread may be very different to ascertain.

Many of the social and physical factors associated with gender combine to concentrate HIV infection in young women of child bearing age. Whether this will lead to a net increase in infant mortality and the proportion of new borns who will be HIV positive/negative is not clear. The long incubation period of the disease means that the opportunities for many HIV positive women to have children will not be reduced and definitely not within this plan period. On the other hand, the epidemic has the potential to reduce fertility if a smaller proportion of the population survives to child-bearing age. Furthermore, increased condom use will have the side effect of preventing some unintended pregnancies.

It is therefore uncertain how mortality and fertility rates will respond to the epidemic and their consequent effects on population growth and structure. However, it may be argued that there will be a slowing down in the growth rate as the epidemic spreads.

## Labour Force

Since AIDS targets the age group 20 - 49, its effect on the labour force, taken to be the age group of 15 - 59, would be expected.

As the epidemic advances, changes in the population profile will exacerbate existing skill shortages thus threatening productivity. Over-time, as the young sexually active members of the labour force (20 - 49 years) become infected, fewer will survive to form the older segment (40-59 years), which has accumulated skills and experience through training and long service.

In addition to the loss of labour and skills, which takes many years to replace, HIV/AIDS has implications for other aspects of employment which include training, medical claims, pensions and insurance. Absenteeism (resulting from intermittent illness of affected labour), caring for the sick, and mourning the dead, also affect productivity.

Thus, although AIDS is likely to slow the growth rate of labour force, it is unlikely to reduce its overall size but will result in decreased productivity. It does, in addition, alter the labour force profile, yielding a younger workforce dominated by strength and vitality but with little experience and few skills.

From the foregoing, it is apparent that any adverse effect of HIV on the size, structure and quality of the labour force will herald and exacerbate a vicious circle of poverty resulting from an increased dependency ratio, low production levels and lack of investible surpluses.

### Bed occupancy

AIDS patients typically suffer through a long period of serious morbidity before death. They now occupy about 20-30% of hospital beds on average, and as many as 60% of the beds in the worst affected areas. Health resources in Kenya are likely to be shifted away from preventive to curative care.

### Orphans

It is estimated that there could be close to 1 million orphans due to AIDS by the year 2000. Due to this large excess of AIDS orphans, Kenya's traditional coping mechanisms of integrating orphans into extended families will no longer be adequate to meet orphan's needs for education, health, clothing and nutrition.

### Infant mortality

AIDS does not affect only the sexually active population. Children too are among its victims. It is estimated that about 30% of the children born to women who are HIV positive will become HIV positive themselves. Most of these children will die before reaching the age of five. AIDS in Kenya is projected to raise the death rate for children under five to about 189:1000 live births - a level which prevailed in the 1960s.

## **CONTROL AND MANAGEMENT OF HIV/AIDS**

### GoK Policy Statements on AIDS

The unprecedented AIDS epidemic which has now become a major problem to society is, if not checked, is likely to undermine achievements made in the country over the last twenty eight years of independence. It is with this in mind that the Government has adopted a multi-sectoral approach in the control of AIDS. The following are the government policy statements on AIDS.

That people have a right to have all the relevant knowledge about AIDS and

related infections and problems.

That through information and education, people will be helped to make informed decisions in adopting life styles that do not favour transmission and spread of AIDS.

The AIDS and related infections have the potential to cause the fiscal, social and moral problems of immense dimensions. Government will organize and mobilize appropriate resources individuals, families and communities.

That health workers need to be given available information on AIDS and related infections and the necessary resources to enable them to deal with AIDS and problems associated with it.

That there being no prophylaxis or cure for AIDS, health education is the major means of combating spread of the disease. Government will therefore mobilize substantial resources for health education.

That the Ministry of Health alone will not stop the spread of AIDS. It will therefore adopt an active multi-sectoral policy of co-ordination and collaboration with other government ministries, departments and Non Governmental Organizations.

That sexual intercourse being the commonest mode of spread of AIDS virus, the government will mobilize resources for Family Life Education and advocate on education on safer sexual behaviour among potentially high risks populations. Condom promotion will be intensified among high risks population.

That because of the association between sexually transmitted disease and AIDS, the government recognizes the need for early diagnosis and treatment of STDs as an important strategy in control of AIDS. The control of sexually transmitted diseases will be an integral component of AIDS control.

That counselling services will be developed at all health delivery points and at community levels to minimize personal and social impact of AIDS.

That HIV positive women need education and counselling to be able to make informed decisions with regard to present and future pregnancies. The government will train health care workers to be able to offer better services to women suffering from AIDS and those who are HIV positive.

That the government encourages early diagnosis of HIV infection through voluntary testing with informed consent. The government will make HIV testing facilities available and accessible to all Kenyans.

That unlinked anonymous testing at specialized clinics will only be undertaken for the purpose of HIV surveillance.

That to prevent transmission by blood transfusion, screening of all blood for transfusion will be mandatory.

That the government will promote rational use of blood and blood products through the training health care workers.

That the number of orphans is expected to increase over the years as a result of deaths from AIDS. The government will review law and policies concerning orphans with the view to ensuring their continued well-being and integration in the society.

That the government is against all forms discrimination against people with AIDS and their families.

As the cost of hospitalization of AIDS patients is increasingly over burdening the source health resources, more emphasis will be placed on community based management of AIDS cases.

## CONSTRAINTS

### Social behavioural changes

Despite the Government's effort to create awareness of the disease, it is evidently difficult to change social behavioural patterns of individuals. Social relationships that increase the spread of the disease have therefore not changed much. A number of these people may be HIV positive without knowing it. By the time their conditions is correctly diagnosed, they will have spread the diseases to many other unsuspecting people.

### Inadequate public awareness of the Impacts of HIV/AIDS

It is evident that there is high level of public awareness on modes of transmission and methods of prevention of HIV/AIDS. However, there is general lack of knowledge of the impacts of HIV/AIDS.

Family planning was not acceptable to many Kenyans until very recently when families practically experienced the burden of large families. Likewise, AIDS is still a new concept to the majority and the deaths resulting from AIDS have been given traditional interpretations by some communities in Kenya.

Cultural practices have tendencies of traversing generations with little changes resulting from external influence. These practices need be addressed in the light of new developments in the health sector.

Limitation of resources both labour and equipment in the developing world hinder the control and management of AIDS. This programme should reach the

target groups at the grassroots.

Lack of inadequate public awareness of HIV/AIDS is therefore a major constraining factor and it is further compounded by high illiteracy rates.

### Legal and ethical constraints

At present there are no enacted laws regarding the dreadful disease of HIV/AIDS. Some of the important areas that may require legal provisions include:

- Mode of reporting of AIDS and HIV positive cases and the testing the victims.
- Conduct of employers vis-a-vis People With AIDS (PWAs) and HIV seropositive persons.
- Screening of blood and blood products for HIV.
- Insurance for the HIV seropositive persons.

### **STRATEGIES**

The constraints identified in the preceding section require concerted efforts by the government, donors and the public if an impression is to be made on the control of AIDS

Central in these efforts will be strategies that will promote public awareness. This will involve effective use of institutions such as schools, Barazas, and the media both print and electronic.

Social workers will play even a more central role in reaching the grassroots and creating an enabling environment within the social and cultural institutions. The need to deploy the category of officers with the knowledge of language and culture of the people becomes imperative.

Other existing institutions will include Adult Education classes and the use of extension workers in other programmes.

At the district level, there will be need to establish a District AIDS Management Committee to coordinate programmes replicating the National Programmes but considering district specific factors.

CHAPTER

The objective of education in the District are:

to provide education at a higher level, as far as possible and allow for both public and private participation in financing the cost of achieving this objective.

to provide technical education and apprenticeship training and demand, in both the public and private sectors.

to enable the individual to be employable at a higher level of education and training.

to provide technical education at every level in the public sector and to encourage private and other forms of self-employment.

to encourage the development of technical schools in the district.

to ensure a minimum level of technical education.

## CHAPTER FIVE

### SECTORAL PROJECTS AND PROGRAMMES

stimulating the contribution of various non-governmental organizations to support schools.

encourage the parents to leave children in school for the whole duration of primary cycle.

raise enrolments in secondary schools.

improve the district's performance in national examinations.

to reduce drought effect on enrolment by creating more boarding facilities especially at primary school level.



## EDUCATION

### Objectives

The objective of education sector in Garissa District are:-

- to provide education as a human right, as far as possible and allow for both public and private participation in meeting the cost of achieving this objective.
- instill realistic attitudes and aspirations, regarding employment, in both the parents and school leavers.
- enable the individual to be easily trainable at higher levels of education and training.
- assist school leavers at every cycle to find gainful employment in the modern sector and other forms of self employment.
- to encourage the expansion of pre-primary schools in the district.
- to register all pre-schools to facilitate better coordination and supervision.
- stimulating the contribution of parents and communities to support schools.
- encourage the parents to leave children in school for the whole duration of primary cycle.
- raise enrollments in secondary schools.
- improve the district's performance in national examinations.
- to reduce drought effect on enrolment by creating more boarding facilities especially at primary school level.

## Achievements in the 1989 - 93 Plan Period

### 1. Initiated Before 1989, Completed in the 1989 - 93 Period

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Division	Project
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Modogashi Modogashe secondary school; 80 bed dormitory, 1 No.

Central Tenri Girls Primary School: 8 Classrooms.  
Bour Algi Primary School: One Workshop.

Masalani Moi Primary School 2 No. 80 bed dormitories and 1 No. Workshop.  
Kotile Primary School: One workshop.  
Hara Primary School: Workshop & Home/Science Room.

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### 2. Initiated and Completed Within the 1989 - 93 Plan Period

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Division	Project
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Central County High School: Five classrooms, Three 80 bed dormitories, water tank.

Garissa High School: One Dining Hall, Three classrooms, 1 sanitation block.

N.E.P. Girls: 1 No. Dining Hall cum Kitchen, 80 bed dormitories 2 No. 1 sanitation block.

Tenri Girls Secondary School: 1 Administration Block.

Garissa Primary School: 8 classrooms equipped with 250 desks.

Tenri Girls Primary School: 4 Classrooms and fencing.

Bura Bura Secondary School: 2 classrooms and sanitation block.

- Hulugho Hulugho Primary School: Home Science Workshop.
- Balambala Saka Primary School: 3 Classrooms 1 Administration Block, 2 No. 80 Bed Dormitories, 1 Dining Hall Kitchen & Store, 8-4-4 Workshop, H/Science Workshop, one Sanitation Block.
- Modogashe Banane Primary School: 2 Dormitories 1 8-4-4 Workshop, 4 Classrooms.
- Garuga Primary School: 3 Classrooms
- Goreale Primary School: 6 Classrooms

3. Initiated Before 1989, Still Under Construction

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Division	Project
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Modogashe Modogashe Secondary School: Mosque and Dormitory

Masalani Korisa Primary School: 3 Classrooms

4. Initiated in the 1989 - 93 Period Still Under Construction

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Division	Project
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Central Sankuri Secondary School: 4 Class Rooms, 1 Laboratory, 5 Teachers Houses, 1 Dormitory Electrification, Fencing.

