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JAPAN INTERNATIONAL COOPERATION AGENCY



THE MINISTRY OF WATER RESOURCES
THE REPUBLIC OF KENYA

**THE AFTERCARE STUDY
ON
THE NATIONAL WATER MASTER PLAN
IN
THE REPUBLIC OF KENYA**

**FINAL REPORT
SUPPORTING REPORT**

November 1998

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1. EXECUTIVE SUMMARY
2. MAIN REPORT
3. SUPPORTING REPORTP
4. DATA BOOK



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**THE AFTERCARE STUDY
ON THE NATIONAL WATER MASTER PLAN**

SUPPORTING REPORT

TABLE OF CONTENTS

LOCATION MAP

ABBREVIATIONS

PART I SOCIOECONOMY

PART II WATER SUPPLY DEVELOPMENT PLAN

PART III SEWERAGE DEVELOPMENT PLAN

PART IV WATER RESOURCE DEVELOPMENT PLAN

PART V LAW AND PUBLIC ADMINISTRATION

PART VI PROJECT EVALUATION

ABBREVIATIONS

AG	Attorney General	KIU	Kenya Industrial Estates Limited
AFW	Accounted for Water	KMD	Kenya Meteorological Department
ASAL	Arid, Semi-Arid Lands	KPLC	Kenya Power and Lighting Co.
CBS	Central Bureau of Statistics	KPTC	Kenya Posts and Telecommunication Corporation
CSRP	Civil Service Reform Programme	KS	Kenya Standard
CSS	Computer Service Section of MOW	KSS	Kenya Soil Survey
DAO	District Agricultural Officer	KTDA	Kenya Tea Development Authority
DC	District Commissioner	KVDA	Kerio Valley Development Authority
DCO	District Commissioner's Office	KWAHO	Kenya Water and Health Organization
DDC	District Development Committee	Kshs	Kenya Shillings
DDP	District Development Plan	K£	Kenya Pounds (20 Kenya Shillings)
DO	District Officer	LA	Local Authority
DRSRS	Department of Resource Surveys & Remote Sensing	LBDA	Lake Basin Development Authority
DTO	District Treasury Office	LU	Livestock Unit
DWB	District Water Board	MCSS	Ministry of Culture and Social Services
DWE	District Water Engineer	MLRRWD	Ministry of Land Reclamation, Regional and Water Development (presently MOWR)
DWO	District Water Office	MOA	Ministry of Agriculture
EAMD	East Africa Meteorological Department	MOE	Ministry of Energy
FAO	Food and Agriculture Organization of the United Nations	MOED	Ministry of Education
GDP	Gross Domestic Product	MOENR	Ministry of Environment and Natural Resources
GIS	Geological Information System	MOF	Ministry of Finance
GOJ	Government of Japan	MOH	Ministry of Health
GOK	Government of Kenya	MOHANH	Ministry of Home Affairs and National Heritage
GRDP	Gross Regional Domestic Product	MOI	Ministry of Industry
GTZ	German Agency for Technical Cooperation	MOL	Ministry of Labour
HRD	Human Resource Development	MOLA	Ministry of Local Authorities
IBRD	International Bank for Reconstruction and Development	MOLD	Ministry of Livestock Development
ICDC	Industrial and Commercial Development Corporation	MOLG	Ministry of Local Government (presently MOLA)
IDA	International Development Association	MOLH	Ministry of Lands and Housing
ILUS	Integrated Land Use Survey	MOMDE	Ministry of Manpower Development and Employment
IPC	Investment Promotion Center	MOP	Ministry of Planning
IRS	Integrated Rural Survey	MOPND	Ministry of Planning and National Development
JICA	Japan International Cooperation Agency	MOPW	Ministry of Public Works
KBS	Kenya Bureau of Standard		
KIRDI	Kenya Industrial Research & Development Institute		

MORD	Ministry of Region Development	RTPC	Rural Trade and Production Center
MORST	Ministry of Research, Science and Technology	RWSDP	Rural Water Supply Development Project
MOSM	Ministry of Supplies and Marketing	SDD	Social Dimensions of Development
MOTC	Ministry of Transport and Communication	SOK	Survey of Kenya
MOTW	Ministry of Tourism and Wildlife	SWAP	Surface Water Extraction Permit
MOWR	Ministry of Water Resources	SWPD	Special Water Programmes Division (MWR)
MPND	Ministry of Planning and National Development	TARDA	Tana and Athi Rivers Development Authority
MWR	Ministry of Water Resources	UC	Urban Centre
NCC	Nairobi City Commission	UDD	Urban Development Department (MOLA)
NCPB	National Cereals and Produce Board	UFW	Unaccounted for Water
NEAP	National Environmental Plan	UNDP	United Nations Development Programme
NES	National Environment Secretariat	UNEP	United Nation Environment Programme
NGO	Non-Governmental Organisation	UNESCO	United Nations Educational, Scientific, and Cultural Organization
NIB	National Irrigation Board	UNICEF	United Nations International Children's Emergency Fund
NMWP-I	National Master Water Plan (Stage I)	UNIDO	United Nations Industrial Development Organization
NWCPC	National Water Conservation and Pipeline Corporation	UNPEP	United Nation Population Fund Programme
NWMP	National Water Master Plan	USAID	United States Agency for International Development
NWP	National Water Policy	UWASAM	Urban Water and Sanitation Management
O&M	Operation and Maintenance	WAB	Water Apportionment Board
OECD	Organization for Economic Cooperation and Development	WDD	Water Development Department (MWR)
OECF	Overseas Economic Cooperation Fund	WHO	World Health Organization
OP	Office of the President	WID	Women in Development
PC	Provincial Commissioner	WRA	Water Resources Authority
PIP	Public Investment Programme		
PIU	Project Implementation Unit		
PPCSCA	Presidential Permanent Commission on Soil Conservation and Afforestation		
PSC	Public Service Commission		
PSP	Private Sector Participation		

ABBREVIATION OF MEASURES

Length

mm	=	millimeter
cm	=	centimeter
m	=	meter
km	=	kilometer

Money

Kshs.	=	Kenya shilling
KL	=	Kenya pound
US\$	=	U.S. dollar
USc	=	U.S. cent

Area

ha	=	hectare
m ²	=	square meter
km ²	=	square kilometer

Energy

Kcal	=	Kilocalorie
KW	=	kilowatt
MW	=	megawatt
KWh	=	kilowatt-hour
GWh	=	gigawatt-hour

Volume

l, lit	=	liter
m ³	=	cubic meter
m ³ /s, cms	=	cubic meter per second
MCM	=	million cubic meter
m ³ /d, cmd	=	cubic meter per day

Others

%	=	percent
o	=	degree
'	=	minute
"	=	second
°C	=	degree Celsius
cap.	=	capital
LU	=	livestock unit
md	=	man-day
mil.	=	million
no.	=	number
pers.	=	person
mmho	=	micromho
ppm	=	parts per million
ppb	=	parts per billion
lpcd	=	litter per capita per day

Weight

mg	=	milligram
g	=	gram
kg	=	kilogram
t	=	ton
MT	=	metric ton

Time

sec	=	second
hr	=	hour
d	=	day
yr	=	year

PART I

SOCIOECONOMY



**THE AFTERCARE STUDY
ON THE NATIONAL WATER MASTER PLAN**

SUPPORTING REPORT

PART I : SOCIOECONOMY

TABLE OF CONTENTS

	Page
CHAPTER 1 PRESENT NATIONAL ECONOMIC CONDITIONS	I-1
1.1 Macro Economy	I-1
1.2 Government Finance	I-2
1.3 Public Expenditure.....	I-2
1.3.1 Central Government	I-2
1.3.2 Local Government.....	I-3
CHAPTER 2 PRESENT SOCIOECONOMIC CONDITIONS	I-5
2.1. Administrative Division.....	I-5
2.1.1 Central Government	I-5
2.1.2 Local Government.....	I-6
2.2 Population	I-7
2.2.1 Population and Regional Distributions	I-7
2.2.2 Population Density	I-7
2.2.3 Urban Population.....	I-8
2.3 Household and per Capita Income.....	I-8
2.4 Social Infrastructures	I-9
2.4.1 Transportation.....	I-9
2.4.2 Electric Power Supply	I-10
2.4.3 Water Supply and Sanitation.....	I-10
2.4.4 Communication	I-10
CHAPTER 3 RELATED SECTORAL ISSUES AND PLANS	I-11
3.1 Related Sectoral Issues	I-11
3.1.1 Public Health and Hygiene Conditions	I-11
3.1.2 Water Carrying Burden to Women.....	I-14
3.1.3 Women in Development	I-16
3.2 Related Sectoral Plans and Programme	I-17
3.2.1 Poverty Alleviation Programme	I-17
3.2.2 Arid and Semi-Arid Land Development Plan.....	I-18
3.2.3 National Environmental Action Programme	I-19
3.2.4 National Tourism Development Master Plan	I-20
3.2.5 District Development Plan 1997-2001	I-21

CHAPTER 4	FINANCIAL MANAGEMENT OF WATER SUPPLY AND SANITATION SECTOR.....	I-23
4.1	Public Expenditure	I-23
4.1.1	Overall Situations of Public Expenditure	I-23
4.1.2	Public Expenditure by Sub-Sector	I-24
4.2	Public Investment Programme, 1997/98 - 1999/2000.....	I-25
4.2.1	Investment Strategies.....	I-25
4.2.2	Investment Priorities	I-27
4.2.3	Core Projects	I-27
4.2.4	Investment Costs.....	I-29
CHAPTER 5	POPULATION PROJECTION.....	I-31
5.1	Projection Methodology	I-31
5.2	National Population.....	I-31
5.3	Urban Centre Population	I-32

LIST OF TABLES

	Page
Table - 2.1.1	Historical Change of Administrative Division in Kenya I-T-1
Table - 2.1.2	Distribution by District, 1991 - 1998..... I-T-2
Table - 2.1.3	Urban Centre and Its Population, 1989 I-T-3
Table - 2.2.1	Population and Density by District, 1991 - 1998 I-T-8
Table - 2.3.1	Overview of Income Status by District, Per capita and Household..... I-T-9
Table - 3.1.1	Distribution of Population by Type of Sickness by District I-T-10
Table - 3.1.2	Distribution of Households with Access to Safe Water and Main Water Sources by District I-T-11
Table - 3.1.3	Distribution of Households by Access to Sanitation, Type of Toilet and District..... I-T-12
Table - 3.1.4	Distribution of Households by Time Taken for Water Carrying by District..... I-T-13
Table - 3.2.1	Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997 - 2001 I-T-14
Table - 4.2.1	Public Investment Programme of MWR, 1997/1998 - 1999/2000 I-T-26
Table - 4.2.2	Public Investment Programme of MOLA, 1997/1998 - 1999/2000 I-T-32
Table - 4.2.3	Summary of Investment Costs for Public Investment Programme, 1997/1998 - 1999/2000, - MWR - I-T-34
Table - 4.2.4	Summary of Investment Costs for Public Investment Programme, 1997/1998 - 1999/2000, - MOLA - I-T-35
Table - 5.1.1	Comparison of Population Projection by Method I-T-36
Table - 5.2.1	Population Projection by District, 1991 - 2010..... I-T-37
Table - 5.2.2	Urban-Rural Population Projection by District, 1995 - 2010 I-T-38
Table - 5.3.1	Population Projection of Urban Centres I-T-39
Table - 5.3.2	Population Projection of Urban Centres by Classification..... I-T-42



CHAPTER 1 PRESENT NATIONAL ECONOMIC CONDITIONS

1.1 Macro Economy

An overview of the Kenyan economy in terms of Gross Domestic Product (GDP) is given in the table below.