Sankuri Primary School: 3 Teacher Houses.

Country High School: 1 Classroom + 2 Departmental rooms.

Garissa High School: 1 Dormitory

Dadaab Dadaab Boarding Primary School: 80 bed dormitory No. 1, 1 Dining Hall and Kitchen.

Modogashe Benane Primary School: 3 Classrooms

Gurufa Primary School: 1 Classroom.

Goreale Primary School: 1 Classroom.

Central Provincial Teachers Training College.

N.E.P. Girls Secondary: 1 Water Tank & Line.

Tenri Girls Secondary School:  
4 Classrooms.

5. Stalled/Abandoned

Masalan Moi Masalani Primary School: Home Science Room.and 1 No. Dormitory.

Central N.E.P. Girls Secondary School: Steel Water Tank.

Bura Kamuthi Primary School: 5 Classrooms at foundation Level.

Liboi Liboi Primary School: Kitchen.

## EDUCATION

### PROJECT AND PROGRAMME PRIORITIES FOR 1994-96 PLAN PERIOD

#### A. On-going Projects

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Project Name/Location/Div	Description of Activities
1. Modogashe Secondary School/Modogashe Division	Construction of Dormitory and Mosque
2. Korisa Primary School Masalani Division	Construction of 3 Classrooms
3. Dadaab Primary School Dadaab Division	80 beds dormitory, 1 Dining Hall + Kitchen
4. Tenri Girls Primary Central Division Sankuri Secondary Sch Central Division	4 Classrooms 3 Teachers Houses
5. Sankuri Secondary Sch./ Central Division	Phase II Development of 4 laboratories, 1 dormitory, five staff houses, electrification, fencing & water reticulation
6. Garissa High School/ Central Division	1 No. Classroom and 2 No. Departmental Rooms.
	<u>Source of Funding: M.O.E/P.T.A</u>
7. Country High School/4 No. 4 No. Classrooms, Central Division	Fencing, 2 Workshops, Laboratory, 3 Staff Houses
	<u>Source of Funding: G.O.K.</u>
8. Moi Masalani Primary Sch./Masalani Division Benane Primary School/	2 Dormitories and 1 Workshop. Classroom Block

Modogashe Division

Source of Funding: C.C.K.

9. Garufa Primary School/  
Modogasshe Division

Classroom Block

Source of Funding: P.T.A.

10. Garufa Primary School/  
Modogashe Division

3 No. Classrooms

Source of Funding: P.T.A.

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### B. New Project Proposals

Project Name Location Division	Priority	Description of Activities
Liboi Primary School Liboi Division	1	4 dormitories of 120 beds each including ablution block and water tank, kitchen and dinning hall.  <u>Justification:</u> Liboi is a fast growing town strategically at the border with permanent water source.
Hulugho Primary School Hulugho Division	2	4 dormitories of 120 beds each with ablution block, dinning hall and kitchen complex for 80 students water reservoir.  <u>Justification:</u> Centre also strategically placed at the border with high population.
Nanighi Primary School Bura Division	3	4 dormitories of 80 beds, concrete water tank, ablution block, dinning hall, kitchen for pupils.  <u>Justification:</u> A centrally placed settlement area with other supporting amenities

Ijara Primary School Bura Division	4	4 dormitories of 80 beds each, water tank, ablution block, dinning hall, kitchen for pupils.	<u>Justification:</u> Up-lifting the status of the school in this heavily settled area will benefit many locals.
Saka Primary School Balambala Division	5	4 dormitories of 80 beds each, ablution block, water tank, dinning hall, kitchen for 980 pupils.	<u>Justification:</u> A settlement area but prone to drought hence need for boarding facilities.
Benane Primary School Modogashe Division	6	2 dormitories of 120 bed each and one water tank.	<u>Justification:</u> A settled area but needs boarding facilities.
Alinjur Primary School Jarajilla Division	7	4 dormitories of 80 beds each water tank, ablution block, dinning hall, kitchen for 480 pupils.	<u>Justification:</u> As above
Mañdabubu Primary School Bura Division	8	4 dormitories of 80 beds each, water tank, ablution block, dinning hall, kitchen for 480 pupils.	<u>Justification:</u> As above
Modogashe Primary School Modogahse Division	9	3 dormitories of 125 pupils.	<u>Justification:</u> As above.
Garissa High School Central Division	10	Equip dinning hall/kitchen, Science laboratory, 5 classrooms, library, 6 teachers houses and staff room.	<u>Justification:</u> Quite necessary facilities for the 8-4-4 system in this top ranking school.

N.E.P. Girls School Central Division	11	One library, school fencing, 4 classrooms, 2 dormitories of 120 pupils and 2 staff improvement.
		<u>Justification:</u> The oldest and biggest school.
County High School Central Division	12	School fencing, 4 classrooms, 2 workshops, 1 laboratory, 3 staff houses and 3 special rooms.
		<u>Justification:</u> School severely constrained by lack of facilities.
Tenri Girls School Central Division	13	2 dormitories of 120 beds, 1 dinning hall/kitchen, 1 ablution block, 3 classroom, 1 laboratory, Home Science Workshop and teachers houses.
		<u>Justification:</u> One of the few Girls schools necessitating expansion to cater for the increasing demand for good schools (girls).
Balambala Boys Balambala Division	14	1 administration block, 2 dormitories for 120 beds, 1 dinning hall/kitchen, 4 classrooms, 2 teachers houses and laboratory.
		<u>Justification:</u> Ideally placed to provide secondary education to the surrounding primary school graduates.
Modogashe Boys Modogashe Division	15	4 classroom, 2 dormitories 120 beds, ablution block, 4 classroom, 2 teachers houses and laboratory.
		<u>Justification:</u> School is ready for expansion and has a big catchment area.



Bura Secondary School Bura Division	16	Administration block, one 80 beds dormitory, one dinning hall/kitchen, laboratory, 4 classrooms and 5 teachers houses.  <u>Justification:</u> School will provide secondary school to the fast growing population of Bura.
Ijara Secondary School Ijara Division	17	Administration block, one 180 beds dormitory, 200 seating and dinning hall, 2 classrooms and one laboratory.  <u>Justification:</u> To provide rent to the graduates of the surrounding schools with increasing pupil population.
Saka Secondary School Balambala Division	18	Administration block, one 80 beds dormitory, classroom and one laboratory.  <u>Justification:</u> To increase the intake capacity of the local pupils to secondary school.

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## HEALTH

### Objectives

The main objectives to be pursued are:

- improvement of MCH/FP service delivery points through improved cold chain management and supply of FP commodities.
- improvement of the quality of basic curative out-patient and maternity services.
- modest improvement of infrastructure and equipments.
- rehabilitation of existing infrastructure.
- clearing pending bills and completing high priority projects.
- expansion of the facilities.

### Achievements in the 1989-93 Plan Period

#### Initiated Before 1989, Completed in the 1989-93 Plan Period

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Division	Project
Central	Garissa Provincial General Hospital (a) DVBD Laboratory (b) Physiotherapy and Occupational therapy rooms.
Bura	Bura Dispensary - Treatment Block
Ijara	Ijara Dispensary - Treatment Block
Balambala	Maternity Ward

2. Initiated and completed within the 1989-93 Plan Period

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Division	Project
Ijara	Sangailu Dispensary, Treatment Block and Staff House
Hulugho	Galmagala Dispensary, Treatment Block, Staff House, Fencing and Equipment.
Bura	Nanighi Dispensary, Treatment Block, Staff House and Water Reservoir.

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3. Stalled/Abandoned

Liboi Liboi Health Centre

## HEALTH

### PROJECT AND PROGRAMME PRIORITIES FOR 1989 - 93 PLAN PERIOD

#### A. On-going Projects

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Project Name/Division	Description of activities
1. Bura Dispensary/ Bura Division	Construction of two staff houses  <u>Source of Funding:</u> G.O.K.
2. Ijara Dispensary/ Ijara Division	Construction of two staff houses  <u>Source of funding:</u> G.O.K.
3. Jarajilla Dispensary Jarajilla Division.	Construction of one Treatment Block  <u>Source of Funding:</u> G.O.K.

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#### B. New Project Proposals

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Project Name/Division	Priority Ranking	Description of Activities
Kotile Dispensary/ Masalani Division	1	Remote centre though growing and settled with no health facility
Jarajilla Dispensary Jarajilla Division	2	-do-
Kulani Dispensary/Liboi	3	-do-
Masababu Health Centre/	4	Existing facility

Bura Division		is in poor condition
Dujis Dispensary/ Balambala Division	5	Remote centre with no health facility near by.
Medical Training Centre	6	The MTC should be relocated nearer the Provincial Hospital since its services and training necessitate close proximity to the Hospital.
Provincial General Hospital Central Division		
Construction of 3 wards	7	To ease the current heavy congestion resulting into use of floor by patients.
Drainage and Sewerage System	8	For improved sanitation
MCH/FP	9	Necessary to curb child mortality rate and maternal care for improved family size and welfare.
Expansion and Equipping Mortuary	10	Present facility too small and not equipped to handle bodies even for one day.
Rehabilitation of Amenity Ward	11	Building in need of face lift to save it from collapse.
Orth. Maintenance	12	None at present.
Fencing & tarmarking hospital compound	13	For improved security and sanitation.
Rehabilitation of Staff Houses	14	Staff houses require facelift; some are threatened with collapse.
Construction of laundry building.	15	Current laundry too small

# RECLAMATION, REGIONAL AND WATER DEVELOPMENT

## Objectives

- to improve operational efficiencies of water supplies by stepping up maintenance of pumps, and purchase new equipment boreholes.
- to improve the quality of water supply in the district, by providing basic treatment facilities.
- to rehabilitate all the silted dams.
- to mobilize water use and committees to play a more effective role in planning, implementation, operation of the water systems.

to train community to actively participate in planning and maintenance of water schemes and revenue collection, and management of funds in general.

- to reactivate the Dam construction units whose activities have been hampered by machine breakdowns.
- to liaise with UNHCR and UNICEF in support of effort to provide water facilities for refugees as a way of reducing pressure placed on existing water supply meant for the communities.
- to work closely with Coast Development Authority to improve the general welfare of Garissa population.