Historical Trend of GDP, 1992-1996

Description	1992		1993		1994		1995		1996		Annual Growth Rate	Average Share 1992-1996 (%)
	GDP	%	GDP	%	GDP	%	GDP	%	GDP	%		
A. Non-Monetary Economy	491.89	4.3	522.45	3.7	560.86	3.3	602.14	3.1	648.70	3.0	7.2%	3.5
B. Monetary Economy	10,910.64	95.7	13,662.96	96.3	16,342.38	96.7	18,603.65	96.9	21,215.85	97.0	18.1%	96.5
B-1 Enterprises and Non-Profit Institutions	9,033.73	79.2	11,407.34	80.4	13,968.15	82.3	15,627.65	81.4	17,945.97	82.1	18.7%	81.1
Agriculture	3,016.01	26.5	4,168.45	29.4	5,292.10	31.3	5,778.12	30.1	6,233.00	28.5	19.9%	29.1
Forestry	140.44	1.2	168.08	1.2	190.48	1.1	203.54	1.1	223.85	1.0	12.4%	1.1
Fishing	45.16	0.4	53.89	0.4	62.98	0.4	61.93	0.3	68.37	0.3	10.9%	0.4
Mining and Quarrying	30.28	0.3	35.22	0.2	35.68	0.2	36.21	0.2	37.06	0.2	5.2%	0.2
Manufacturing	1,230.73	10.8	1,419.63	10.0	1,807.76	10.7	1,945.55	10.1	2,282.23	10.4	16.7%	10.4
Building and Construction	579.60	5.1	655.20	4.6	742.80	4.4	799.18	4.2	879.02	4.0	11.0%	4.5
Electricity and Water	100.33	0.9	126.90	0.9	164.06	1.0	191.13	1.0	208.01	1.0	20.0%	0.9
Trade, Restaurants, and Hotels	1,517.10	13.3	1,920.65	13.5	2,400.81	14.2	3,238.00	16.9	4,144.76	19.0	28.6%	15.4
Transport, Storage, and Communications	908.70	8.0	991.91	7.0	1,262.95	7.5	1,515.64	7.9	1,713.84	7.8	17.2%	7.6
Finance, Insurance, Real Estate, and Business Service	1,081.34	9.5	1,398.17	9.9	2,015.65	11.9	2,295.52	12.0	2,646.16	12.1	25.1%	11.1
Ownership of Dwellings	658.42	5.8	716.69	5.1	764.86	4.5	814.00	4.2	936.10	4.3	9.2%	4.8
Other Services	368.65	3.2	477.87	3.4	578.11	3.4	693.73	3.6	818.60	3.7	22.1%	3.5
Less: Imputed Bank Service Charges	-643.03	-5.6	-725.37	-5.1	-1,410.09	-8.3	-1,944.90	-10.1	-2,245.03	-10.3	-	-7.9
B-2 Procedures of Government Services	1,722.34	15.1	2,075.04	14.6	2,223.10	13.2	2,728.79	14.2	2,985.71	13.7	14.7%	14.1
B-3 Private Households (Domestic Services)	154.57	1.4	180.58	1.3	211.13	1.2	247.21	1.3	287.17	1.3	16.7%	1.3
C. Gross Domestic Products	11,402.53	100.0	14,155.41	100.0	16,903.24	100.0	19,205.79	100.0	21,867.55	100.0	17.7%	-
D. Population	25.24	-	26.00	-	26.76	-	27.52	-	28.27	-	-	-
E. GDP Per capita	451.84	-	545.57	-	631.61	-	697.88	-	773.63	-	14.4%	-

Source: Economic Survey 1997, Central Bureau of Statistics

The economy of Kenya has been and still is largely dependent on agriculture and tourism, which accounted for an average of 29% and 15% of GDP, respectively, in the five years from 1992 to 1996. These two key sectors have largely contributed to foreign exchange earned by the country in the same period. Tourism and agriculture sectors achieved the high annual growth rates of 28.6% and 19.9%, respectively, while the national average was 17.7%. The finance and manufacturing sectors are two other important sectors in the Kenyan economy constituting the second largest group in terms of GDP, accounting for approximately 11% and 10% of GDP, respectively, on average in the five years period. A fairly stable foreign exchange rate and moderate inflation in the country in the recent years has supported this economic situation.

As the economy grew, GDP per capita had a high average growth rate of 14.4% per annum for the five-year period, 1992 - 1996, and reached K£773 in 1996, which is equivalent to approximately US\$ 260.

1.2 Government Finance

The overall government financial situation during the past fiscal years from 1992/93 to 1996/97 is presented in the table below.

Historical Trend of Revenue and Expenditure of Kenyan Government, 1992/93-1996/97

Item	(Unit: K£ million)					Average
	1992/93	1993/94	1994/95	1995/96	1996/97	
Current Revenue (A)	3,454.71	5,039.37	6,097.82	7,181.84	7,441.42	-
Current Expenditure	3,884.17	5,912.64	5,888.84	6,745.53	7,404.05	-
Current Surplus	-429.46	-873.27	208.98	436.31	37.37	-
Capital Revenue	21.37	12.31	38.62	29.02	5.02	-
Capital Expenditure (B)	423.71	566.67	715.17	890.36	1,052.63	-
Gross Fixed Capital Formation (GFCF) (C)	384.79	465.30	687.34	812.10	979.14	-
- GFCF Ratio (C / B)	90.8%	82.1%	96.1%	91.2%	93.0%	90.7%
Net Lending	76.28	35.90	29.53	-209.71	133.36	-
Overall Deficit (D)	-908.08	-1,463.53	-497.10	-215.32	-1,143.60	-
- Deficit Ratio (D / A)	-26.3%	-29.0%	-8.2%	-3.0%	-15.4%	-16.4%
External Grants (E)	440.40	485.15	661.45	450.05	787.15	-
- Grant Ratio (E / B)	103.9%	85.6%	92.5%	50.5%	74.8%	81.5%
Total Borrowing (F)	1,069.75	1,155.40	295.40	-27.25	224.90	-
External Loans (Net)	318.00	-56.75	-106.50	86.30	136.60	-
Total Domestic Borrowing	751.75	1,212.15	401.90	-113.55	88.30	-
- Long-Term Borrowing (Net)	66.05	-168.80	-376.70	-355.10	-19.75	-
- Short-Term Borrowing (Net)	685.70	1,380.95	778.60	241.55	108.05	-
Total Financing of Deficit (G)	1,510.15	1,640.55	956.85	422.80	1,012.05	-
Cash Balance (D + G)	602.07	177.02	459.75	207.48	-131.55	-

Source: Economic Survey 1995, 1996 and 1997, Central Bureau of Statistics

As shown in the table, current revenue of the government can cover current expenditure. However, capital expenditure is hardly covered by their own funds. The government is dependent on domestic and external funds obtained in the forms of grants and loans to finance their deficit.

In financing the deficit, the external grants have been largely obtained in order for the government to be able to implement development projects for welfare of the Kenyan people. The grant ratio is quite high staying at around 81% on e average.

1.3 Public Expenditure

1.3.1 Central Government

The historical trend of the central government's public expenditure during the fiscal years from 1992/93 to 1996/97 is summarised in the table below.

Public expenditure can be divided into recurrent expenditure and development expenditure. Each of these can be sub-divided into net expenditure, as an original fund of the government, and

appropriation-in-aid, as an external fund financed from both domestic and international finance institutions in the form of grants and loans.

Nationally, the recurrent expenditure accounts for approximately 78% of the total expenditure, and the development expenditure takes up merely 22%, on average for the five-year fiscal period. These figures do vary quite largely according to each ministry. Focusing on the development expenditure, the share of appropriation-in-aid to total expenditure averaged approximately 54%, which is considered quite high. This situation simply substantiates the fairly poor financial basis of the country and capabilities of the government in financing and implementing all the necessary development projects with their own funds.

Historical Trend of Public Expenditure of Kenyan Government, 1992/93-1996/97

(Unit: K£ million)

Item	1992/93		1993/94		1994/95		1995/96		1996/97		Average
A. GDP at Factor Cost	11,402.520	-	14,185.410	-	16,903.240	-	19,205.790	-	21,865.550	-	-
B. National Public Expenditure	5,757.614	100.0	8,112.967	100.0	9,472.089	100.0	9,544.698	100.0	10,072.679	100.0	-
Recurrent Expenditure	4,425.046	76.9	6,558.087	80.8	7,359.345	77.7	7,572.938	79.3	7,821.953	77.7	78.5
Net Expenditure	(4,309.392)	(97.4)	(6,391.560)	(97.5)	(7,034.749)	(95.6)	(7,137.005)	(94.2)	(7,451.081)	(95.3)	(96.0)
Appropriation-in-Aid	(115.654)	(2.6)	(166.527)	(2.5)	(324.596)	(4.4)	(435.933)	(5.8)	(370.872)	(4.7)	(04.0)
Development Expenditure	1,332.568	23.1	1,554.880	19.2	2,112.744	22.3	1,971.760	20.7	2,250.726	22.3	21.5
Net Expenditure	(677.410)	(50.8)	(731.731)	(47.1)	(939.181)	(44.5)	(880.705)	(44.7)	(1,017.509)	(45.2)	(46.4)
Appropriation-in-Aid	(655.158)	(49.2)	(823.149)	(52.9)	(1,173.563)	(55.5)	(1,091.055)	(55.3)	(1,233.217)	(54.8)	(53.6)
Ratio of Net Expenditure to GDP (%)	5.9	-	5.2	-	5.6	-	4.6	-	4.7	-	5.2
Ratio of Appropriation-in-Aid to GDP (%)	5.7	-	5.8	-	6.9	-	5.7	-	5.6	-	6.0
C. Capital Expenditure	423.710	100.0	566.670	100.0	715.170	100.0	890.360	100.0	1,052.630	100.0	-
Gross Fixed Capital Formation (GFCF)	(384.790)	(90.8)	(465.300)	(82.1)	(687.340)	(96.1)	(812.100)	(91.2)	(979.140)	(93.0)	(90.7)

Source: Development Estimates and Estimates of Recurrent Expenditure, 1992/93-1997/98
Economic Survey 1997 Central Bureau of Statistics

1.3.2 Local Government

As of 1997, there are 165 local authorities, consisting of city, municipal, county and town councils. The financial situation of local authorities as a whole for the country is summarised in the table below.

According to the table, it is clearly found that current revenue can cover at least current expenditure, but not capital expenditure, even with the efforts taken to generate capital revenue by raising loans. In the five years period from 1992/93 to 1996/97, there has always been a financial deficit, which is averaged at approximately 22% of the current revenue. The way to cover an overall financial deficit is unknown. It is, however, difficult to provide local infrastructure by their own funds without external funds to finance it.

Historical Trend of Revenue and Expenditure of Municipal Councils 1992/93-1996/97

(Unit: K€ million)

Item	1992/93	1993/94	1994/95	1995/96	1996/97	Average
Revenue (A)	165.15	211.59	240.49	244.82	261.04	-
Expenditure	118.25	157.65	204.44	236.26	273.25	-
Surplus	46.90	53.94	36.05	8.57	-12.21	-
Capital Revenue	362.15	102.07	132.93	96.98	148.50	-
Capital Expenditure (B)	437.02	178.86	210.69	165.29	238.19	-
Gross Fixed Capital Formation (GFCF) (C)	425.91	171.36	200.57	149.08	228.87	-
- GFCF Ratio (C / B)	97.5%	95.8%	95.2%	90.2%	96.1%	94.9%
Overall Deficit (D)	-27.97	-22.85	-41.71	-59.74	-101.90	-
- Deficit Ratio (D / A)	-16.9%	-10.8%	-17.3%	-24.4%	-39.0%	-21.7%

Source: Economic Survey 1995, 1996 and 1997, Central Bureau of Statistics

CHAPTER 2 PRESENT SOCIOECONOMIC CONDITIONS

2.1. Administrative Division

2.1.1 Central Government

The administrative division is one of the important basics of the present Study. In Kenya, socioeconomic development including infrastructures are formulated and implemented on the basis of a district unit. Administrative division in Kenya comprises provinces, districts, divisions, locations and sub-locations.

Boundaries of the administrative division in Kenya have been changed year after year, being subjected to a rapid growth of population. At the time of the 1989 Population Census conducted, the number of districts was 41 (Table - 2.1.1). Since then, more new administrative divisions have been created. According to the latest information obtained, the number of districts as of 1997 is 63 (Table - 2.1.1).

It was, however, hardly possible to confirm the latest boundaries of the 63 administrative districts, although the Study Team made the best efforts under assistance of Ministry of Water Resources (MWR) and other government organisations concerned. After discussion with the Technical Committee, it was finally determined that the Study shall be based on the boundaries of the 50 administrative districts (Table - 2.1.1) obtained from "Kenya Administrative Boundary Map (Survey of Kenya, January 1996)," taking account of the availability of the necessary information and data required for the purpose of water supply and sewerage planning. Those of the divisions, locations, sub-locations, and urban centres refer to the 1989 Population Census.

The administrative divisions adopted in the Study are presented in Table - 2.1.2 and summarised in the table below.

Administrative Division in Kenya, 1996

Province	Number of Districts	Number of Divisions	Number of Locations	Number of Urban Centres
Nairobi	1	8	29	1
Central	5	25	129	36
Coastal	6	27	114	22
Eastern	10	44	175	42
North Eastern	3	21	64	15
Nyanza	6	34	164	24
Rift Valley	15	70	344	58
Western	4	27	80	17
Total	50	256	1,099	215

Source: The 1989 Population Census and Kenya Administrative Boundary Map, January 1996, SOK

The Urban Centres are one of the objective areas of the Study for their piped water supply, sanitary treatment and disposal planning. The number of the urban centres is 215, according to the 1989 Population Census (Table - 2.1.3) and is defined as "all city councils, municipal councils, town and county councils, all district headquarters, and all the towns and trading centres having a minimum population of 2000 and potential for future growth".