## Achievements in the 1989 - 93 Plan Period

### 1. Initiated Before 1989, Completed in the 1989-93 Plan Period

Division	Project
Central	Raya Water Supply Sankuri Water Supply
Bura	Kamuthi Water Supply

2. Initiated and Completed in the 1989-93 Plan Period

Division	Project
Liboi	Liboi 3 B/H
Dadaab	Ifo 5 B/H Dagahale 3 B/H

3. Initiated in the 1989-93 Plan Period, Still Under Construction

Division	Project
Central	Garissa Urban Water Supply Balich Water Supply
Hulugho	Galmagala Water Pan
Masalani	Garasweno Water Pan Hara Water Pan
Modogashe	Shanta-abaq Borehole
Jarajilla	Alinjugur 1(one) borehole

4. Stalled

Division	Project
Hulugho	Hulugho Borehole
Balambala	Jarajara Water Supply

# RECLAMATION, REGIONAL AND WATER DEVELOPMENT

## PROJECT AND PROGRAMME PRIORITIES FOR 1994 - 96 PLAN PERIOD

### A. On-going Projects

<u>Project Name/ Location</u>	<u>Description of Activities</u>
1. Garissa Urban W/S Central Division	Construction of new treatment plant, new rising main and staff quarters  <u>Funding Source:</u> G.O.K.
2. Galmagala Pan Hulugho Division	Construction of new pan  <u>Funding Source:</u> R.D.F.
3. Garasweno Pan Masalani Division	Construction of new pan  <u>Funding Source:</u> R.D.F.
4. Hara Pan Masalani Division	Construction of new pan  <u>Funding Source:</u> R.D.F.
5. Balich Water supply Central Division	Construction of new supply  <u>Funding Source:</u> R.D.F.
6. Rehabilitation of W/S and Livestock boreholes (District wide)	Purchase of stand-by pumping equipment, improvement of distribu- tion systems and construction of tanks.  <u>Funding Source:</u> EEC/UNICEF & GOK
7. Modogashe W/S Modogashe Division	Rehabilitation of the project  <u>Funding Source:</u> Inter-Aid
8. Shantabaq W/S Modogashe Division	Completion of borehole and equipping it.  <u>Funding Source:</u> UNICEF



9. Goraele B/H  
Modogashe Division

Completion of borehole and equipping.

Funding Source: UNICEF/GOK

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**B. New Project Proposals**

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<b>Project Name/ Location</b>	<b>Priority Ranking</b>	<b>Description of Activities</b>
Dujis Central Division	1	To provide water to the fast growing trading centre with no reliable source of water.
Sedagose Jarajilla Division	2	Old water supply abandoned with pump, equipment stuck. The centre has potential to grow into shopping centre if water is provided.
Dertu	3	Old borehole - no other source of water for people and livestock, hence new borehole needed.
Fafi Jarajilla Division	4	Rich grazing area with no reliable source of water.
Abakaile	5	Already drilled borehole lacks equipment. Generating set and pump needed.
Welmer, Jarajilla Division	6	Old borehole caved in-new borehole needed. Lack of water caused people to abandon a school and shopping centre.
Bila, Modogashe Division	7	Old borehole caved in-New one needed to serve people and livestock.
Dadaab Dadaad Division	8	Increasing population dictates need for additional Bore hole.
Amuma, Jarajilla Division	9	Existing dam source dries during dry season. There is need for a more reliable source to serve trading centre, school, police post e.t.c.

water supplies &  
a bore hole for  
livestock  
(District - Wide).

Revival of dam construction Unit.	11	.Dam construction Activities stopped in 1988 can be resumed.
Dam Construction Unit	12	It is proposed to desilt old pan/dams and open new ones mainly in the southern half, of the district where dams are the only source of water due to poor potential of ground water.
Planning and design	13	More investigation for ground water to be carried out especially in Hullugho, Ijara & Masalani Divisions where there are no permanent source of water.

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## Objectives

Coast Development Authority is interested in the general welfare of Garissa people, upto and including their income level, security, food production, availability and accessibility, etc.

The following are the projects and programmes to be implemented by CDA in the district (southern part of Garissa District) in the next three years plan period. Each project will have a security component so as to boost the security status in the district.

### PROJECT AND PROGRAMME ACTIVITIES FOR 1994 - 96 PLAN PERIOD

Project Name/ Location	Priority	Description of Activities
Tenant Purchase House Project: To be located in Garissa Town	1	Mushrooming of substandard houses and their related slum problems in Garissa Town
Establishment of a Model Ranch To be located in the southern half of the southern Garissa region bordering Tana River District.	2	<ul style="list-style-type: none"><li>- Over 50% of the region is rangeland.</li><li>- Low financial returns from the ranging business due to low adoption rate of new livestock management technologies.</li><li>- High incidence of livestock diseases.</li><li>- Beef production is the main income generating activity in the region.</li></ul>
Vegetable Growing Farm and/or Project The project will be located in the area near the Tana River Course.	3	<ul style="list-style-type: none"><li>- The southern Garissa area continues to export vegetables to Tana River and other neighbouring districts.</li><li>- There is alot of un-exploited potential in the region.</li></ul>
Rubber Project to be located to the southern Garissa District bordering Lamu district.	4	There exists alot of rubber trees in the forest, this is indicative of an abandoned plantation which needs rehabilitation.

## COOPERATIVE DEVELOPMENT

### Objectives

The main objectives of this sector in the district are:

- advising members on all aspects of societal management.
- attending committee meetings to review constraints, and successes in order to make amendments and prescribe recommendations for necessary action.
- attending all general meetings with view to educating members on the affairs of the societies and solicit for new membership and cohesiveness of existing societies.
- to encourage the formation of new societies, as a way of strengthening the movement in the district.

### Achievements in 1989 - 93 Plan Period

This district has fourteen registered societies though only six were notably active during the last plan period. Only three societies were newly registered within the same period.

It is noteworthy that besides registering three new societies over the last plan period, the membership, share capital and turnover increased by 576, Kshs.19m and Kshs.147,000 respectively. This achievement was indeed encouraging given that the movement is a relatively new phenomenon in this district with limited viable economic activities.

The department undertook no noticeable physical development programmes during the concluded plan period. Nevertheless the routine and vital operations were successfully undertaken with encouraging results.

## COOPERATIVE DEVELOPMENT

### PROJECT AND PROGRAMME ACTIVITIES FOR 1994 - 96 PLAN PERIOD

#### New Project Proposals

Project name/Division	Priority	Description of Activities
Cooperative information campaign Whole District	1	To popularize the movement in the District.
District Cooperative office and two staff houses, Central Division	2	The present office is too squeezed to accommodate staff No staff house available.
Divisional Office and staff houses. Masalani, Bura, Modogashe	3	The facilities are not in place.

# AGRICULTURE, LIVESTOCK DEVELOPMENT AND MARKETING

## Objectives

- to promote small scale irrigation projects along Tana River as a way of reducing the over-reliance of the community on livestock.
- to intensify agricultural extension services so as to achieve high yields.
- to instil crop farming culture through 4K clubs and leaders education.
- to promote river bank protection, gully control and to improve the availability of fruit tree seedlings.
- to encourage water conservation efforts by the community by setting up new fruit and fodder tree nurseries.
- to promote the cultivation of oil crops and production of legumes.
- to maintain all the established small scale irrigation schemes.
- to establish more water troughs in all the boreholes and dams as a way of guarding against pollution and improving access to water for livestock.
- to improve veterinary services in the district by intensifying campaigns against major livestock diseases such as rinderpest, contagious Bovine Ploeuophoumosi.

## Achievements 1989 - 93 Plan Period

### Agriculture

The Garissa Irrigation Programme (G.I.P) phase II formed the major agricultural undertaking during the last plan period. The project, which was funded by DANIDA earmarked 10 schemes, covering a total area of 225 acres, for implementation in phase II. Out of the planned, 7 schemes were completed and are under crop. These schemes with a total area of 280 acres are Raya, Lagdera, Holwadag, Dismillahi Naib, Bouralgi and Korakora. The incomplete schemes include Dololomida, Bura and Maramtu. The plan period therefore witnessed an 80% implementation rate for this project with a total area of 154 acres put under crop.

The foregoing success was however, affected in the last two years of the plan period by lack of funding with a consequent stoppage of work on the remaining

schemes.

Other notable irrigation projects successfully implemented outside Central Division were the Balambala and Ganalmara Women Farms where half of the 10 acres were developed and cropped in the former and half of 20 acres were cropped in the case of the latter. The two farms are located in Balambala Division.

Soil and water conservation project included the following activities:-

- Seminars held for leaders, farmers, teachers, 4K clubs and technical staff;
- Demonstrations on river bank protection, gully control, tree nursery management and planting of trees;
- Soil and water conservation sites plus tree nurseries set up at Hara and Bodhai in Masalani and Ijara Divisions;
- Water harvesting for crop production set up at two sites in Central Division;
- One roof catchment, ferro-cement tank constructed at Boys Town School;
- Fruit tree planting in all schemes and river bank protection through tree planting undertaken in all schemes.

The Rural oil crop and protein production and processing project included the procurement of oil crop seeds, bulking oil crops in Central, Ijara and Masalani Divisions. In Ijara, Balambala and Masalani Divisions demonstrations, field days and barazas on promotion, production and processing of oil crops were held. Besides trials on oil crop performance at the G.K Prisons and FTC farms were done.

Other achievements included the identification of sites for the establishment of demonstration plots for rainfed agriculture.. Improvement was also notable in the design of irrigation schemes at about 30 metres from the river.

Table 5.1

Achievements in the 1989 - 93 Plan Period

Activity	Central	B/mbala	M/gashe	J/jilla	Dadaab	Liboi	Hulugho	Ijara	M/salani	Bura	Total
No. of Farmers Visited	881	299	60	15	17	10	305	123	246	270	2,226
No. of training sessions for T.As	14	-	-	-	-	-	-	-	-	-	14
No. of Demonstrations	52	8	7	-	2	3	10	9	8	4	103
No. of A.F.C.	82	3	-	-	-	1	5	4	6	-	101
No. of Educational Tours	1	-	-	-	-	-	-	1	1	1	4

Note: Most activities were carried out during the first half of the year 1992 when Danida was offering substantial financial support.



## Achievements in the 1989 - 93 Plan Period

### Initiated in the 1989, Still Under/Implementation

Division	Project
Central	Garissa Irrigation Programme.
Central, Ijara, Liboi, Mbalambala, Bura, Masalani Hulugho, Dadaab, Modogashe & Jarajilla,	Soil and Water Conservation project.
Balambala, Masalani and Hulugho	Rural oil crop protein protection and processing project.
Balambala	Balambala Women Group Farm.
Balambala	Ganalmare Women Group Farm.