2.1.2 Local Government

There are four kinds of local governments or local authorities in the country: city, municipal, town, and county councils. The number of the local authorities by province is summarised in the table below.

Number of Local Authorities in Kenya

Province	Number of Local Authorities				Total
	City Council	Municipal Council	County Council	Town Council	
Nairobi	1	-	-	-	-
Central	-	3	6	4	13
Coastal	-	12	17	13	42
Eastern	-	7	12	7	26
North Eastern	1	3	1	5	10
Nyanza	-	8	7	9	24
Rift Valley	-	7	6	8	21
Western	-	6	9	18	33
Total	2	46	58	64	169

Source: MOLA

In order to carry out the Study rationally and effectively, the same coding system adopted by the 1992 NWMP is used as follow.

Coding System of Administrative Divisions

Administrative Unit	Code
Province	Three digits (100 - 900)
District	Two digits (10 - 90)
Division	Single digits (1 - 9)
Location	First decimal figures (0.1 - 0.9)

For urban centres, a serial number is used with initial of "U".

2.2 Population

2.2.1 Population and Regional Distributions

The historical population trend of Kenya and for each province was obtained from the projection made by the Central Bureau of Statistics in 1996, which was based on the latest national population census conducted in 1989. The results of the projection are presented in the table below. Population by district is also illustrated in Table - 2.1.2.

Kenya's population increased significantly at an annual growth rate of 2.8% for the eight years from 1991 to 1998, reaching 29.7 million in 1998. There are two major growth areas in the country. Nairobi had the highest growth rate at 4.2% followed by Rift Valley at 3.5% and the other six were around 2%.

Population and Distribution by Province, 1991 - 1998

(Unit: 1,000)

Province	1991		1992		1993		1994		1995		1996		1997		1998		Average Annual Growth Rate
	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	
Nairobi	1,564	6.4	1,635	6.5	1,708	6.6	1,782	6.7	1,857	6.7	1,932	6.8	2,009	6.9	2,086	7.0	4.2%
Central	3,403	13.9	3,481	13.8	3,559	13.7	3,636	13.6	3,712	13.5	3,782	13.4	3,853	13.3	3,919	13.2	2.0%
Coast	2,031	8.3	2,086	8.3	2,142	8.2	2,195	8.2	2,250	8.2	2,303	8.1	2,353	8.1	2,404	8.1	2.4%
Eastern	4,177	17.1	4,298	17.0	4,417	17.0	4,536	16.9	4,653	16.9	4,767	16.9	4,882	16.8	4,994	16.8	2.6%
North Eastern	585	2.4	603	2.4	621	2.4	640	2.4	657	2.4	674	2.4	692	2.4	708	2.4	2.8%
Nyanza	4,311	17.6	4,428	17.5	4,542	17.5	4,655	17.4	4,767	17.3	4,876	17.3	4,983	17.2	5,087	17.1	2.4%
Rift Valley	5,555	22.7	5,763	22.8	5,976	23.0	6,190	23.1	6,405	23.3	6,621	23.4	6,836	23.6	7,055	23.7	3.5%
Western	2,850	11.6	2,942	11.7	3,036	11.7	3,128	11.7	3,219	11.7	3,311	11.7	3,403	11.7	3,492	11.7	2.9%
NATIONAL	24,476	100.0	25,236	100.0	26,001	100.0	26,762	100.0	27,520	100.0	28,266	100.0	29,011	100.0	29,745	100.0	2.8%

Source: Kenya Population Census 1989, Analytical Report Volume VII, April 1996, Central Bureau of Statistics

In terms of population distribution, Rift Valley is the most populated province with a population of more than 7 million which is followed by Nyanza of 5 million where another growing urban centre of Kisumu is located. The rapidly growing Province of Nairobi, however, has the second smallest share in the country.

2.2.2 Population Density

The historical trend of population density from 1991 to 1998 by province is presented in the table below. Population density by district is further shown in Table - 2.2.1.

Population Density by Province, 1991 – 1998

(Unit: 1,000)

Province	Area (km ²)	1991		1992		1993		1994		1995		1996		1997		1998	
		Pop.	Density	Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²
Nairobi	693	1,564	2.257	1,635	2.359	1,708	2.465	1,782	2.571	1,857	2.650	1,932	2.788	2,009	2.899	2,086	3.010
Central	13,236	3,403	0.257	3,491	0.263	3,559	0.269	3,636	0.275	3,712	0.280	3,792	0.286	3,853	0.291	3,919	0.296
Coast	84,113	2,031	0.024	2,086	0.025	2,142	0.025	2,195	0.026	2,250	0.027	2,303	0.027	2,353	0.028	2,404	0.029
Eastern	154,354	4,177	0.027	4,298	0.028	4,417	0.029	4,536	0.029	4,653	0.030	4,767	0.031	4,882	0.032	4,994	0.032
North-Eastern	126,186	555	0.005	603	0.005	621	0.005	640	0.005	657	0.005	674	0.005	692	0.005	708	0.006
Nyanza	12,507	4,311	0.345	4,428	0.354	4,542	0.363	4,655	0.372	4,767	0.381	4,876	0.390	4,983	0.398	5,087	0.407
Rift Valley	182,412	5,555	0.030	5,763	0.032	5,976	0.033	6,190	0.034	6,405	0.035	6,621	0.036	6,836	0.037	7,055	0.039
Western	8,285	2,550	0.344	2,942	0.355	3,036	0.366	3,128	0.378	3,219	0.389	3,311	0.400	3,403	0.411	3,492	0.421
NATIONAL	581,786	24,476	0.042	25,236	0.043	26,001	0.045	26,762	0.046	27,520	0.047	28,266	0.049	29,011	0.050	29,745	0.051

Source: Kenya Population Census 1989, Analytical Report Volume VII, April 1996, Central Bureau of Statistics

Among the eight provinces, the highest population density has been observed in Nairobi province in the past years and reached at 3,010 persons/km² in 1998, while all the other provinces have not changed so much and stayed around at less than 500 persons/km². The lowest is then found in North Eastern province at only 6 persons/km² where is classified into the arid and semi-arid land.

2.2.3 Urban Population

In addition to the above, the major characteristics of the 215 urban centres in the country are presented in Table - 2.1.3. These urban centres were identified as urban areas in the results of the National Population Census 1989 with criteria of having a minimum population of 2,000 and potential for future growth. It is therefore obvious that a population size of the urban centres varies widely ranging from the smallest population of 186 in Kambu Town Centre (Makueni District) to the largest population of 1,324,570 in Nairobi (Nairobi District) in 1989.

2.3 Household and per Capita Income

The income status of households in Kenya including the mean monthly income from different sources and annual per capita income by province is shown in the table below. Income status by district is presented in Table - 2.3.1.

In general, households earn higher income from wages and salaries than any other sources. Household incomes are high in the provinces with major urban centres where commerce and industry are concentrated. The Province of Nairobi has the highest mean monthly household income of Kshs 16,789, which is about 73% higher than the national average of Kshs 9,696. In Rift Valley Province and Coast Province, the average income level of households are the second highest (Kshs 12,241) and third highest (Kshs 9,893), respectively. On the contrary, the lowest mean household income is found in Western, Nyanza, and Eastern provinces. The mean monthly income of urban households (Kshs 17,673) is more than three times that of rural households (Kshs 5,130). Nationally, the share of mean monthly household income obtained from non agricultural activities constitutes 66.4% while the agricultural income accounts for 33.6%.

Furthermore, the same trend observed by the mean monthly household can be seen the income status by a per capita income, as presented in the table.

Overview of Income Status by Province, Per Capita and Household

Province	Mean Household Size	Annual per Capita Income		Mean Monthly Household Income						
		Per Capita Income (Kshs)	National Average (Index=100)	Total Income (Kshs)	Non Agriculture Income			Agriculture Income		
					Wages (Kshs)	Others (Kshs)	Share (%)	Agriculture (Kshs)	Crops (Kshs)	Share (%)
Nairobi	3.7	62,565	228	16,789	13,557	2,795	97.4	436	2	2.6
Central	5.3	22,262	81	9,268	4,489	1,572	65.4	1,604	1,603	34.6
Coast	5.3	32,547	119	9,893	6,034	1,625	77.4	1,028	1,206	22.6
Eastern	5.8	16,809	61	6,572	3,046	1,138	63.7	1,812	577	36.3
North Eastern	6.1	25,504	93	9,931	3,283	1,926	52.5	4,678	44	47.5
Nyanza	5.0	19,666	72	6,750	2,920	1,457	64.8	1,712	652	35.2
Rift Valley	5.3	30,585	112	12,241	4,863	1,262	50.0	3,892	2,225	50.0
Western	5.8	20,364	74	7,659	3,602	1,158	62.1	1,792	1,107	37.9
NATIONAL	5.2	27,403	100	9,696	4,941	1,497	66.4	2,108	1,149	33.6
- Urban	4.0	51,009	186	17,673	11,266	2,456	77.6	2,534	1,418	22.4
- Rural	5.6	21,305	78	5,130	3,307	1,250	88.8	463	111	11.2

Source: Welfare Monitoring Survey II Basic Report 1994, Central Bureau of Statistics

Notes: Per capita income – Annual Household Incomes / Household Size

2.4 Social Infrastructures

2.4.1 Transportation

Kenya has five major transportation systems: roads, railways, maritime transport, and air transport networks.

The port of Mombasa is the international gateway not only for Kenya but also for Uganda, Rwanda, and Brundi. Roads and railways originate from the Mombasa port. The heaviest concentration of transportation facilities is along the Mombasa-Nairobi corridor, continuing on to the western region and to the Kenya/Uganda border.

The railway networks is about 1,920 km, in total length, consisting of main lines of 1,085 km, principal lines of 345 km and branch lines of 490 km. The main line links the Mombasa port with the Ugandan boarder through Nairobi.

The total road network length is about 160,000 km, comprising classified roads under Ministry of Public Works (MOPW) of 63,000 km and local authority roads under Ministry of Local Authorities (MOLA) and various local authorities of 91,000 km. The road network system is quite similar to that of the railway but has as higher density and covers almost every corners of the country.

2.4.2 Electric Power Supply

Electric power consumption in 1994 was 3,134 GWh, over 99% of which was supplied through the national grid. Of the total consumption, 44% was for the large commercial and industrial consumers, 31% for domestic and small commercial consumers, and 18% for medium commercial and industrial consumers.

The installed generating capacity was 820.8 MW, including 30 MW import from Uganda. The main type of source is hydropower, 598.5 MW, followed by thermal steam (93.0 MW), diesel (47.5 MW), and geothermal (45.0 MW).

The electric power transmission system is operated as an integrated network, with load and generation centres linked by both 132 kV and 220 kV transmission lines. The total circuit lengths of 132 kV and 220 kV lines are 1,980 km and 877 km, respectively. The distribution system is at 66 kV, 40 kV (Nairobi region only), 33 kV, and 11 kV. The country is divided into six distribution systems: Nairobi, Coast, Western, Central, Central Rift, Mt. Kenya and North Rift. Low voltage is at 415/240 V.

2.4.3 Water Supply and Sanitation

Unfortunately there is no accurate statistics data regarding potable water supply and sanitation schemes, though MWR issues a "Status Report " annually for potable water supply only.

The "National Development Plan, 1997 - 2001" states that 75% of the urban population will have access to safe drinking water, while 50% of the rural population has access to potable water from various schemes. By 1994, there were 1,779 water supply projects under major operators, consisting of 931 projects by the public sector (MWR, NWCPC, local authorities) and 848 projects by community, self-help, and NGOs.

As to sanitation, out of 142 gazetted urban areas, only 30% have sewerage system.

2.4.4 Communication

Kenya Posts and Telecommunication Corporation (KPTC) currently provides both postal and telecommunication services.

In 1995, the total number of telephone exchange connections was about 250,000, with a telephone density of 9.4 lines/1,000 people. The telephone exchange capacity was about 377,000 in the same year.

Apart from the above, there were about 2,600 mobile telephones in services. Data service lines of 64 Kb/s are also available for lease by the business community.

CHAPTER 3 RELATED SECTORAL ISSUES AND PLANS

3.1 Related Sectoral Issues

3.1.1 Public Health and Hygiene Conditions

(1) Waterborne Diseases

Provision of safe and portable water, as one of the basic human needs is an important role of the government to save vulnerable population from the severe health situation. They are suffering from waterborne diseases. It was difficult to obtain comprehensive data on waterborne diseases; the only data obtained was from the "Welfare Monitoring Survey II 1996" conducted by Central Bureau of Statistics (CBS) in cooperation with World Bank and UNICEF and presented in the table below. It shows an overview of type of sickness in the country by province including the water-related diseases such as diarrhea and malaria, but excluding the other major waterborne diseases such as typhoid. Further information by district is presented in **Table - 3.1.1**.