### Livestock

Most of the projects planned for during the 1989-93 plan period were not implemented due to lack of funding. However, the department implemented among its other routine extension activities, a few projects that were funded under the Rural Development Fund (RDF), ASAL and Kenya Livestock Development Programme (KLDP). These projects included 7 water troughs in Dadaab Division out of which implementation of 2 located at IFO could not be fully realized due to takeover of site by refugees. However, the five completed ones are serving livestock with water.

During the same period, 5 generating sets were donated by ASAL/KLDP to the boreholes of Gorufa and Cherron in Modogashe Division and Kumahumatu, Kulan and Alinjukur in Dadaab Division. Each of the five boreholes is to receive a rehabilitated generating set under the same programme.

A remarkable achievement emanating from the ASAL/KLDP funded boreholes is the establishment of water user committees which have been activated to

manage and fully operationalise the schemes. These committees generate their own revenue for operation and maintenance and are expected to replace the generating sets in the long run.

In Masalani Division, ASAL/KLPD initiated a livestock development centre whose completion will rejuvenate livestock management in the south.

During the plan period, livestock veterinary care were improved though lack of funds affected a comprehensive coverage. A notable achievement was the positive response by the pastoralist to veterinary services resulting from campaign mainly against two major diseases namely Rinderpest and contagious Bovine Pleuropneumonia (C.B.P.P.). The vaccination coverage has been a district-wide programme and because of the migrating nature of livestock keeping, data on coverage by administrative divisions becomes difficult to gather. The number of cattle, camels and poultry vaccinated during the 1989-93 plan period is given in Table 5.2.

Table 5.2

Number of Cattle & Fowls - 1989/93

	1989	1990	1991	1992
C.B.P.P	286,941	248,000	170,320	133,440
Rinder				
Pestes	217,934	273,295	191,470	169,960
Blanthrax	14,050	65,850	11,900	22,050
L.S.D	20,000	8,600		
F.M.D		300	300	100
New Castle	3,200		5,430	200
Rabies				6
Fowl Typhoid		8	250	300
Fowl Fox			100	300

Source: District Veterinary Officer

Note: C.B.P.P. - Contagious Bovine Pleuro Pneumonia

L.S.D. - Food and Mouth Disease

The observed trend reflects a decline over the last two years of the plan which in part is attributed to the decimation of livestock by drought and partly on lack of funds. However, the coverage represent over 30% by 1992.

Treatment of livestock has exhibited an increasing trend as more pastoralist are witnessed acquiring drugs since treatment by field staff becomes difficult given the nomadic nature of the people. Dipping continued to be impractical since all the existing five dips were not operational. Only one of the dips in Bodhai is usable but lack of funds hindered its operation.

The other project initiated before 1989 but not completed during the plan period is the veterinary investigations laboratory which remained stalled throughout the plan period though 75% complete.

# AGRICULTURE, LIVESTOCK DEVELOPMENT AND MARKETING

## PROJECT AND PROGRAMME PRIORITIES FOR 1994-96 PLAN PERIOD

### A. On - Going Projects

Project/Name Title Location	Description of the Activities
1. Garissa Irrigation Programme (Central Division)	<p>Bush clearing, ripping, ploughing, harrowing, levelling, canal raising, planting and extension.</p> <p><u>Funding Source: DANIDA/GOK</u></p>
2. Soil and water conservation Project (whole District)	<p>Seminars for leaders, teachers and technical farmers staff on soil and water conservation and demonstration on river banks, protection gully control, tree planting, setting up of agro-forestry tree nurseries and planting trees.</p> <p><u>Funding Source: SIDA/GOK</u></p>
3. Rural oil crop and protein production and processing project. Balambala, Ijara Hulugho and Masalani.	<p>Promotion of oil crop production through demonstrations, field days and barazas.</p> <p>Demonstration on oil crop and protein processing and utilization locally using the oil expeller.</p> <p>Procuring, bulking and distribution of oil crop seeds.</p> <p><u>Funding Source: WORLD BANK/GOK</u></p>
4. Balambala Women Group Farm	<p>Ploughing, harrowing, levelling ridging, canal raising, planting and extension.</p>

**B. New Project Proposals**

<b>Project Name Division</b>	<b>Priority</b>	<b>Description of Activities</b>
Rehabilitation of 3 irrigation schemes Balambala and Bura Division	1	The three schemes namely Balambala Women Group, Namighi Mansabubu schemes require rehabilitation since production has deteriorated. There is need to complete development of Balambala farms and control floods. These projects are important and have potential for increased production of food and income generation.
Saka Irrigation scheme Balambala Division	2	Presently 5 acres are irrigated using buckets and floods. Pumpset was washed away by floods. This will be the only project in the location that will tap the unexploited irrigation potential. It will increase food production and improve the living standard of the local people.
Masalani Irrigation Scheme, Masalani Division	3	Irrigation structures deteriorated. Site to be identified. This will be the only such project in the division.
Investigations for gravity Fed Irrigation scheme	4	There is only one gravity fed irrigation scheme in the district managed by NYS. potential still untapped. Unlike the pump-fed irrigation system, gravity fed irrigation system have low running and maintenance cost hence low cost of production.
Tawakal Group Farm since Pump set	5	This large farm requires a pumpset the original broke down. An important farm with potential for increased production.

## A. On-Going Projects

<b>Project Name/Division</b>	<b>Description of Activities</b>
<b>1. Veterinary Investigating Lab. Central Division</b>	<b>Complete wiring septic tank, painting and Equipment</b>  <b><u>Funding Source:</u> EEC</b>
<b>2. Livestock Development Centre Masalani Division</b>	<b>Construction of livestock Development at Masalani KLDP Divisional Headquarters. This involves construction of 3 staff houses, 1 office block, 1 vaccine and 1 ranch aid store.</b>  <b><u>Funding Source:</u> GOK/EEC/KLDP</b>
<b>3. Dadaab Cattle trough, Dadaab Division</b>	<b>2 troughs at Ifo borehole</b>
<b>4. Supply of generating set to Cherron, Gerufa, Kulan Alinjugur, Kumahumatu boreholes Dadaab, Modogashe Divisions</b>	<b>Generating sets supplied, old ones being rehabilitated at Gailey and Roberts Nairobi, piping and piping networks to be undertaken.</b>  <b><u>Funding Source:</u> ASAL/KLDP</b>
<b>5. Liboi Livestock Borehole, Liboi Division</b>	<b>Drilling of one livestock, bore-hole at Liboi</b>  <b><u>Funding Source:</u> UNICEF</b>

**B. New Project Proposals**

<b>Project Name/Division</b>	<b>Priority Ranking</b>	<b>Description of Activities</b>
Completion of Veterinary Investigations Laboratories	1	To enable animals to be tested for CBPP
Construction of 20 crushes in Ijara, Masalani, Bura, Dadaab, Modogashe and Loiboi	2	Important facilities for restraining animals during Vaccination
Develop holding grounds in Bodhai, Ijara Division and Modogashe and Loiboi	3	Important for retention and cleansing of animals before transportation to other markets.
Development of boreholes in Modogashe East Block, 2 in Modogashe Division, 3 in Liboi Division 2 in Jarajilla Division & 2 in Dadaab Division	4	To enable proper distribution of livestock in Northern Division - to reduce pressure on the few existing boreholes during peak periods.  To reduce running hours by, generating set and reduce breakdown. To reduce trekking distance between boreholes
Improvement and intensification of extension services and pastoral Education	5	Increase extension agent former contract. Facilitate follow-up Provide morbidity for enhancing contact at watering points.
Provision of adequate transport, provide funding for operating and training	6	- Provide inputs, training materials, demonstrations etc. - Provide incentives to field staff. - Enhance vaccination campaigns and provide adequate drugs.

## **CULTURE AND SOCIAL SERVICES**

### **Objectives**

The objectives of the Ministry are:

- Mobilize local communities for self reliance in basic needs and involvement in development Planning Processes.
- Train rural population on balanced diet to reduce malnutrition and improve the life expectancy of children through the family life training programme.
- Promote the Reservation and role of culture through visual art, performing art, Oral traditions, popularization of Kiswahili and other national languages for national identity and pride.
- Establish and encourage cultural co-operation with friendly countries for greater international understanding.
- Intensify adult education to eradicate illiteracy.
- Provide reading materials in the districts through national Library Service.
- Improve sports facilities in the form of national and district stadia, and other facilities that can promote and improve sporting talents in the country.
- Encourage sports talents from the grass roots.
- Identify, train, rehabilitate and resettle disabled persons for self-reliance; and
- Promote and raise the status of women through Programmes focused on involving women's groups in income-generating activities and in decision making at all levels.

### **Achievements in the 1989-93 Plan Period**

The activities under this sector were effectively discharged through the departments of Social Services, Culture, Adult Education, and Sports. The active programmes during the plan period included community development, social welfare, sports, youth development, women's programmes and vocational



rehabilitation.

A major task during the plan period was the mobilization of the community to participate in the initiation, planning, implementation and operation and maintenance of projects. The period witnessed a positive gesture in community participation though pauperization resulting from drought was a setback. Encouragement to fully participate in development programmes continued to be done including provision of incentives (in cash and/or kind) to those on-going projects communally initiated.

The supervision and monitoring of projects was undertaken even though insufficiency of funds affected the implementation of some.

Table 5.3

## Achievements in Adult Education, Women and Youth Polytechnic

	Divisions									
	Central	Bura	Masalani	Hulugho	Ijara	B/Mbala	J.Jilla	M/Gashe	Dadaab	Liboi
Adult Literacy Enrolment 1989	1,220	230	330	350	65	280	22	320	410	320
(% Female)	54.1	56.5		60	57	54.5	56.2	56.1	56.1	56.2
Enrolment 1993	870	110	210	200	65	170	35	250	141	70
(% Female)	51.7	63.6	47.6	55	53.8	64.7	71.4	71.4	57.0	71
Women Groups										
Number 1989	32	3	4	2	-	2	-	6	7	2
Number 1993	5	4	5	2	2	2	-	8	7	2
Enrolment 1989	480	59	46	35	-	72	-	200	182	55
Enrolment 1993	1,508	100	134	35		72	60	248	182	55

Adult literacy enrolment decreased by 1426 in aggregate between 1989 and 1993. The fall was evidenced in all the divisions save for Jarajilla with an insignificant rise of 13 learners. This observed decline is in no way attributed to increased levels of literacy but rather a result of nomadism which had its highest toll between 1991 and 1993. This is evidenced by the heaviest drops in Liboi and Dadaab Divisions worst hit by drought and cost sharing.

The enrolment of females in literacy classes albeit low as compared to the illiteracy rate, is encouraging since their percentage is higher than males on average. The enrolment figures are further worsened by the low attendance.