Distribution of Morbidity by Type of Sickness by Province

Province Name	Vomit/Diarrhea		Fever/Malaria		Cough / Cold	Wound / Injury	Measles	Skin Rash	Eye Infection	Others
	Case Population %	National Average (Index=100)	Case Population %	National Average (Index=100)	Case Population %	Case Population %	Case Population %	Case Population %	Case Population %	Case Population %
Nairobi	6.4	68.1	47.8	92.8	23.7	2.6	-	4.6	2.4	12.3
Central	6.3	67.0	34.6	67.2	35.7	5.1	0.4	4.8	1.4	11.8
Coast	17.7	188.3	51.1	99.2	51.1	4.1	0.7	1.6	0.8	8.7
Eastern	7.7	81.9	47.1	91.5	27.7	4.1	0.2	2.1	2.0	9.1
North-Eastern	5.7	60.6	52.7	102.3	15.1	4.3	1.3	2.1	4.6	14.2
Nyanza	10.0	106.4	59.4	115.3	13.3	2.9	1.9	2.2	1.8	8.6
Rift Valley	9.1	96.8	50.1	97.3	22.9	3.2	0.6	2.6	1.8	9.7
Western	9.4	57.9	57.9	112.4	16.1	3.9	1.2	2.5	1.0	7.9
NATIONAL	9.4	100.0	51.5	100.0	21.0	3.6	0.9	2.6	1.6	9.4
- Urban	10.4	110.6	50.9	98.8	20.4	2.4	0.2	3.0	1.7	11.1
- Rural	9.2	97.9	51.6	100.2	21.1	3.8	1.0	2.6	1.6	9.1

Source: Welfare Monitoring Survey II Basic Report 1994, Central Bureau of Statistics

The major cause of morbidity in the country still remains fever/malaria, which is one of the water-related diseases, and averaged at 1.5% of the total morbidity population. The province most affected by fever/malaria is Nyanza where 59.4% of the population were affected. There is no significant difference in the incidences of fever/malaria observed between urban areas (50.9%) and rural areas (51.6%), almost staying at the same level as the national average (51.5%).

The incidents of vomit/diarrhea, an another water-related disease, ranked the third highest cause of morbidity. It accounts for 9.4% of the total morbidity population, which is quite lower than the

incidents of fever/malaria. The province affected most by vomit/diarrhea is Coast Province where it affected approximately 17.7% of the population, which is 88% more than the national average.

(2) Accessibility to Safe Water and Sanitation

Public health conditions as measured by accessibility to safe water and sanitation of households is summarised and presented in the two tables below. Information by district is presented in **Table - 3.1.2** and **Table - 3.1.3**, respectively, for safe water and sanitation.

1) Accessibility to Safe Water

Safe water includes treated surface water and untreated and uncontaminated water such as piped water, roof catchment, protected springs, and wells. However, access to safe water does not mean water reliability and availability.

Distribution of Households with Access to Safe Water and Main Water Sources by Province

Province Name	Access to Safe Water		Main Sources of Water									
	Access %	National Average (Index=100)	Piped Water %	River %	Lake/Pond/Dam %	Roof Catchment %	Protected Spring %	Unprotected Spring %	Protected Well %	Unprotected Well %	Bore-hole %	Others %
Nairobi	96.2	214	95.6	2.6	-	-	-	-	0.5	-	-	1.2
Central	45.5	101	36.2	35.3	0.9	3.8	1.8	5.3	3.7	3.2	7.0	2.7
Coast	59.2	132	56.2	11.6	12.4	0.1	0.3	0.7	2.5	5.2	8.6	2.2
Eastern	35.1	78	29.3	37.4	4.6	0.5	2.1	8.1	3.2	9.2	4.0	1.4
North-Eastern	16.9	38	12.7	13.5	33.8	-	0.7	3.9	3.4	15.7	13.9	2.3
Nyanza	28.1	63	9.2	24.8	10.2	3.0	10.1	22.2	5.8	9.3	5.1	0.3
Rift Valley	41.6	93	25.0	32.4	4.1	7.0	2.6	9.9	6.9	6.1	3.9	1.9
Western	42.9	96	14.0	9.1	0.0	4.3	14.1	17.0	10.6	9.4	18.1	3.5
NATIONAL	44.9	100	32.1	24.9	5.3	3.2	4.5	10.2	5.1	6.7	6.3	1.8
- Urban	93.3	208	90.2	3.1	0.0	0.3	0.4	0.7	2.3	0.7	0.7	1.4
- Rural	32.5	72	17.3	30.5	6.6	3.9	5.6	12.6	5.8	8.2	7.7	1.9

Source: Welfare Monitoring Survey II Basic Report 1994, Central Bureau of Statistics

Nairobi province has the highest accessibility at 96.2% in the county, of which the main source of water is piped water (95.6%). The lowest accessibility of 16.9% is in North Eastern province where a large part of the land belongs to Arid, Semi-Arid Lands (ASAL) area, with the top three main sources of water for the province being lake/pond/dams (33.8%), unprotected wells (15.7%), and boreholes (13.9%), which together account for 63.4% of the total. There is quite a large difference in accessibility between urban and rural areas, with urban areas at a quite high ratio of 93.3%, which is 108% higher than the national average. In urban areas, the most main source of water is piped water (90.2%). On the other hand, the ratio for rural area is very low at 32.5%, which is 28% lower than the national average. In the rural areas, the main source of water is the surface runoffs of rivers (30.5%).

It is assumed that the quality of water being taken from rivers is questionable and most likely it is not safe water, which means unsanitary water is being used daily for domestic purposes. The government should control water quality for water supply schemes, particularly for community water supply, on which many people of the country are relying as the main source of water.

2) Accessibility to Sanitation

Access to sanitation is basically defined as the population who has the reasonable access to sanitary means of excreta and waste disposal including outdoor latrines.

Distribution of Households by Access to Sanitation, Type of Toilet and Province

Province Name	Access to Sanitation		Type of Main Toilet					
	Access %	National Average (Index=100)	Pit %	V.I.P %	Bucket %	Water Closet %	Pour Flush %	None %
Nairobi	98.2	122	39.6	4.6	-	26.6	27.4	1.8
Central	99.3	124	90.8	2.3	0.2	2.9	3.2	0.7
Coast	74.6	93	63.6	1.8	-	7.0	2.3	25.4
Eastern	76.6	95	71.5	3.4	0.4	0.3	1.1	23.4
North-Eastern	25.4	32	21.3	1.4	2.0	0.7	-	74.6
Nyanza	72.0	90	66.4	2.3	-	1.8	1.6	28.0
Rift Valley	71.9	89	65.3	1.8	0.2	1.4	3.1	28.1
Western	93.1	116	85.8	2.3	-	3.2	1.9	6.9
NATIONAL	80.4	100	68.6	2.5	0.2	4.5	4.6	19.6
- Urban	97.6	121	50.7	5.0	0.5	20.5	20.8	2.4
- Rural	75.9	94	73.2	1.9	0.1	0.4	0.4	24.1

Source: Welfare Monitoring Survey II Basic Report 1994, Central Bureau of Statistics

Population Served by Sanitation Type in Urban Centres

Urban Centre Characteristics				Sanitation Type								
Population Classification	Urban Centres		Urban Population		Sewerage		Septic Tank		Pit Latrine		None	
	(Nos)	(%)	(000's)	(%)	(000's)	(%)	(000's)	(%)	(000's)	(%)	(000's)	(%)
P>100,000	8	3.7	3,443	65.2	905	26.3	861	25.0	1,549	45.0	128	3.7
100,000>P>20,000	24	11.2	953	18.0	89	9.4	333	35.0	524	55.0	6	0.6
P<20,000	183	85.1	884	16.8	17	1.9	177	20.0	663	75.0	27	3.1
TOTAL	215	100.0	5,280	100.0	1,011	19.2	1,371	26.0	2,737	51.8	161	3.1

Source: Sewerage in Kenya, JICA 1995

The above two tables show the accessibility to sanitation in the different ways. The first table explains the accessibility by the households quoted from "Welfare Monitoring Survey II Basic Report", 1994. The next table presents the accessibility by urban population based on the actual figures for sewerage and the estimate figures for the others made by study team.

According to the survey on households, the highest accessibility to sanitation in the country is found in Nairobi Province at 98.2%, of which pit is the most used type of toilet accounting for 39.6%, followed by pour flush (27.4%) and water closet (26.6%). North Eastern Province has the lowest accessibility at 32%, with 74% of the population not using any type of toilet, followed by pit (21.3%). It is the highest ratio in the country that 74.6% has no toilet facility, compared to the national average for none accounts for 19.6%. Focusing onto urban-rural difference, in urban and rural area, 97.6% and 75.9% have the access to sanitation, respectively, and even the ratio of rural area is closed to the national average of 80.4%. In urban area, the most used toilet is pit (50.7%), followed by pour flush (20.8%) and water closet (20.5%). In rural areas, 73.2% use pit and 24.1% do not use any type of toilet.

Focusing on urban population served by sanitation, it is important to note that only 19.2% of the total urban population have access to sewerage, and most others are largely dependent on either septic tank (26.0%) or pit latrine (51.8%). Compared by population classification, the urban centres with a population more than 100,000 show the highest access percentage to sewerage of 26.3% among the other sanitation facilities, and the other urban centres with less than 100,000 show fairly low access percentage. Of the population in urban centres with sewerage, 89.5% belong to urban centres with population more than 100,000. These situations show that provision of sewerage service is concentrated only in large urban centres, and most others have either no access to sewerage or are dependent on other sanitation facilities such as septic tank and pit latrine.

Although 80.4% of the households have access to sanitation at the national level, the ratio of none toilet facility still stays at 19.6% and 24.1% in the rural area. Many people still suffer from not being provided with any sanitation facilities. It is more importantly noted that the urban centres where the sanitation facility particularly sewerage is highly necessary still have low access to sewerage at 19.9% at the national level. This could be partly explained that development of water supply schemes has not been matched by a corresponding increase in sanitation facilities. This situation should be focussed on further development in sanitation sector, with a proper guideline set by the government to coordinate with water supply sector.

3.1.2 Water Carrying Burden to Women

The women in Kenya are traditionally responsible for collecting water for domestic use in the households. The time and difficulty of the task varies over the country according to the geographic setting, particularly in urban and rural areas. In rural areas, not only is significant time required but the task of carrying water is very physical for the women.

Information by district is presented in **Table - 3.1.4**.

Distribution of Households by Time Taken for Carrying Water by Province

Province Name	Less than 5 Min.		6-30 Min.		31-60 Min.		61-120 Min.		More than 121 Min.	
	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season
	%	%	%	%	%	%	%	%	%	%
Nairobi	84.8	83.2	15.2	16.2	-	0.6	-	-	-	-
Central	43.8	34.8	46.1	52.1	7.5	9.8	2.1	2.4	0.4	0.9
Coast	38.1	33.4	47.1	34.6	10.7	14.3	3.1	7.5	0.9	10.2
Eastern	19.8	13.8	53.8	41.3	19.0	20.6	5.7	13.7	1.6	10.6
North-Eastern	15.8	17.7	42.9	27.0	16.0	14.5	6.0	7.7	19.2	33.1
Nyanza	22.8	16.5	59.7	50.9	14.4	18.5	2.8	8.3	0.1	6.0
Rift Valley	31.6	22.5	53.1	48.6	11.7	15.8	3.2	8.6	0.4	4.5
Western	19.8	14.0	63.2	58.5	13.8	20.1	3.1	6.0	0.1	1.3
NATIONAL	33.9	27.4	50.2	44.8	11.9	15.1	3.1	7.3	0.9	5.5
- Urban	77.0	73.6	20.8	21.9	1.3	3.3	0.6	0.7	0.2	0.4
- Rural	22.8	15.5	57.8	50.6	14.6	18.1	3.8	9.0	1.1	6.8

Source: Welfare Monitoring Survey II Basic Report 1994, Central Bureau of Statistics

The time taken for carrying water varies significantly not only between provinces but also between the dry season and the wet season. In the North Eastern province over 30% of the households spend more than two hours fetching water every day. During the wet season, water can be collected near the homesteads. Notes the task of carrying water particularly during the dry season should not be just explained by time, but also the geographical settings of the area where the women search, collect and transport water. These situations, therefore, harm the health conditions of the women very badly. The table below summarises the major health effects to women caused by the task of carrying water.