It is also noteworthy that literacy enrolment is highest in Central Division with a more sedentary life-style compared to the rest. Other divisions in a similar trail include Masalani and Modogashe. Given the central role of adult education in this district emphasis on availability of teachers and divisional staff becomes necessary. There is a serious shortage of divisional officers since only one is charged with the responsibility of supervising the ten divisions. This is unattainable task which calls for redress given the lack of transport let alone the vast nature of the district with its severe communication system. Adult education teachers are based in some areas of settlement though their numbers is dismal.

Table 5.4

Adult Education Teachers by Division

Division	Full time	Part Time	Total
Central	11	16	27
Dadaab	2	2	4
Hulugho	1	3	4
Liboi	1	3	4
Masalani	2	5	7
Ijara	3	2	5
Jarajilla	-	2	2
Mbalambala	3	5	8
Modogashe	3	6	9
Bura		16	7
<b>Total</b>	<b>27</b>	<b>50</b>	<b>77</b>

Source: District Adult Education Office, Garissa.

There is need to operate mobile literacy classes for the pastoralists in order to permeate the bulk of the illiterate population.

The achievement of the department, however, included an increase of adult

classes from 86 to 127 and making 837 people literate with slightly half of the number being female. The last plan period witnessed an increase in both number of women groups and enrolment save for Hulugho, Dadaab and Liboi Divisions.

Though the activity of the groups still remain low, efforts by a few over the plan period were noticeable. Incentives to these groups were provided. A total of over Kshs.360,000 was availed as financial grants district-wide. 11 women groups are assisted by DANIDA to develop and manage farms while the Rural Development Fund and Rural enterprises Fund assisted 15 women groups with a total of nearly Kshs.1m.

The past plan period recorded a marked reduction in self-help contribution as depicted in Table 5.5.

Table 5.5

Harambee Contributions, 1988-92

Year	Kshs
1988	1,412,730.00
1989	4,093,470.70
1990	1,114,146.55
1991	838,688.10
1992	270,818.45

Source: District Social Development Office, Garissa, 1993

The reduction is attributable to two factors namely the effect of drought and lack of personnel to monitor more closely the community's involvement in some divisional projects.

## CULTURE AND SOCIAL SERVICES

### PROJECTS AND PROGRAMMES FOR 1994-1996 PLAN PERIOD

#### A. On-Going Project

Project Name/Division	Description of Activities
1. Garissa Vocation Rehabilitation	Four staff houses, five workshops and administration  <u>Funding Source: GOK</u>
2. Muungano Women Group, Central Division	Construction of a Guest House

#### B: New Project Proposals

Project Name/Division	Priority Ranking	Description of Activities
Mama Hani Children's Home, Central Division.	1	Construction of dormitories Children are currently kept in 2 small rented rooms lacking habitable destitute facilities.
Usafi Women Group Workshop Central Division	2	Construction of workshop An income generating activity with dedicated members currently under-taking serious work. Project will offer training to school leavers
District Adult Education Office block Central Division		Construction of office block Present office not adequate
Divisional Offices Modogashe and Masalani Divisional Headquarters	3	Construction of divisional offices. Divisional Facilities Quite necessary for effective delivery of services
Sports Department Garissa Stadium Central Division		Available field not enough to promote sports development. Project will promote sports in the province.

## ENERGY

### Objectives

The demand for all forms of energy in the district is anticipated to grow significantly in the next three years. Consequently, future energy development patterns in the district will be influenced by the relevant energy policies being pursued in other sectors.

Wood Energy: Wood energy, in the form of fuelwood and charcoal, forms the most important energy source in the district accounting for over 90% of the domestic energy requirement. The annual production of fuelwood over the last plan period was estimated at 343,000 m<sup>3</sup>.

In Garissa, it appears that wood energy problems for local consumption was not experienced during the last plan period, save for the refugee camps. This is attributable to the fact that the way of life of the nomadic pastoralists requires very little cooking. However, there are areas of intense deforestation mainly for charcoal burning, a round permanent settlements. Deforestation was further exacerbated in Liboi and Dadaab divisions due to increased demand for woodfuel and timber by the Somali refugees. This resulted in to desertification of big areas in the two divisions.

Along the Tana River, where irrigation farms were established, the clearing of bushes to pave way for the farms had some effect on the district's wood energy base. The need for replenishment remains central.

Petroleum: The demand for petroleum products have continued to grow and apart from its major application in transport, cooking and lighting, its importance in the irrigation schemes and water supplies district-wide remains vital. In the remoter parts of the district fuels are often in short supply or not available, leading to high costs and long trips to obtain these essential fuels.

There are only two outlets for the petroleum products in the district and are located within Garissa Town. The DDC has identified Modogashe, Liboi and Hulugho as petroleum products sales locations, and requests the Ministry of Energy to undertake the necessary arrangements with the Office of the President and petroleum companies to ensure fair distribution and adequate supplies of the products.

Solar Energy: This exists in unlimited supply and is very useful in communication stations and lighting in the divisions where equipments are established.

The DDC has recommended establishment of solar power to the divisional institutions such as boarding schools and health centres.

**Wind Energy:** There is great potential for this energy source yet to be fully exploited. Where Wind Mills are established, mainly in the Central division, their use in supplying clean water from boreholes is very encouraging. There is need to harness this energy source in the divisions where wind power exists as a cheap source of energy for boreholes.

**Electricity:** Garissa district is yet to be connected to the National Power Grid. A diesel generator supplies Garissa Town with electric power and is mainly used domestically apart from the few manufacturing concerns.

The demand for this form of energy outstripped its supply as a result of the expanded domestic demand. A new power generating station whose supply is expected to triple the present one is already under implementation and expected is to provide increased power to the town and its suburbs.

## ENERGY

### PROJECT AND PROGRAMME PRIORITIES for 1994-96 PLAN PERIOD

#### B. New Project Proposals

Project Name/ Location	Priority Ranking	Description of Activities
New Power Station Central Division	1	Present capacity over utilized due to increasing demand resulting into shortages and high maintenance costs. Increased supply will serve the Town's suburbs for increased security will also increase the Town's supply and bolster commercial and manufacturing operations. Construction of a new paven station.
Extension of Power Wires to Sankuri, and Kakaraka. Central Division	2	Important centres that require power for increased security and to encourage development will provide power to important institutions. Extension of paven wires (Lunci)
Afforestation Programmes. Dadaab and Liboi Division	3	To replenish vegetative cover in worst deforested areas such as Hagadera, Ifo and Liboi. This will safeguard erosion and guarantee woodfuel supply.
Agro-forestry programmes. Central Balambala Division	4	Important programme for fuelwood, especially in the irrigation farms. A supplementary necessity to farming which enhances soil fertility and source of fodder.
Fuel saving Jikos Wholle District	5	Important energy-conserving programmes.
Solar Power Whole District	6	Important for the lighting of the divisional headquarters and institutions. Installation of Solar power.
Wind Power Whole District	7	Important and cheap source of power to the boreholes. Power connection to the natural Paven Grid.
Connection to The	8	Necessary project for Rural Development



will enhance irrigation farming and rural water supplies at cheaper costs.

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## **TOURISM AND WILDLIFE**

### **Objectives**

The main objectives in the section's development have been to:-

- Promote tourism marketing and promotion.
- Increase the contribution of tourism to GDP growth, through increased foreign exchange earnings from the section and maximizing its retention in the economy.
- Stimulate Tourism as means of encouraging local employment and source of foreign exchange by promoting and developing tourist attractions, expansion and improvement of infrastructures in the game reserves and National Parks.
- Wildlife development and its management.
- Promote tourism training for those servicing the industry; and
- Promote wildlife development and protect the environment.

### **Kenya Wildlife Service**

The last plan period witnessed a notable transition in this department's change from Government to a parastatal organization. This change affected the planned activities and tangible results were not realized, save for normal operations namely, control of wildlife menaces, poaching and management of the National Reserves.

In this plan period the department's priority include:-

- Better management of Boni and Arawale Reserves;
- Creating awareness of the need to conserve both flora and fauna;
- Research on possible revenue generating areas through tourism;
- Improve security in Boni National Reserve and create conducive atmosphere for development;

Develop Arawale National Reserve to revenue generating status once the three mile zone is settled between Garissa and Tana River County Councils to enable access to the river.

Other priority projects include the rehabilitation of the Wildlife Protection Unit complex and District Offices and staff quarters.

Fisheries Department: The fishing industry in the district realized little development in the concluded plan period. Only one demonstration pond sited at the Provincial Commissioner's compound was completed and stocked. Other ponds earmarked were not implemented due to lack of funds.

The Department realized an encouraging response to the fish-eating campaigns undertaken as evidenced to the increasing issuance of fishing licenses and demand for fish mainly in Garissa Town.

Three fish ponds are earmarked for establishment in Central Division during this plan period and are expected to provide fingerlings for prospective farmers.

The department encourages research to establish fish type and stock quantity in the district to enhance exploitation of the resource for increased employment and income.

## ENVIRONMENT AND NATURAL RESOURCES

### Objectives

Objectives of the Ministry are:

- Assessing and evaluating the impact of development activities on the environment.
- Promoting inter-disciplinary and integration of sustainable policies, Plans, Programmes and Projects.
- Sustainable watershed management and environmental amelioration through surviculturally sound forest management of natural and industrial forestry component.
- Reclamation and regeneration of forest cover in Arid and Semi-Arid land, through appropriate techniques.
- Intensification of mineral resource development through careful exploitation of minerals resources.

### Achievements in the 1989 - 93 Plan Period

There are no known natural resources of value in the district save scanty forest. Mineral prospecting undertaken prior to and during the early part of the last plan period bore no tangible results. Sand and lime used in the construction industry are harvested mainly for local use. The abundance of sand is most noticeable and it reduces construction costs.

Lack of funds affected planned activities during the concluded plan period though efforts in establishing seedlings through Rural Afforestation Extension Services (RAES) yielded positive results as portrayed in Table 5.5.

Table 5.6

Rural Afforestation Extension Services, 1989-93

	Central	Dadaab	Bura	Liboi	Balambala	Masalani
Seedlings Raised	309,936	2,050	15,749	2,015	17,303	4,230
Seedlings Distri-	32,780	1,912	8,717	1,717	6,513	3,140
New Nurseries Established	1	1	-	1	1	1

**Note:** No activities were undertaken in the divisions omitted from table 5.6.

A major impact on forestry resources during the past plan period was the influx of refugees into Dadaab and Liboi Divisions which resulted to environmental degradation through clearing of trees and shrubs for fuelwood and construction. It is expected that positive verbal responses already received from the U.N.H.C.R. and NGOs regarding afforestation programmes in these divisions will be transformed into tangible results within this plan period.

## ENVIRONMENT AND NATURAL RESOURCES

### PROJECT AND PROGRAMME PRIORITIES FOR 1994-96 PLAN PERIOD

#### B. New Project Proposals

Project Name Location/Division	Priority Ranking	Description of Activities
Tree Nursery water Pumps.  Central, Bura and Balambala Division.	1	<u>Justification</u> : Avail pumps necessary for tree nurseries.  <u>Funding Source</u> : GOK
Energy saving stoves and other energy forms. Liboi, Dadaab Division	2	To provide the refugees with alternative sources of energy and energy. Saving jikos.  <u>Funding Source</u> : GOK
Fuelwood project (Agroforestry) Central Division	3	Necessary project expected to provide fuelwood given the pressure on the available stock. This is to circumvent a foreseen crisis.  <u>Funding Source</u> : GOK
River Bank protection and floods, Central, Balambala, Masalani, Bura Divisions	4	Necessary project yet undertaken.
Afforestation Programmes District wide	5	On-going but affected by lack of funds.  <u>Funding Source</u> : GOK
Office and Staff Housing. Balambala Bura, Liboi, Dadaab Divisions.	6	Lack of these hinders effective work in the divisions.

## LANDS AND SETTLEMENT

### Objectives

The objectives of the sector are to:

- Ensure that the landless are settled and the problem of squatters in major urban areas is sorted out;
- Ensure that plot owners are issued with title deeds or leases to promote guaranteed and permanent development; and
- Ensure that the occupants of residential houses are not over charged in payment of rent by fixing standard rents and adjudicating rent disputes that might arise therein.

### Achievements in 1989 - 93 Plan Period

This Sector operated its servicing role through its departments namely, lands, survey, and physical planning.

Land transfers, boundary disputes and sub-divisions were not handled since the district's land falls under trust-land except for urban centres.

During the last plan period the department of lands operated its administrative division which in consultation with the Ministry headquarters finalized the setting apart of Modogashe Town (864.91 ha). The department also formalized the allocation of some developed plots previously allocated by the council by issuing letters of offers and title deeds and alienated some as summarized in Table 5.6.

Table 5.7

Number of Plots Ratified, 1989-93

Type of Plot	Garissa Municipal	Modogashe
Residential	96	126
Business Cum Residential	246	53
Industrial	1	-
Religious	8	-
Petrol Station	1	-
Educational	1	-
Rank	1	-
	1	
<b>Total</b>	<b>355</b>	<b>179</b>

Source: District Lands Office, Garissa, 1993.

Table 5.8

Plots Alienated, Garissa Municipality

Type of Plot	No.
Residential	980
Commercial	10
Nursery School	7
Industria	34
<b>Total</b>	<b>1,031</b>

Source: District Lands Office, Garissa, 1993.

The department of survey completed topographical surveys in all the divisional headquarters. Title surveys within Garissa Township were also undertaken. This could however not be done for divisional centres since they are not gazetted.

The department of physical planning prepared physical development plans for many centres including Balambala, Masalani, Sankuri, Bouralgi, Modogashe, Bura, Hulugho, Ijara, Dadaab, and Benane. Liboi, Hagadera and Amuma development plans are in their final stages of completion.



Lack of funds hindered the implementation of other physical projects such as proposed offices and staff houses. It is hoped that these will be realized in this plan period.

Given the importance of land use planning and its control, it is envisaged that this plan period will witness positive results in the under-listed plans of action.

- Avail land to prospective developers, particularly in Modogashe and Garissa towns by verifying and issuing title deeds to plot owners previously allocated by council.
- Gazettement of divisional headquarters.
- Alienation of plots through rectification of developed and rectification of vacant ones.
- Setting apart of Liboi, Dadaab, Hulugho, Masalani, Balambala, Bura and Ijara and availing their development plans.
- The municipal council to liaise on with the survey of Kenya and private surveyors for Topo survey of Garissa Municipality and revising its development plan.
- The resettling of squatters within the municipality.
- In conjunction with local authorities, necessary corrective measures be instituted as a solution the problem of Road Reserves affected by developments neglecting their importance including other public utilities. In the same vein, more road reserves will be opened in Garissa municipality and other centres.

## LANDS AND SETTLEMENT

### PROJECT AND PROGRAMME PRIORITIES FOR 1994-96 PLAN PERIOD

#### B. New Project Proposals

<b>Project Name/ Division</b>	<b>Priority Ranking</b>	<b>Description of Activities</b>
Office Blocks Central Division	1	Department of lands and physical Planning operating from rental premises.  <b><u>Funding Source:</u></b> GOK
Office equipment Printing Machines	2	Necessary facilities for performance of duty.  <b><u>Funding Source:</u></b> GOK
Staff Houses	3	Department houses necessary for improved working morale.  <b><u>Funding Source:</u></b> GOK

## PUBLIC WORKS AND HOUSING

### Objectives

The Ministry is responsible for the planning, designing, constructing and maintaining Public roads and buildings. The main objective of the Ministry are to complete on-going projects and maintain Public roads and buildings.

### Achievements in the 1989 - 92 Plan Period

During the last plan period, the Ministry's service functions namely, maintenances of Government Buildings and, electrical services were ineffectively undertaken because of lack of funding. The department however successfully supervised numerous construction projects undertaken by other departments. More attention was paid to the maintenance of roads including bridge/Drifts works. Tables 5.9 and 5.10 below, give the picture of works undertaken on the roads during the last plan period.

Table 5.9

#### Major Road Works Undertaken, 1989 - 93

Activities	Road Category (Km)					
	A	B	C	D	E	Others
Roads Butiminished	Nil	Nil	Nil	Nil	Nil	Nil
Roads Gravelled	Nil	Nil	Nil	Nil	10	Nil
Culverts	Nil	Nil	Nil	Nil	9	Nil
Bridges	Nil	Nil	Nil	Nil	Nil	Nil
Drifts	1	Nil	Nil	Nil	2	Nil
Earth Roads	Nil	Nil	Nil	Nil	Nil	Nil

Source: District Works Office, Garissa, 1993.

Table 5.10

**Roads Graded by Division 1989 - 92 (km)**

Division	1989	1990	1991	1992
Central	105	105	105	105
Jarajilla	50	50	0	0
Modogashe	185	185	185	185
Balambala	138	150	100	89
Dadaab	114	114	114	0
Liboi	170	170	170	170
Bura	255	255	255	255
Musalani	63	63	63	63
Ijara	155	155	155	155
Hulugho	0	78	0	
<b>Total</b>	<b>1,235</b>	<b>1,325</b>	<b>1,225</b>	<b>1,022</b>

**Source:** District Works Office, Garissa, 1993.

## PUBLIC WORKS AND HOUSING

### PROJECT AND PROGRAMME PRIORITIES FOR 1994-96 PLAN PERIOD

#### A: On-Going Projects

Project Name Division	Description of Activities
1. Ijara-Sangailu Ijara Division	Gravelling of 20 km road  <u>Funding Source:</u> GOK
2. Concrete Drift Bura Division	Concrete drift on Garissa - Bura road E 861
3. 6 No. Staff houses Central Division/Township.	Complete one block of two houses at lintel level and one block of two houses at slab level.
4. Materials Laboratory Central Division/ Township.	Complete construction of building.

#### B New Project Proposals

Project Name Division	Priority Ranking	Description of Activities
Butiminise 201 KM Garissa - Liboi Road A3 Central/Dadaab/ Liboi Divisions	1	An international trunk road will ease livestock market ing and avail veterinary care for improved income to pastoralists.  <u>Funding Source:</u> GOK
Raising/re-gravel Garissa-Modogashe Road C81.60 km Central/Balambala/ Modogashe Division	2	Raising and re-gravelling road. Important link-way to Eastern Province and will open up new markets. It serves as link to Wajir and Mandera and when

impassable affect development of those districts also.

**Funding Source: GOK**

Gravelling Garissa  
Masalani-Hulugho 3

Gravelling road. The road will easen communication to Coast Province hence extend market for livestock.

**Funding Source: GOK**

Two Bailay Bridges  
on road E 861 4  
Garissa - Balambala  
Central Balambala

Construction of bridges (2). Important facilities for improved communication.

**Funding Source: GOK**

Masalani - Hola  
Bridge 5  
Masalani Division

Construction of a bridge. Bridge will shorten distance to Mombasa from Hulugho, Masalani and Ijara Divisions by over 300 km and hence improve marketing of livestock to coastal towns.

**Funding Source: GOK**

Extension of  
Mechanical Workshop 6  
Central/township

Extension of mechanical workshop. Will provide room for Engine Dynamometer and fuel injector pump machine currently not in use for lack of space.

P.O.L. Station 7  
Central Division

Will reduce cost of fueling GK vehicles and easen work.

**Funding Source: GOK**

Office Block 8  
Central Division

Present District and Provincial Offices prefabricated and prone to fire.

**Funding Source: GOK**

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## **COMMERCE AND INDUSTRY**

### **Objectives**

The major objectives of the Ministry are to:-

- Ensure the development of trade.
- Promote policy and institutional reforms that allow trade and commerce to play a dynamic role in the generation of economic growth and social development.
- Generate employment opportunities by way of providing business finance, training and other support services.
- Promote and diversify export production and markets.
- Increase GDP contribution by the manufacturing sector.
- Promote the emergence of export -oriented industries that will increase the foreign exchange earning capacity of the country and reduce the current heavy reliance on agriculture and tourism to generate foreign exchange.
- Accelerate exploitation of local resources in the production of quality products to meet the demands of local, regional and International markets.
- Encourage rural industrialization through provision of adequate industrial services in the districts, especially by the District Industrial Development offices.

### **Achievements in the 1989-93 Plan Period**

Commerce and Industry formed the major economic activity during the last plan period besides the keeping and selling of livestock. The performance of commerce and trade during the concluded plan period is reflected in Table 5.11.

Table 5.11  
Number and Type of Issued Licenses With Revenue Generated, 1989-93

Type of Licence	1989		1990		1991		1992		1993	
	No. Issued	Revenue Ksh.	No. Issued	Revenue Ksh.	No. Issued	Revenue Ksh.	No. Issued	Revenue Ksh.	No. Issued	Revenue Ksh.
Wholesale	57	71420	60	54434	77	75600	58	43722	71	75360
Catering	105	23893	110	27674	97	27981	98	20710	40	214520
Motor Vehicle Repair	7	6500	8	7420	8	8250	11	12100	5	5500
Regulated Trade	832	305705	981	571343	837	320124	863	323068	494	186450
Misc. Occupation	35	91500	44	128800	30	90933	23	69500	15	47300
Distribution	9	9000	5	5000	-	-	-	-	1	1100
<b>Total</b>	<b>1045</b>	<b>508018</b>	<b>1209</b>	<b>794671</b>	<b>1049</b>	<b>522888</b>	<b>1053</b>	<b>469100</b>	<b>626</b>	<b>530230</b>

Source: District Trade and Development Office.