Major Health Effects to Women Caused by Carrying Water

Outline of Major Causes and Effects
<ul style="list-style-type: none"> • Burdens by Long-Distance Water Carrying Water carrying requires women to have a substantial amount of energy, but most face a shortfall in available food, particularly in rural areas. This condition usually cause the women to be malnourished, therefore, making them more susceptible to disease such as energy-sapping anaemia during pregnancy.
<ul style="list-style-type: none"> • Burdens by Methods of Water Carrying Most frequently used method of water carrying by women is to carry water on their backs with a head strap, which usually causes women to have headaches and backaches. The backaches further cause sometimes deformation of the spine and, therefore, obstructs birth canal of women, which causes a risk on childbirth for both mother and child.
<ul style="list-style-type: none"> • Accidents during Water Carrying Women often face the accidents during the task on water carrying, major types of which are slipped discs, paralysis, injury to carried children, broken backs, and even strangulation by the head strap.

Source: Women and the Transport of Water

One of the major issues is how to make the women and children in the rural areas free from heavy-overburden water fetching, particularly in ASAL area.

3.1.3 Women in Development

Women in Development (WID) is the terms for the integration of women into socioeconomic development.

Potential Contribution of and Benefits to Women and Community in Water Supply and Sanitation Projects

Project Objectives	Potential Contribution	Potential Benefits
Maximum coverage at Minimum cost	<ul style="list-style-type: none"> • Voluntary contribution to construction work • Motivation of community contribution • Local knowledge for appropriate design • Support for self-reliant improvement of traditional water supply and sanitation 	<ul style="list-style-type: none"> • More households can be served • Avoidance of design mistakes
Continued functioning of facilities	<ul style="list-style-type: none"> • Local knowledge for appropriate design • Participation in maintenance and management 	<ul style="list-style-type: none"> • Avoidance of design mistakes • More control over services • Better functioning of facilities • Recognition of traditional roles in modern functions
Public health impact	<ul style="list-style-type: none"> • General acceptance of facilities • Exclusive and safe use of facilities • More time and water for hygiene, child care and food production • Elimination of local transmission routes of water and sanitation related disease 	<ul style="list-style-type: none"> • Better health for users and their families • Improved public health • Reduction in health costs
Socio-economic development	<ul style="list-style-type: none"> • Economic use of time and energy gains • Economic use of water including grey water • Economic use of waste (compost and biogas) 	<ul style="list-style-type: none"> • Income generation and food production • Increased time for women's organisations, household tasks, child care and education • Enhancement of the status of women
Equitable distribution of contributions and benefits	<ul style="list-style-type: none"> • Local knowledge of needs and capacities 	<ul style="list-style-type: none"> • Access for all • Contributions according to capacity • Employment of poor women

Source: Participation of Women in Water Supply and Sanitation

To what extent a development project has on how considerable and favourable effects on WID are, largely depends on social and cultural backgrounds, and also on social and economic activities of women where the development project is considered to be planned and implemented. The participation of women in water supply and sanitation projects has a significant impact particularly on achieving the sustainability of operating, managing, and maintaining the water supply and sanitation schemes in the rural area, which normally provides several major benefits such as welfare, economic, health, and project benefits. The table above summarises the potential contribution of and benefits to women and community in water supply and sanitation projects.

3.2 Related Sectoral Plans and Programme

3.2.1 Poverty Alleviation Programme

The Social Dimensions of Development (SDD) is a priority policy that the Kenyan government has established to alleviate poverty as 46% of the total population still lives below the poverty line. To ensure a dynamic and interactive SDD programme, the proposed strategy advocates that all the key stakeholders effectively participate in the conceptualisation, implementation, monitoring, and evaluation. In the programme, it is importantly addressed that, at the local level, the SDD programme is to be highly strengthening the coordination and partnerships among the key stakeholders in the delivery of the SDD programme including the governments (both central governments and local authorities), NGOs, the private sector, the donors, the community-based-organisations and other civic organisations. The SDD programme is designed to include precise identification of beneficiary/target groups, efficient reach/adequate coverage of target groups, and sound choices of indicators of vulnerability as the criteria for priority rating.

The implementation strategy and the key priority areas of intervention programmes of the SDD are summarised in the tables below.

SDD Policy and Implementation Strategy of Kenyan Government

Outline of Major Policy and Implementation Strategy
<ul style="list-style-type: none"> • Implementing the remaining economic, structural and institutional reforms that are necessary for the efficient market oriented private sector.
<ul style="list-style-type: none"> • Immediately implement comparable programmes for poverty reduction under the SDD programmes that are consistent with the broad objectives and targets of the economic reform framework with a focus on the structural aspects in Kenya.
<ul style="list-style-type: none"> • Widely consult with all development partners/actors and seek broad consensus on SDD policy and implementation arrangements, refocusing all targeted poverty reduction efforts under the SDD framework, and creation of representative and participatory machinery to complement Government efforts in enhancing transparency and accountability.
<ul style="list-style-type: none"> • Implement a dynamic and interactive SDD programme that enhances national commitment and ownership essential for sustainable poverty reduction.
<ul style="list-style-type: none"> • Reorient and harmonise the SDD institutional arrangements with the District Focus for Rural Development (DFRD) in order to make them more responsive, facilitative and open to local communities.
<ul style="list-style-type: none"> • Consider and accommodate well through alternative SDD delivery systems, in spite of the fact that the Government considers DFRD should be the main delivery systems of the SDD programme.
<ul style="list-style-type: none"> • Mobilise SDD financial resources from donors, private sector NGOs as well as local community actors to complement the Government's limited development resources using broadly defined SDD intervention areas.
<ul style="list-style-type: none"> • Attract new resources, financing arrangements of SDD programme will be flexible enough to permit alternative options, while existing budget system will remain an important channel for SDD resources.

Source: Social Dimensions of Development, the Government of Kenya, 1996

SDD's Key Priority Areas of Intervention Programmes

Programmes	Key Priority Areas of Intervention
Programme 1	<ul style="list-style-type: none"> • Proper labour intensive public investment programmes. • Increased private sector investment in the delivery of basic social service infrastructure i.e. education, health, water and sanitation, roads, housing and shelter.
Programme 2	<ul style="list-style-type: none"> • Women and children in development. • Food and nutrition and population programmes
Programme 3	<ul style="list-style-type: none"> • Promotion of employment creation, small scale enterprises in industry, agriculture and service sectors. • Youth and school leavers development. • Self-help programmes for retrenched workers.
Programme 4	<ul style="list-style-type: none"> • Sustainable environment and resource conservation. • Proper development methodologies. • Decentralised development.
Programme 5	<ul style="list-style-type: none"> • Social mobilisation and sensitisation. • Development of information base for poverty monitoring and evaluation. • Training and institutional capacity building.
Programme 6	<ul style="list-style-type: none"> • Rehabilitation and reintegration of displaced persons. • Promotion of peace and conflict resolution. • Promotion of good governance and protection of human rights. • Provision of security and crime prevention. • Emergency relief.

Source: Social Dimensions of Development, the Government of Kenya, 1996

3.2.2 Arid and Semi-Arid Land Development Plan

The Arid and Semi-Arid Lands (ASAL) in Kenya comprises over 80% of country's total land surface; they have more than 25% of the population and over half of the livestock of the country.

The majority of ASAL population is pastoralist although the semi-pastoral and farming communities are becoming more important. Some of the new farmers are migrants in recently opened irrigation and settlement schemes. Some ASAL areas have pockets of high agricultural potential where crops can be grown successfully and, therefore, irrigated horticultural production has been encouraged with some positive results.

The long term objective of ASAL Development Policy is to improve the standard of living of the ASAL population by integrating ASAL into the mainstream of the national economy and social development in an environmentally sustainable manner, in accordance with the national goal to create employment, generate income and attain food security.

The table below summarises the major objectives of ASAL's nine areas of intervention, such as environment, water resources development, social and community development, livestock development, dryland farming systems development, small-scale irrigation development, small-scale enterprise development, infrastructure development and drought management.

ASAL's Key Priority Areas of Interventions

Outline of Major Objectives of Intervention Areas
<ul style="list-style-type: none"> • Environment Maintain vegetation cover, soil fertility and disease control, which are soil and water conservation, afforestation, control of grazing areas, control of diseases and supply of water to crops, livestock and people.
<ul style="list-style-type: none"> • Water Resources Development Provide water in sufficient quantity and quality for human consumption, livestock, agriculture and agro-forestry with an emphasis on development of both surface and ground water sources through water harvesting and supply technologies.
<ul style="list-style-type: none"> • Social and Community Development Provide social facilities such as schools, health centres and recreation facilities with close local participation to identify the specific local needs as perceived by the people themselves, so that the social facilities provided will be better utilised.
<ul style="list-style-type: none"> • Livestock Development Ensure that the role of livestock in the pastoral and nomadic community food security systems is to be strengthened and supplemented through the improved disease control, range rehabilitation, production of supplementary feed and food crops using water harvesting techniques and various agro-silvo-pastoral systems.
<ul style="list-style-type: none"> • Dryland Farming Systems Development Continue to develop and demonstrate low-cost outrays of technical packages through an accelerated Farming Systems Development (FSD) programme, whose major components include agro-forestry species, new drought resistant maize and sorghum varieties-the latter grown on rationing mode for feed.
<ul style="list-style-type: none"> • Small-Scale Irrigation Development Secure more efficient use of water for agricultural production in ASAL area where river basins are far from by using water harvesting techniques of all kinds, and intensify ground water exploration in the ground water potential areas to enable the production of high-value crops such as cotton, horticulture crops, fruits and so on.
<ul style="list-style-type: none"> • Small-Scale Enterprise Development Match the efforts and resources allocated to local conditions, resources and needs in order to utilise the limited local resources in due consideration with the comparative advantage of alternative local centres, therefore contributing to increasing the level of local income, both public and private.
<ul style="list-style-type: none"> • Infrastructure Development Provide physical infrastructure such as roads, power, water, banking and credit in ASAL area to stimulate the local market and the development of a cash economy, therefore making ASAL area to be self-sustaining in development.
<ul style="list-style-type: none"> • Drought Management Respond to hunger in a controlled and measured way so that people will not be obliged to abandon their way of life, to migrate to towns or move into relief camps.

Source: Development Policy for the Arid and Semi-Arid Lands, 1992, the Government of Kenya.

3.2.3 National Environmental Action Programme

The National Environment Action Plan (NEAP) formally adopted by the government in June 1994 set the framework to deal with crucial urban and coastal environmental problems that needed to be urgently addressed.

Outline of National Environment Action Plan (NEAP)

A. Major Strategies
• Enhance the harmonisation, implementation and enforcement of laws for the management, sustainable use and protection of the environment.
• Provide economic incentives and penalties to encourage sustainable use of natural resources and to minimise pollution.
• Assess and evaluate in economic terms the value of standing, unexploited natural resources and ecological functions.
• Institutionalise the process of environment impact assessment and monitoring for public and programmes.
• Provide strong and effective environmental coordination and monitoring, by creating a single autonomous organisation.
• Enhance the involvement of local communities in the management of natural resources and their living environment. In addition, promote the participation of all parties (local communities, business, industry and NGOs) in projects and programmes for conservation and development.
• Enhance environment management capacities by training professionals and raising awareness at all levels.
• Conduct research in a wide range of disciplines, including biodiversity, biotechnology, indigenous knowledge, waste management, gaseousemissions, disaster management, human settlement development and alternative forms of energy.
• Maintain system of protected areas and create others to conserve biodiversity, generate income and provide recreation.
• Address underlying causes of desertification, including socioeconomic factors, and establish mechanism to mitigate the effects of drought.
• Formulate comprehensive land use and settlement policy to regulate human activities in order to minimise their negative impacts on the environment..
• Improve decision-making processes by developing an efficient national environment education and information system within easy reach of users in all parts of the country.
• Enhance cooperation with regional and international environment programmes, treaties and agreements.
B. NEPA's Major Concerns on Water Supply and Sewerage Sectors
• Be charged economic rates for water use and effluent treatment.
• Be provided basic infrastructure necessary for efficient disposal of effluents and pollutants (sewerage, etc.)
C. NEPA's Major Actions Already Taken for Water Supply and Sewerage Sectors
• Study done on the establishment of an authority to manage the proposed environmental legislation, including environmental impact assessment (EIA).

Source: NEAP Newsletter, August 1996, Ministry of Environment and Natural Resources

Major strategies of NEAP are summarised in the table above, with the major concerns and major actions already taken for water supply and sanitation sectors.