Table 5.11 shows that commerce and trade recorded the highest growth in 1990 but declined in the last two years of the period. This drop is partly attributable to the district's internal factors such as the 1991-92 drought and to the overall performance of the national economy during the period.

Individual initiatives formed the basis of source of funds for this sector. However, the District Joint Loan Board and the Rural Enterprise Fund were additional injections earmarked for expansion of business and creation of employment. Loan disbursements from the two sources is given in Table 5.12.

Year	1989	1990	1991	1992	1993	Total
1989	1,000,000.00					
1990		2,500,000.00				
1991			1,500,000.00			
1992				1,000,000.00		
1993					2,000,000.00	
Total	1,000,000.00	2,500,000.00	1,500,000.00	1,000,000.00	2,000,000.00	7,000,000.00

Table 5.12  
Loans Disbursed 1989 - 93

Disbursement	Division									
	Central	Dadaab	Bura	Ijara	Libol	Hulugwo	M/Geshe	M/Mkole	Masalani	J.Jilla
Joint Loan Boards Number	38	1	3	-	-	6	8	2	3	-
Amt. Kshs.	448,000		420,000	-	-	90,000	107,000	30,000	44,000	-
Rural Entr. Fund No.	37	10	21	20	20	20	20	20	20	20
Amt. Kshs.	640,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Seminars for traders: No. of part.	4 80	- -	- -	- -	- -	- -	- -	- -	- -	- -

Source: District Trade Development office.

During the last plan period, the Joint Loan Board disbursed a total of Kshs. 821,000.00 to 64 traders in the district. Over 80% of the Rural Enterprises Fund was disbursed to wholesale and retail traders and its repayment during the plan period is expected to avail additional funds supplementary to the Joint Loan Board and hence boost the sector's performance.

The Industrial and Commercial Development Corporation (I.C.D.C.) operated its loan scheme covering commercial, small industrial and textiles guarantee general scheme.

Total loan disbursement and collections is reflected in Table 5.13.

Table 5.13

I.C.D.C. Loan Disbursement, 1898 - 93

Year	Amount Disbursed (Kshs)	Amount Collected (Kshs)
1989	600,000.00	377,284.00
1990	300,000.00	440,571.00
1991	1,060,000.00	652,665.60
1992	1,010,000.00	617,607.90
1993		
<b>Total</b>	<b>2,970,000.00</b>	<b>2,624,586.20</b>

Source: ICDC Office, Garissa, 1993

The Kenya Industrial Estates (K.I.E.) provided Loans to a number of small scale industrial projects during the last plan period besides provision of extension services in the preparation, implementation and management of the enterprises. Table 5.13 illustrates the KIE achievements during the period.

Table 5.14

K.I.E. Projects 1989-93

Project	Capital (Kshs)	Employment Created
Halwa and Brick Unity	100,000.00	5
Garissa Town	500,000.00	5
Cinema Theatre (Garissa Town)	500,000.00	5
Garage (Garissa Town)	500,000.00	4
Posho Mill (Modogashe)	150,000.00	2
Block Making (Garissa Town)	2,900,000.00	6
Printing Press Unit (Garissa Town)	1,200,000.00	10
Ice Cream Making Unit (Garissa Town)	197,000.00	6
Cold Storage Unit (Garissa Town)	220,000.00	6
Tailoring Unit (Garissa Town)	220,000.00	7
<b>Total</b>	<b>3,457,000.00</b>	<b>56</b>

Source: Kenya Industrial Estates, Garissa 1993

During the period under review, KIE collected a total of KShs.2.4 million from its loanees within the district.

Whereas the foregoing depicts achievement evidenced in availability of funds for commerce and industry, the loan repayment rates is generally low. Outstanding loans for Joint Loan Board, ICDC and KIE are not being repaid as required. The low level of loan repayment is explained by:

- diversion of funds from original intended purpose to other uses;
- general unwillingness by most loanees to repay;
- poor communication networks and insecurity in some areas;
- lack of business acumen among the loanees; and
- easy disbursement conditions mainly due to absence of strong collaterals like title deeds;

## COMMERCE AND INDUSTRY

### PROJECT AND PROGRAMME PRIORITIES FOR 1994 - 96 PLAN PERIOD

#### Industrial and Commercial Development Corporation (ICDC)

#### B. New Project/Programme Proposals

Project Name Location	Priority Ranking	Description of Activities
Loans District wide	1	Issue of loans amounting to Kshs. 2 million every year and increase loan collection to Kshs.700,000per year.  <u>Funding Source: ICDC</u>
Training of Traders'  District wide	2	To train at least 200 traders every year in fields including book-keeping, stock control, marketing, import trade and business management.  <u>Funding Source: ICDC.</u>
Office block Garissa Town	3	Construction of an office block for improved work performance.  <u>Funding Source: ICDC.</u>

## Kenya Industrial Estates

### B. New Project/Proposals

<b>Project Name Location</b>	<b>Priority Ranking</b>	<b>Description of Activities</b>
Cinema Theatre Garissa Town	1	Construction of a Cinema theatre in Garissa. It will create employment for 5 people.  <u>Funding Source</u> K.I.E.  <u>Costs</u> Kshs. 300,000
Tailoring Unit. Garissa Town	2	Construction of a Tailoring Unit in Garissa Town: It will create employment for people.  <u>Funding Source</u> K.I.E.  <u>Costs:</u> 250,000
Posho mill Balambala Division	3	Installation of a Posho mill. This project will create employment for 3 people.  <u>Funding Source:</u> K.I.E.  <u>Cost:</u> Kshs. 200,000.
Hotel, Modogashe Division	4	Construction of a hotel in Modogashe Division. It will create employment for 6 people.  <u>Funding Source:</u> K.I.E.  <u>Cost:</u> Kshs.200,000
Carpentry Unit Garissa Town.	5	Construction of a building and purchasing of carpentry tools. It will create employment for 5 people.  <u>Funding Source:</u> K.I.E.  <u>Cost:</u> 200,000.

Garage  
Garissa Town

6

Construction of a Garage and purchase of tools. Eight people will be employed.

Funding Source: K.I.E.

Cost: Kshs.250,000

## LOCAL GOVERNMENT AND URBAN DEVELOPMENT

### Objectives

The development investment objectives of the Ministry are as follows:-

- Promote policies that avoid concentration of population in the largest cities by promoting vigorous growth of Secondary towns and smaller urban centres.
- Support the provision of catalytic infrastructure such as water supply, sewerage, treatment facilities, Power Supply, roads, market/trading facilities, etc., in selected local authorities with the objective of providing incentives for private investment.
- Strengthen management and financial capacity of local authorities to formulate policy, manage authority manpower and resources, and carry out the design, implementation and management of infrastructure investments, as well as ensure that adequate funds are made available to complete projects on time.
- Improve the capacity of local authorities to provide municipal services on a sustainable basis by broadening utilities and realistic pricing of urban services.

### Achievements in the 1989-93 plan period

The two local authorities namely Garissa Municipal Council (G.M.C.) and Garissa County Council (G.C.C.) performed their expected roles despite the limited revenue base and income outlets. One major achievement coming towards the end of the plan period was the upgrading of Garissa Town to a Municipality status in 1992. The Municipal Council undertook no major development projects during the plan period save for the on-going construction of a slaughter house in Garissa Town.

Likewise, the County Council undertook no major development projects but made a remarkable achievement in the preparation of development plans for the major town centres which included plans for Benane, Modogashe, Liboi, Amuma, Ijara, Mbalambala, Masalani, Hulugho, Dadaab, Dagahale, Haghadera and Bour-Agly. This was effectively done with the technical assistance from the department of physical planning.

Revenue collection by the two councils has been mentioned as low and Table 5.15 gives the revenue status during the plan period.



Table 5.15

**Total Revenue Collection and Expenditure by Local Authorities 1988 -92**

	1988	1989	1990	1991	1991
<b>Garissa County Council</b>					
Revenue collection Kshs.	2863837	2496803	4004468	3110989	3454334
<b>Garissa Municipal Council</b>					
Revenue Collections Kshs.	115070	155580	199340	21145	

## LOCAL GOVERNMENT AND URBAN DEVELOPMENT

### PROJECT AND PROGRAMME PRIORITIES FOR 1994-1996 PLAN PERIOD

#### Garissa County Council

##### B. New Project Proposals

Project Name Division	Priority Ranking	Description of Activities
Opening of Markets Hulugho and Liboi	1	Necessary facilities for economic activity and to improve councils revenue.
Slaughter House Liboi, Division	2	Facility not in place but centre growing .
Adult literacy classes & pre-primary Teachers	3	Construction of classes and pre primary teachers training centre.
Training Centre Jarajilla Division		These will reduce illiteracy rate Construction of a Livestock Loading Bay.
Livestock loading Bay Central/Bour-Algy	4	Necessary facility presently lacking

#### Garissa Municipal Council

##### B. New Project Proposals

Project Name Division	Priority Ranking	Description of Activities
Modern Market Garissa Town	1	Construction of a market. To improve the market for agricultural produce and other merchandise.
Slaughter House Garissa Town	2	Construction of a slaughter house To accommodate the fast growing town

Fire Station Garissa Town	3	Important facility presently in place
Town Hall Garissa Town	4	Construction of a Town Hall. To accommodate Municipal offices and facilitate mayoral meetings.
Town Roads Garissa Town	5	Construction and improvement of town roads. Improvements necessary and planning for roads already overtaken by development necessary.

## HOME AFFAIRS AND NATIONAL HERITAGE

### Objectives

The children's department operates under the children and young persons act cap 141 of the laws of Kenya. The department diverges its direction from the curative method to preventive measures in collaboration with other agencies dealing with children. Full time street children are mainly concentrated in major towns and Garissa town is now experiencing some part time street children. Other categories of children especially under difficult circumstances (C.E.D.C) are increasing. Noted cases of C.E.D.C. include neglected children, child labour, destitutes, orphans, abandoned, displaced, refugees, undisciplined, handicapped, child mother, child prostitute and AIDS orphans. The problems of children in Garissa is alarmingly increasing due to changes in Socio-economic factors affecting the community. The Provincial children's office is charged with the duties of the district office but faces many constrains which include inadequate funds, shortage of personnel and lack of essential facilities such as Juvenile remand home, Approved school and office accommodation. Below is the number of cases handled over the last plan period.