3.2.4 National Tourism Development Master Plan

The National Tourism Development Master Plan was prepared by the Ministry of Tourism and Wildlife in cooperation with the technical assistance of the Japan International Cooperation Agency (JICA) in 1995. The main components of the master plan are threefold: (1) a long-term tourism development strategy, (2) a national tourism development master plan, and (3) a tourism development plan for priority zones. The priority tourism zones (TRs) established in the master plan are: Turkana TR, Western TR, Northern TR, Tana Basin TR, Central TR, Eastern TR, and Masailand TR.

For the tourism development master plan, infrastructure plans were prepared and included in the five-year action programme to better facilitate basic infrastructure for tourism development. The infrastructure projects related to water supply and sanitation are summarised in the table below. All the projects listed in the five-year action programme are at the community level where most major tourism points are located. The master plan assumes that water demand from tourism sector is considered in the public urban water supply and sanitation projects and, therefore, can be absorbed.

Five-Year Action Programme for the National Tourism Development Master Plan, 1996-2000
- With a Focus on Water Supply and Sewerage Development Projects -

(Unit for Investment Costs: Kf million)

Project Name	Priority Tourism Development Area	Project Description	Total Investment Costs & Schedule 1996-2000						Completion Target Year	
			1996	1997	1998	1999	2000	Total	Before 2000	After 2000
Water Supply Projects			0.1	0.3	0.6	0.8	0.8	2.6		
Karen Town Community	Central Tourism Region	Incremental Capacity: 1,052 m ³ /d	-	-	-	-	-	-	X	
South Limuru Community		Incremental Capacity: 7,222 m ³ /d	-	-	-	-	-	-	X	
Mt. Elgon Community	Western Tourism Region	Incremental Capacity: 358 m ³ /d	-	-	-	-	-	-	X	
Lake Baringo Community		Incremental Capacity: 950 m ³ /d	-	-	-	-	-	-		
Shimoni Community	Coastal Tourism Region	Incremental Capacity: 1,158 m ³ /d	-	-	-	-	-	-		X
Funzi Bay Community		Incremental Capacity: 273 m ³ /d	-	-	-	-	-	-		X
South Diani Community		Incremental Capacity: 3,800 m ³ /d	-	-	-	-	-	-	X	
Gazi Bay Community		Incremental Capacity: 525 m ³ /d	-	-	-	-	-	-	X	
North Mamburi Community		Incremental Capacity: 614 m ³ /d	-	-	-	-	-	-		X
Watamu Enlargement		Incremental Capacity: 700 m ³ /d	-	-	-	-	-	-	X	
North watamu Enlargement		Incremental Capacity: 700 m ³ /d	-	-	-	-	-	-		X
West Lamu Community		Incremental Capacity: 301 m ³ /d	-	-	-	-	-	-	X	
Sewerage Projects			0.5	0.9	3.1	4.5	4.7	13.7		
Karen Town Community	Central Tourism Region	Sewered Area: 35 ha	-	-	-	-	-	-		X
		Sewered Area: 60 ha	-	-	-	-	-	-		X
Mt. Elgon Community	Western Tourism Region	Sewered Area: 9 ha	-	-	-	-	-	-		X
Lake Baringo Community		Sewered Area: 33 ha	-	-	-	-	-	-		X
Shimoni Community	Coastal Tourism Region	Sewered Area: 43 ha	-	-	-	-	-	-		X
South Diani Community		Sewered Area: 160 ha	-	-	-	-	-	-	X	
Gazi Bay Community		Sewered Area: 18 ha	-	-	-	-	-	-	X	
North Mamburi Community		Sewered Area: 25 ha	-	-	-	-	-	-		X
Watamu Enlargement		Sewered Area: 800 ha	-	-	-	-	-	-	X	
West Lamu Community		Sewered Area: 10 ha	-	-	-	-	-	-		X

Source: The Study on the National Tourism Master Plan in the Republic of Kenya (Volume 1: Master Plan), JICA 1995

Note: Investment Costs for sewerage projects include waste disposal projects

3.2.5 District Development Plan 1997-2001

A District Development Plan (DDP) 1997-2001 was prepared by each district, in line with preparing the Eighth National Development Plan 1997-2001. The latest available DDPs were collected by the Study Team to understand the priority projects of MWR and MOLA listed in DDPs. However, of the total of 60 DDPs, only 39 DDPs were collected. The others were, unfortunately, not available.

In the 39 DDPs, there are a total of 1,026 priority projects listed by MWR and MOLA including both on-going projects (452) and newly proposing projects (574), each of which accounts for approximately 44% and 56% of the total, respectively. All of these projects are presented in Table - 3.2.1. Of the total, 648 were found to be water-related projects including water supply

projects (602), sewerage projects (39), and water and sewerage projects (7). Water supply projects were found to be most dominant, accounting for approximately 93% to the total.

CHAPTER 4 FINANCIAL MANAGEMENT OF WATER SUPPLY AND SANITATION SECTOR

4.1 Public Expenditure

4.1.1 Overall Situations of Public Expenditure

The historical trend of public expenditure on water supply and sewerage by MWR and MOLA is shown in the table below for the period of 1993/93 to 1996/97.

Historical Trend of Public Expenditure on Water Supply Sector, 1992/93-1996/97

Item	1992/93		1993/94		1994/95		1995/96		1996/97		Average
	1992/93	100.0	141.735	100.0	257.123	100.0	261.928	100.0	266.349	100.0	
A. Ministry of Water Resources (MWR)											
Recurrent Expenditure by MWR	38 018	31.1	51 063	36.0	74 267	29.1	83 572	31.9	82 155	30.8	31.8
Net Expenditure	(34 885)	(91.8)	(45 976)	(90.0)	(69 533)	(93.0)	(77 723)	(93.0)	(75 001)	(91.3)	(91.8)
Appropriation-in-Aid	(3 133)	(8.2)	(5 087)	(10.0)	(5 234)	(7.0)	(5 849)	(7.0)	(7 134)	(8.7)	(8.2)
Development Expenditure by MWR	84 042	68.9	90 672	64.0	182 356	70.9	178 356	66.1	184 214	69.2	68.2
Net Expenditure	(33 870)	(40.3)	(42 388)	(46.7)	(65 552)	(35.9)	(78 347)	(43.8)	(77 396)	(42.0)	(41.8)
Appropriation-in-Aid	(50 172)	(59.7)	(48 284)	(53.3)	(116 804)	(64.1)	(100 009)	(56.1)	(106 818)	(58.0)	(58.2)
Share of Water Supply and Sewerage Development Expenditure in MWR (%)	69.3	-	70.3	-	82.2	-	81.8	-	92.7	-	79.2
Development Expenditure for Water Supply and Sewerage Sector by MWR	58 240	100.0	63 698	100.0	149 857	100.0	145 875	100.0	170 754	100.0	-
Net Expenditure	(27 042)	(46.4)	(36 085)	(56.7)	(56 964)	(38.0)	(66 181)	(46.7)	(71 050)	(41.6)	(45.9)
Appropriation-in-Aid	(31 198)	(53.6)	(27 613)	(43.3)	(92 895)	(62.0)	(77 694)	(53.3)	(99 704)	(58.4)	(54.1)
B. Ministry of Local Authorities (MOLA)											
Recurrent Expenditure by MWR	9 002	9.6	11 020	10.1	16 659	10.7	14 010	13.8	27 221	13.7	11.6
Net Expenditure	8 924	99.1	10 961	99.5	15 600	99.6	13 946	99.5	27 156	99.8	99.5
Appropriation-in-Aid	0 078	0.9	0 059	0.5	0 059	0.4	0 064	0.5	0 065	0.2	0.5
Development Expenditure by MOLA	84 704	90.4	98 319	89.9	139 430	89.3	87 398	86.2	172 138	86.3	88.4
Net Expenditure	(20 499)	(24.2)	(19 156)	(19.5)	(30 388)	(21.8)	(38 661)	(44.2)	(40 987)	(23.8)	(26.7)
Appropriation-in-Aid	(64 205)	(75.8)	(79 163)	(80.5)	(109 042)	(78.2)	(48 737)	(55.5)	(131 151)	(76.2)	(73.3)
Share of Water Supply and Sewerage Development Expenditure in MOLA (%)	81.7	-	87.6	-	83.2	-	89.0	-	92.0	-	85.7
Development Expenditure for Water Supply and Sewerage Sector by MOLA	69 197	100.0	86 092	100.0	116 025	100.0	77 753	100.0	158 427	100.0	-
Net Expenditure	(11 783)	(17.0)	(9 613)	(11.2)	(28 752)	(24.8)	(35 681)	45.9	(33 727)	(21.3)	(24.0)
Appropriation-in-Aid	(57 414)	(83.0)	(76 479)	(88.8)	(87 273)	(75.2)	(42 072)	(54.1)	(124 700)	(78.7)	(76.0)

Source: Development Estimates and Estimates of Recurrent Expenditure, 1992/93-1997/98
Economic Survey 1997 Central Bureau of Statistics

Development expenditure largely exceeds recurrent expenditure for both MWR and MOLA. The share of development expenditure of MWR averaged 68.2% of the total expenditure in the past years of 1992/93 to 1996/97, and the share of MOLA is 88.4%. These figures are quite high compared to the share of the development expenditure of 21.5% at a national level. The appropriation-in-aid in MWR and MOLA takes up more than a half of the development expenditure, and the share is averaged at 58.2% and 73.3%, respectively. These figures are also considered quite high compared to the national average of 53.6%.

4.1.2 Public Expenditure by Sub-Sector

(1) Water Supply Sector

The following summary table presents the water supply expenditure of MWR and MOLA for the period from 1992/93 to 1996/97.

Historical Trend of Development Expenditure on Water Supply Sector by MWR and MOLA and Project Type 1992/93-1996/97

(Unit: K£ million)

	1992/93		1993/94		1994/95		1995/96		1996/97		Average
Ministry of Water Resources (MWR)	122.060	100.0	141.735	100.0	257.123	100.0	261.928	100.0	266.349	100.0	-
Water Development	2.885	5.0	1.272	2.0	28.607	19.1	21.999	15.1	32.454	19.0	12.0
Net Expenditure	(0.502)	(17.4)	(0.482)	(37.9)	(4.867)	(17.0)	(2.683)	(12.2)	(6.525)	(20.1)	(20.9)
Appropriation-in-Aid	(2.383)	(82.6)	(0.790)	(62.1)	(23.740)	(83.0)	(19.316)	(87.8)	(25.929)	(79.9)	(79.1)
Training of Water Development Staff	0.155	0.3	0.095	0.1	1.120	0.7	2.737	1.9	0.594	0.3	0.7
Net Expenditure	(0.155)	(100.0)	(0.095)	(100.0)	(0.120)	(10.7)	(0.137)	(5.0)	(0.094)	(15.8)	(46.3)
Appropriation-in-Aid	(0.000)	(0.0)	(0.000)	(0.0)	(1.000)	(89.3)	(2.600)	(95.0)	(0.500)	(84.2)	(53.7)
Rural Water Supply	15.446	26.5	12.074	19.0	24.768	16.5	17.298	11.9	21.227	12.4	17.3
Net Expenditure	(7.456)	(48.3)	(5.328)	(44.1)	(18.135)	(73.2)	(15.188)	(87.8)	(18.887)	(88.9)	(68.5)
Appropriation-in-Aid	(7.990)	(51.7)	(6.746)	(55.9)	(6.633)	(26.8)	(2.110)	(12.2)	(2.350)	(11.1)	(31.5)
Self Help Water Supply	0.078	0.1	0.040	0.1	0.164	0.1	0.056	0.0	0.031	0.0	0.1
Net Expenditure	(0.078)	(100.0)	(0.040)	(100.0)	(0.164)	(100.0)	(0.056)	(100.0)	(0.031)	(100.0)	(100.0)
Appropriation-in-Aid	(0.000)	(0.0)	(0.000)	(0.0)	(0.000)	(0.0)	(0.000)	(0.0)	(0.000)	(0.0)	(0.0)
Urban Water Supply and Sewerage	4.990	8.6	3.892	6.1	4.855	3.2	3.080	2.1	5.033	2.8	4.6
Net Expenditure	(4.875)	(97.7)	(3.777)	(97.0)	(4.655)	(95.9)	(1.980)	(64.3)	(2.153)	(42.8)	(79.5)
Appropriation-in-Aid	(0.115)	(2.3)	(0.115)	(3.0)	(0.200)	(4.1)	(1.100)	(35.7)	(2.880)	(57.2)	(30.5)
Special Water Programs	6.070	10.4	3.616	5.7	5.580	3.7	3.307	2.3	4.844	2.8	5.0
Net Expenditure	(1.272)	(21.0)	(0.641)	(17.7)	(0.940)	(16.8)	(0.827)	(25.0)	(1.905)	(39.4)	(34.0)
Appropriation-in-Aid	(4.798)	(79.0)	(2.975)	(82.3)	(4.640)	(83.2)	(2.480)	(75.0)	(2.935)	(60.6)	(76.0)
Water Conservation and Pipeline Corporation	28.616	49.1	42.709	67.0	84.763	56.6	97.398	66.8	106.561	62.4	60.4
Net Expenditure	(12.704)	(44.4)	(25.722)	(60.2)	(28.083)	(33.1)	(47.310)	(48.6)	(41.451)	(38.9)	(45.0)
Appropriation-in-Aid	(15.912)	(55.6)	(16.987)	(39.8)	(56.680)	(66.9)	(50.088)	(51.4)	(65.110)	(61.1)	(55.0)
Ministry of Local Authorities (MOLA)	93.706	100.0	109.339	100.0	156.089	100.0	161.408	100.0	199.359	100.0	-
Local Authorities Water Supply Schemes	61.818	89.3	79.367	92.2	65.982	56.9	41.841	53.8	98.465	62.2	70.9
Net Expenditure	(9.603)	(15.5)	(8.018)	(10.1)	(24.221)	(36.7)	(21.269)	(59.8)	(22.565)	(22.9)	(27.2)
Appropriation-in-Aid	(52.215)	(84.5)	(71.349)	(89.9)	(41.761)	(63.3)	(20.572)	(49.2)	(75.900)	(77.1)	(72.8)

Source: Development Estimates and Estimates of Recurrent Expenditure, 1992/93-1997/98
Economic Survey 1997 Central Bureau of Statistics

MWR has provided a large amount of subsidy to NWCP, which takes up approximately 60% of the development expenditure of MWR, although NWCP has its own income and manages less water supply projects than MWR. Excluding the expenditure of NWCP, rural water supply has the highest share of 17.3%. The lowest share of 0.1% is then found to be self-help water supply. In MOLA, the expenditure for water supply sector accounts for 70.9% on an average in the total expenditure for water supply and sewerage sector.

(2) Sanitation Sector

The following summary table illustrates the sanitation expenditure of MOLA for the period from 1992/93 to 1996/97

Historical Trend of Public Expenditure on Sanitation Sector, 1992/93-1996/97

(Unit: K£ million)

	1992/93		1993/94		1994/95		1995/96		1996/97		Average
Ministry of Local Authorities (MOLA)	93,706	100.0	109,339	100.0	156,089	100.0	101,408	100.0	199,539	100.0	-
Recurrent Expenditure by MOLA	9,002	9.6	11,020	10.1	15,639	10.7	14,010	13.8	27,221	13.7	11.6
Net Expenditure	8,924	99.1	10,961	99.5	15,600	99.6	13,946	99.5	27,156	99.8	99.5
Appropriation-in-Aid	0,078	0.9	0,059	0.5	0,059	0.4	0,064	0.5	0,063	0.2	0.5
Development Expenditure by MOLA	84,704	90.4	98,319	89.9	139,450	89.3	87,398	86.2	172,318	86.3	88.4
Net Expenditure	(20,499)	(24.2)	(19,156)	(19.5)	(30,386)	(21.8)	(38,661)	(44.2)	(40,987)	(23.8)	(26.7)
Appropriation-in-Aid	(64,205)	(75.8)	(79,163)	(80.5)	(109,042)	(78.2)	(48,337)	(55.8)	(131,151)	(76.2)	(73.3)
Share of Water Supply and Sewerage Development Expenditure in MOLA (%)	81.7	-	87.6	-	83.2	-	89.0	-	92.0	-	-
Development Expenditure for Water Supply and Sewerage Sector by MOLA	69,197	100.0	85,092	100.0	116,025	100.0	77,753	100.0	158,427	100.0	-
Net Expenditure	(11,783)	(17.0)	(9,613)	(11.2)	(28,752)	(24.8)	(35,681)	(45.9)	(33,727)	(21.3)	(24.0)
Appropriation-in-Aid	(57,414)	(83.0)	(76,479)	(88.8)	(87,273)	(75.2)	(32,072)	(34.1)	(124,700)	(78.7)	(76.0)
Local Authorities Sewerage Schemes	7,379	10.7	6,725	7.8	50,043	43.1	35,912	46.2	59,562	37.8	29.1
Net Expenditure	(2,180)	(29.5)	(1,595)	(23.7)	(4,531)	(9.1)	(14,412)	(40.1)	(11,162)	(18.6)	(24.2)
Appropriation-in-Aid	(5,199)	(70.5)	(5,139)	(76.3)	(45,512)	(90.9)	(21,509)	(59.9)	(48,800)	(81.4)	(75.8)

Source: Development Estimates and Estimates of Recurrent Expenditure, 1992/93-1997/98
Economic Survey 1997 Central Bureau of Statistics

Of the total development expenditure of MOLA, the expenditure for sanitation sector accounts only for 29.1% on an average, since a large part of the expenditure of MOLA is spent for water supply sector (70.9%). Appropriation-in-aid takes up approximately 76% on an average of development expenditure, which is considered quite high.

4.2 Public Investment Programme, 1997/98 - 1999/2000

Although there might have been various reasons in implementing a large number of the projects as mentioned in subsequent section, it is quite necessary to consider more effective and rational way of investing and then completing the projects in a shorter period of time as possible, in line with the strategies set forth in "Public Investment Programme (PIP), 1997/98 - 1999/2000."S

The Government of Kenya prepared "Public Investment Programme, 1997/98-1999/2000" in December 1996. The programme sets forth ministries' strategies, policies and programmes. For the public water supply and sanitation sector, MWR and MOLA are the responsible ministries. Their strategies and core projects are quoted from PIP.

4.2.1 Investment Strategies

(1) MWR

The MWR's strategy is divided into three components: water development, regional and irrigation development, and ASAL development. Among them, the strategy only for water development is summarised:

- 1) First priority will be given to the rehabilitation and augmentation of several water projects all over the country.
- 2) Second priority will be given to the ongoing projects and programmes which have been identified as being of high priority.
- 3) In addition, MWR will concentrate resources on rehabilitation of existing water facilities to improve on utilisation of existing capacity and increase coverage.
- 4) MWR attaches great importance to the proper management of water resources in the country to ensure their rational exploitation now and in future.
- 5) MWR will continue to encourage the private sector to upgrade its role in water resources conservancy. Community participation will be encouraged at all levels of project cycle and will thus be sensitised to develop partnership approach in the water sector. The eventual goal will be hand over the water facilities to be run by beneficiaries themselves.
- 6) MWR will encoding and promote the use of appropriate and low cost technologies that easy to install, operate and maintain to extend water coverage. MWR will gradually move away from massive projects to small scale manageable community based water projects.
- 7) MWR will work with MOH and MOLA to monitor the dangers of contamination of rivers and open water bodies.
- 8) Attention will be given to water and sanitation problems resulting from rapid growth of population coupled with inadequate effluent and waste treatment facilities, particularly in slum areas.

(2) MOLA

- 1) MOLA will continue the target of "the Seventh National Development Plan, 1994 - 96" which stresses the need to curb rural - urban migration and the need to focus development resources to small urban centres throughout the country.
- 2) The strategy to achieve the above goal is through the improvement of infrastructures, giving emphasis to markets, slaughterhouse, water supply, sewerage and roads.
- 3) The other strategy to curb rural-urban immigration is to formulate and articulate urban development policies.
- 4) MOLA promotes this goal by guiding, assisting and overseeing the administration of local authorities.
- 5) MOLA emphasises the provision of technical assistance and training of local authority staff.
- 6) MOLA's investment programme aims at supporting the growth of a strong local government system. MOLA's strategy is to make project investment programme, project identification, design, implementation and maintenance reality. The strategy is to ensure that local authorities operate sound cost recovery practices in regard to all investment.
- 7) Local authorities also provide residential and central services to people in and around their areas of jurisdiction.
- 8) MOLA will utilise funds from the proposed Social Dimension Programme to keep up such project as water supply, sanitation and upgrading settlements.

4.2.2 Investment Priorities

Of the number of investment priorities, only water supply and sewerage sector are summarised below:

(1) MWR

- 1) Provision of safe drinking water to the vulnerable groups through rehabilitation of dams and pans, boreholes and piped water schemes, to ensure full capacity utilisation of existing facilities.
- 2) Concentrate on on-going water projects and programmes throughout the country to ensure timely completion and faster realisation of benefits by consumers.
- 3) Planning, assessment, conservation and protection of water resources, especially the water catchment areas and water bodies.
- 4) Development and strengthening of humans and physical infrastructure in ASAL.
- 5) Strengthening the communities' participation and involvement in determining and executing development approaches for sustainable development.
- 6) Completion and maintenance of rural water and urban water supplies.
- 7) Increase the provision of water supplies in ASAL areas to speed up development.

(2) MOLA

In regard to general investment priorities, the emphasis of MOLA is on facilitating the provision of infrastructures for local authorities. MOLA's priority in the large urban centres include among others:

- 1) Complete the on-going projects.
- 2) Undertake projects with donors and GOK commitments
- 3) Appraise project investment in small towns to promote the National Policy of decentralisation and rural/urban balance.

4.2.3 Core Projects

A complete list of all PIP projects prepared by MWR and MOLA are presented in Table - 4.2.1 and Table - 4.2.2, respectively. There are a total of 313 projects listed by MWR and 56 projects by MOLA. Among these projects, 27 are considered core projects by MWR and 24 by MOLA. There are 18 water-related projects listed by MWR and 8 by MOLA. These core projects are further grouped into three types of projects, namely, GOK-funded projects, external fund projects and new projects and presented as follows:

(1) MWR

Of the 18 water-related core projects of MWR, 10 projects are GOK-funded projects, and the other 8 are external fund projects. In terms of project status, all are on-going projects.

1) GOK-Funded Projects

- i) Construction of Water Supplies, Livestock Programme
- ii) Livestock and Water Supplies Development, ENSD
- iii) Water Supply/Livestock Development & Marketing - CDA
- iv) Construction of Water Supplies – Sacho Remo/Kabasis/Secretounln
- v) Construction of Water Supplies – Rehab (SDD)
- vi) Construction of Water Supplies – Luma Urban
- vii) Construction of Water Supplies – Kibirichia
- viii) Construction of Water Supplies – Maseno
- ix) Construction of Water Supplies – Solai/Menengai
- x) Construction of Water Supplies – Ngata/Kiboron

2) External Fund Projects

- i) Kajiado ASAL
- ii) Laikipia ASAL
- iii) West Pokot ASAL
- iv) Elgeyo Marakwet ASAL
- v) Coastal ASAL Development Programme
- vi) Construction of Water Supplies – Garissa
- vii) 2nd Mombasa and Coastal Water Supply
- viii) Training of Water Personnel - KWI

(2) MOLA

MOLA lists totally 8 water-related core projects in PIP. Of these projects, 7 are external projects, and 1 is a new project.

1) External Fund Projects

- i) Murang's Sewerage
- ii) Kericho Municipal Council Sewerage
- iii) Kapsabet Town Sewerage
- iv) Bungoma Municipal Council Sewerage
- v) Nairobi Water III
- vi) Thika Municipal Council Water Supply
- vii) Eldoret Municipal Water

2) New Projects

- i) Sanitation Improvement in Nyanyuki (SDD)

4.2.4 Investment Costs

(1) MWR

Total investment costs of all PIP projects selected by MWR are estimated at approximately Kshs 2,591 million, 74% of which are budgeted for core projects totally about 664 million.

Investment costs of all the PIP projects are summarised in the table below. Further information is presented in Table – 4.2.3.

Investment Costs for Public Investment Programme, 1997/1998 - 1999/2000
– MWR -

(Unit: 1,000 Kshs)

	No. of Projects	Costs/ Project	GOK Fund	External Fund		Estimated Costs		
				External Grant	External Loan			
Water Related Core Projects (A)	18	20,361	176,172	52,380	(27.5%)	137,945	(72.5%)	366,497
			48.1%	51.9%			100.0%	
Total Core Projects	27	24,599	219,486	58,380	(13.1%)	386,313	(86.9%)	664,179
			33.0%	(67.0%)			100.0%	
Water Related PIP Projects (B)	201	9,526	714,499	870,413	(72.5%)	329,867	(27.5%)	1,914,779
			37.3%	62.7%			100.0%	
Total PIP Projects	313	8,279	1,239,492	602,148	(44.5%)	749,685	(55.5%)	2,591,325
			47.8%	52.2%			100.0%	

The major highlights are:

- 1) Most of the projects are financed through external fund. The dependency ratio of external fund to the total estimated costs is found to be high at approximately 67% for all core projects and 52% for all PIP projects. The same trend is found in water-related projects as well.
- 2) Among the projects financed through external fund, core projects are found to be largely financed through external loan, whose dependency ratio is 72.5% for water-related core projects and 86.9% for all core projects.
- 3) Focusing on costs per project, core projects obtain more funds than the other PIP projects. Costs of each core project are averaged at Kshs 20.36 million for water-related core projects and Kshs 24.59 million for all core projects. On the other hands, the other PIP projects get much less than core projects, whose costs are averaged at Kshs 9.5 million for water-related projects and Kshs 8.27 million for total PIP projects.