### Achievements in the 1989 - 1993 Plan Period

- Reconciled some families for the Welfare of their Children
- Rehabilitated 7 Children to approved School among them is one girl to Kiringiti.

Table 5.16

Year	Cases Handled
1990	227
1991	154
1992	316

Source: Provincial Children's Office.

## HOME AFFAIRS AND NATIONAL HERITAGE

### PROJECT AND PROGRAMME PRIORITIES FOR 1994-96

#### B. New Project Proposals

Project Name Division	Priority Ranking	Description of Activities
<b>Juvenile Remand Home</b>		
Central Division	1	Fencing, 5 dormitories of 100 beds each, Sanitation block, Kitchen and Dinning Hall. Manager's Office, Staff Offices and 3 Stores. Safe custody of Juvenile delinquents with pending cases under investigation.
Central Division.	2	Construction of Dormitories, Kitchen, Dinning Hall, Administration block and Vocational training Centres. To rehabilitate Juvenile delinquents and reduce children especially under difficult circumstances.

## **OFFICE OF THE VICE-PRESIDENT AND MINISTRY OF PLANNING AND NATIONAL DEVELOPMENT**

### **Objectives**

The Ministry is responsible for the formulation and coordination of National development policies and strategies. Towards this end it oversees the systematic production of basic data on the economic and social progress of the nation. It also promotes the coordination and implementation of government wide programmes and projects. Some of the objectives of the Ministry to the Rural Development are:-

- Formulate Strategies, Policies, Programmes and projects that support the District Focus Strategy for rural development objectives.
- Support and strengthen district level planning and implementation capacity through systematic development and training activities.
- Formulate and promote the Government's Rural - Urban balance strategy.
- Implement the District Development Fund, Rural Development Fund, EEC - Micro Projects and Area based development programmes and projects.

### **Achievements in the 1989 - 93 Plan Period**

Over the last plan period, the development co-ordination role of this Ministry was effectively undertaken by the personnel attached to the office of the District Commissioner. The Ministry's role as secretariat to the District Executive Committee (DEC) as well as District Development Committee (DDC) enabled the realization of notable development projects and programmes by other departments. Towards the end of the last plan period, the Ministry commenced the move to establish its autonomous District Offices in liaison with the office of the President from which much assistance is expected. It is envisaged that this move will enhance the Development co-ordination role of the Ministry through the recruitment and posting of Senior and qualified personnel for effective functioning of the District Planning Unit (DPU). Assistance will be solicited from donor agencies for the establishment of a well equipped DPU that will strengthen the planning, implementation, Monitoring, and evaluation of district's projects and programmes.

**OFFICE OF THE VICE-PRESIDENT AND MINISTRY OF PLANNING AND  
NATIONAL DEVELOPMENT**

**PROJECT AND PROGRAMME PRIORITIES FOR 1994-96 PLAN PERIOD**

**B. New Project Proposals**

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<b>Project Name Division</b>	<b>Priority Ranking</b>	<b>Description of Activities</b>
District Planning Unit (DPU) Office Block Central Division.	1	DPU staff need to operate in close liaison for improved services to other departments. There is inadequate office spaces to house present and expected staff. The office block will include the D.I.D.C. and conference Hall for DDC.
District Information and Documentation Centre (D.I.D.C) and Equipments for Information Collection and storage	2	Construction of office block and purchase of Equipments. There is need to store data in Modern Computer Systems for ease of retrieval and updating information. District data collection will thus be enhanced. The centre is currently operating in the KNLS but its functionality is impaired by lack of equipment and distance from the District Development and statistical Offices.

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## NATIONAL CHILD SURVIVAL AND DEVELOPMENT PROGRAMME

Infant mortality rate in the district range between 95.5 per 1000 in Central division to 160 per 1000 in the more remote divisions. It is believed that under 5 mortality rates are quite high though lack of reliable data constrain in-depth analysis of the problem.

The problem of infant and under 5 mortality is further compounded by high illiteracy rates among women and non sedentary life-style of the pastoral community.

### B. New Project Proposals

Project Name Location	Priority Ranking	Description of Activities
Primary health care, District Wide	1	Improved immunization coverage to reach communities distanced from existing health facilities. Provision of equipments.
Basic education. District Wide	2	Provision of education facilities in pastoral areas.
Children Assistance. District wide	3	Special assistance to children of Rural - Urban poor
Water and sanitation facilities	4	Provision of water and sanitation facilities.
Pastoral Development	5	Pastoral development emphasizing on improvement of household food security through economic development of the pastoralist family.
Service Delivery System	6	Development of service delivering system for all sectors which are appropriate to the needs of a nomadic people.



## **RESEARCH, TECHNICAL TRAINING AND APPLIED TECHNOLOGY**

### **Objectives**

The major objectives of the Ministry are to:-

- Set promotion of research in physical and biological sciences that will benefit Kenya's agricultural, Livestock, forestry, fisheries, manufacturing and industrial sectors.
- Study and monitor the national capacity to undertake research activities and develop findings that benefits the country's economy and social welfare.
- Mobilize resources from the Public, private and donor agencies to be used to support the development of the Nation's scientific and technical capacity.
- Establish and strengthen mechanisms that facilitate the transfer of scientific and technical research fundings to the public and private sectors.
- Development of patent policy and Legislation that assists indigenous entrepreneurs and investors to protect their fundings and helps local entrepreneurs to acquire foreign patents on favourable terms.
- To assist the Jua Kali Sector so that it can maximize contribution to the economic growth and technological progress of the country.
- Provide basic business management and Vocational skill training to the artisans and to improve their businesses.
- Collect and disseminate relevant market information to artisans and advise on production of goods and services.
- Provide suitable working places (Nyayo sheds) to the needy artisans.
- To provide increased training opportunities for the increased number of school leavers to enable them be self-supporting.
- To develop practical skills and attitudes which will lead to income generating activities in the rural areas through

self-employment.

To equip the institutions with tools, machinery and equipment that can match the latest technological developments in the Kenyan Industry.

### Kenya Agricultural Research Institute (KARI)

The Kenya Agricultural Research institute, currently housed in the Ministry of Agriculture's Hoden Farm is mandated to undertake research on Livestock and crop production technologies for North Eastern Province and Tana River district of Coast Province.

#### Research Department

##### Achievements in the 1989 - 93 Plan Period

During the last plan period, the centre's achievement in Garissa district included the Tomato and Rice varietal adaptation trials. The institute has in addition earmarked a 15,000 ha land for development as a permanent operation base. Other Programmes already initiated include Horticultural adaptation trials which will cover Bananas and Citrus.

#### Technical Training Department

##### Achievements in the 1989 - 93 Plan Period

Over the last plan period, the operations of this department was enhanced by the posting of the Provincial officer to undertake the district's programmes. The department operates one technical college, the NEP Technical, and two youth polytechnics in Bura and Central divisions. The Polytechnics are lacking in facilities that would enable expansion of courses offered. The department also oversees the activities in the Jua Kali sector whose importance needs no emphasis. During the last plan period, a Jua Kali shed was constructed within the Municipality but remains unused to date since the siting was not favourable.

# RESEARCH, TECHNICAL TRAINING AND APPLIED TECHNOLOGY

## PROJECT AND PROGRAMME PRIORITIES FOR 1994-96 PLAN PERIOD

### Research Department

#### B. New Project Proposals

Project Name Location	Priority Ranking	Description of Activities
Diagnostic Surveys	1	Carry out surveys to understand the existing farming systems in the area.
Research/Extension Linkage	2	Testing and dissemination of research finding activities and exchange of information
Maize varietal trials	3	Carry out varietal trials so as to identify the best adapted varieties.
Dairy, Zero grazing	4	Identify breeds from a zero-grazing system in the irrigation production economic schemes. Qualification of production system required.
Forage and pasture trials	5	Carry out trials so as to evaluate forage species for the zero-grazing dairy cattle.
Sorghum/Millet variety	6	Carry out trials to identify best adapted sorghum/millet. To diversify food services.

## RESEARCH, TECHNICAL TRAINING AND APPLIED TECHNOLOGY

### PROJECT AND PROGRAMME PRIORITIES FOR 1994 - 96 PLAN PERIOD

#### Technical Training Department

#### B. New Project Proposals

Project Name Division	Priority Ranking	Description of Activities
Jua Kali sheds Central Division	1	Construction of Jua Kali Sheds. Necessary facility for increased employment. Would encourage activity in this sector. The existing sheds not used due to siting but has potential for future use.
Workshops and Equipment in Bura and Garissa Youth Polytechnics. Bura & Central Division	2	Construction of workshop and purchase of equipments. The two Polytechnics presently lack workshops and equipments for all trades.

# OFFICE OF THE PRESIDENT

## Objectives

The major objectives of the office of the President are to promote effective and efficient operation of Government activities at the national, provincial, district levels and to ensure the security of the nation; ensure adequate information on the population in general and particular types of categories of individuals; keep citizens informed about Government policies and activities.

## OFFICE OF THE PRESIDENT

### PROJECT AND PROGRAMME PRIORITIES FOR 1994-96 PLAN PERIOD

#### B. New Project Proposals

Project Name Division	Priority Ranking	Description of Activities
Garissa District Headquarters Central Division	1	Construction of District headquarters. Present office lack space. There is need for a modern office block to accommodate many offices for increased efficiency. Other departments would be accommodated.
Divisional Staff Houses. Dadaab, Jarajilla Division	2	Construction of Divisional staff houses. There is need to house District Officers for increased productivity.
Administration Police Housing. Hulugho Division.	3	Construction of houses. Project started and stalled. Need to house officers for improved security in the area. Officers currently housed in tents.
Police Station in Liboi and Police Post in Ijara Division.	4	Construction of a police station and Post. Liboi is a border town requires functional station. Ijara needs a post due to increased banditry and stock theft. Station now served by Masalani Post about 80 kms away.

## HIV/AIDS

### B. PROJECTS AND PROGRAMMES 1994-96 PLAN PERIOD

Projects Name	Priority Ranking	Description of Activities
Public Education and Awareness campaigns.	1	Necessary for Dissemination of information. Involves use of seminars, Schools, Adult Education classes, Barazas and the Media (posters, bulletins, etc).
Counselling AIDS	2	To enable victims lead normal life with AIDS
Victims and affected Families	3	This involves encouraging victims and their families to enable them perform their social and economic roles effectively.
Distribution of condoms	4	Special programme to encourage protected sex as a measure against AIDS.
Children's Home	5	This will be necessary to cater for orphaned children. Establishing one to cater for the whole province.
Identifiable Income Generating projects	6	Initiate projects for AIDS victims that could benefit their lot. The projects to be identified to be relevant to skills of victims and those of family members requiring assistance.