(2) MOLA

Total investment costs of all PIP projects selected by MOLA are estimated at approximately Kshs 1,176 million, 86% of which are budgeted for core projects totally about 1,007 million.

Investment costs of all the PIP projects selected by MOLA are summarised in the table below. Further information is presented in Table – 4.2.4, as well as MWR.

Investment Costs for Public Investment Programme, 1997/1998 - 1999/2000
- MOLA -

(Unit: 1,000 Kshs)

	No. of Projects	Costs/ Project	GOK Fund	External Fund		Estimated Costs
				External Grant	External Loan	
Water Related Core Projects (A)	8	83,171	53,870	9,500 (1.6%)	602,000 (98.4%)	665,370
			8.1%	91.9%		100.0%
Total Core Projects	24	41,992	66,297	339,513 (36.1%)	602,000 (63.9%)	1,007,810
			6.6%	(93.4%)		100.0%
Water Related PIP Projects (B)	30	25,642	90,945	9,500 (1.4%)	668,800 (98.6%)	769,245
			11.8%	88.2%		100.0%
Total PIP Projects	56	21,006	116,472	364,087 (34.4%)	695,800 (65.6%)	1,176,359
			9.9%	90.1%		100.0%

The major highlights are:

- 1) Compared to MWR, the dependency ratio of external fund to the total estimated costs is found to be extremely higher at approximately 93% for all core projects and 90% for all PIP projects. A very small portion is contributed by GOK fund.
- 2) Among the projects financed through external fund, core projects are found to be largely financed through external loan as the same situations found in MWR, whose ratio is 98.4% for water-related core projects and 63.4% for all core projects. Particularly, water-related core projects are almost fully financed through external fund.
- 3) In terms of costs per project, core projects get more funds than the other PIP projects, as the same as MWR. Costs of each core project are, however, much higher than those of MWR and then averaged at Kshs 83.17 million for water-related core projects and 41.99 million for all core projects. The other PIP projects then get much less than core projects, averaging at Kshs 25.64 million for water-related projects and Kshs 21.0 million for total PIP projects.

CHAPTER 5 POPULATION PROJECTION

5.1 Projection Methodology

Population projection for the Study was made on the basis of the projection done up to the year 2000 by the Central Bureau of Statistics in 1996, which was based on the results of the 1989 Population Census.

For the purpose of the Study, population needed to be extrapolated to the final planning year of 2010. The projected population was thereafter adjusted by the national population framework set in the current Eighth National Development Plan 1997-2000 and the Sessional Paper No. 1 of 1994 on Recovery and Sustainable Development to the Year 2010.

In order to verify the accuracy of the projection done by the Study Team, another projection was attempted using a projection model developed by World Bank. The model incorporated average patterns of molar HIV prevalence. The results of both projections were found to be fairly close, as presented in **Table - 5.1.1**. The projection was, therefore, substantiated.

5.2 National Population

The framework of the projected population and the distribution by urban-rural area from 1990 to 2010 is summarised in the table below. Projection by district is presented in **Table - 5.2.1**.

According to the projection, annual average growth rate of total population will fall largely from 3.0% in the years of 1990 to 1995 to 1.6% in the years of 2005 to 2010, so the overall average will be 2.3% over the years of 1990 to 2010. The decline of the population was considered due to an increasing trend of deaths by HIV/AIDS and decreasing trend of fertility rates in the country.

Summary of Population Projection, 1990 - 2010

	1990	1990-1995	1995	1995-2000	2000	2000-2005	2005	2005-2010	2010	1990-2010
	Projected Population	Annual Average Growth Rate	Projected Population	Annual Average Growth Rate	Projected Population	Annual Average Growth Rate	Projected Population	Annual Average Growth Rate	Projected Population	Annual Average Growth Rate
Total Population	23.7	3.0%	27.52	2.5%	31.18	2.1%	34.55	1.6%	37.40	2.3%
Urban Population	4.07 (17.2%)	5.2% -	5.28 (19.2%)	7.1% -	7.44 (23.9%)	6.1% -	10.02 (29.0%)	2.8% -	11.50 (30.7%)	5.3%
Rural Population	19.63 (82.8%)	2.5% -	22.24 (80.8%)	1.3% -	23.74 (76.1%)	0.7% -	24.53 (71.0%)	1.1% -	25.90 (69.3%)	1.4%

Source: Kenyan Population Census 1989, Analytical Report Vol. VII, April 1996
The Eighth National Development Plan 1997 - 2001
Sessional Paper No. 1 of 1994 on Recovery and Sustainable Development to the Year 2001

The total population of the country will reach 37.5 million by the year 2010. This is approximately 58% higher than in 1990. Urban population will have an annual average growth rate at 5.3% from 1990 to 2010 and reach 11.5 million by the year 2010. The urban population

will account for approximately 30% of the total population in 2010. On the other hand, rural population will annually grow at a low rate of 1.4% on average and reach 25.9 million by the year 2010. The total rural population will account for approximately 70% of the total population in 2010. The projection of urban-rural population by district from 1991 to 2010 is presented in Table – 5.2.2.

5.3 Urban Centre Population

Population for 215 urban centres identified in the National Population Census 1989 was projected up to the year 2010 by applying an average growth rate estimated from the population projection of the urban centres in the National Water Master Plan 1992. Population projection of the urban centres is presented in Table-5.3.1.

Change of Urban Centres in Number and Population, 1995 – 2010

Urban Centre Classification	1995				2000				2005				2010			
	Nos.	%	Population	%	Nos.	%	Population	%	Nos.	%	Population	%	Nos.	%	Population	%
P>100,000	8	3.7	3,443,14	65.2	11	5.1	4,875,02	65.5	17	7.9	6,991,12	69.8	19	8.8	8,259,42	71.8
20,000<P<100,000	24	11.2	952,45	18.0	40	18.6	1,660,20	22.3	49	22.3	2,066,89	20.6	54	25.1	2,348,67	20.4
5,000<P<20,000	60	27.9	625,46	11.8	70	32.6	690,68	9.3	70	32.6	740,76	7.4	68	31.6	692,42	6.0
1,000<P<5,000	87	40.5	232,10	4.4	85	39.5	207,81	2.8	75	34.9	207,25	2.1	71	33.0	197,26	1.7
P<1,000	39	16.7	26,833	0.5	9	4.2	6,267	0.1	5	2.3	3,964	0.0	3	1.4	2,212	0.0
TOTAL	215	100.0	5,280,00	100.0	215	100.0	7,440,00	100.0	215	100.0	10,010,00	100.0	215	100.0	11,500,00	100.0

Source: JICA Study Team

The table above summarises the total number and population of the 215 urban centres by population classification for the planning period of 1995 to 2010, which gives an overall picture of urbanisation projected for the next twenty years. More detail information of the urban centres by population classification is presented in Table - 5.3.2, which lists the urban centres sorted by classification and population size.

The table above also shows that each urban centre will shift from one classification to another as the population of each urban centre grows from 1995 to 2010. Total population of the urban centres less than 5,000 will go down slightly by the year 2010 at an average annual growth rate of -1.7%. But, for the urban centres more than 20,000, total population will grow significantly at a 6.0% annual average. The total population of the urban centres between 5,000 and 20,000 will remain at almost the same level both in number and population.

- PART I : SOCIOECONOMY -

TABLES

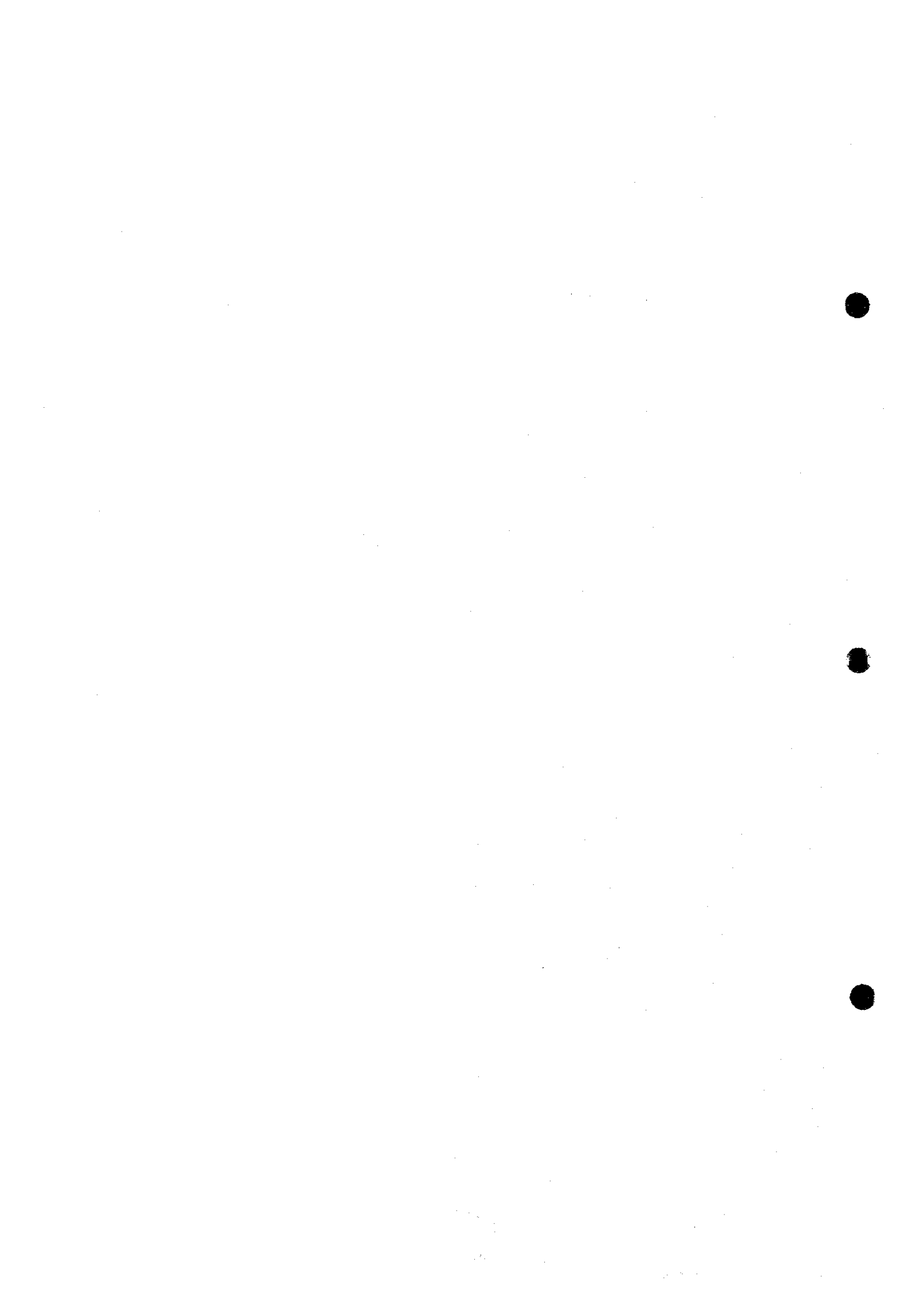


Table - 2.1.1 Historical Change of Administrative Division in Kenya

Province	Year	1959	1996	1997
	Number of Districts	41	50	63
	Remarks	1959 Population Census ¹⁾	Base for the Study ²⁾	Latest Confirmed
Nairobi	1	Nairobi	Nairobi	Nairobi
Central	2	Kiambu	Kiambu	Thika
	3			Kiambu
	4	Kirinyaga	Kirinyaga	Kirinyaga
	5	Muranga	Muranga	Muranga
	6			Maragua
	7	Nyandarua	Nyandarua	Nyandarua
	8	Nyeri	Nyeri	Nyeri
Coast	9	Kilifi	Kilifi	Kilifi
	10			Malindi
	11	Kwale	Kwale	Kwale
	12	Lamu	Lamu	Lamu
	13	Mombasa	Mombasa	Mombasa
	14	Taita	Taita	Taita
	15	Tana River	Tana River	Tana River
Eastern	16	Embu	Embu	Embu
	17			Mbeere
	18	Kitui	Kitui	Kitui
	19			Mwingi
	20	Isiolo	Isiolo	Isiolo
	21	Meru	Meru	Meru
	22		Tharaka Nithi	Tharaka Nithi
	23		Nyambene	Nyambene
	24	Machakos	Masaku	Machakos
	25		Makueni	Makueni
	26	Marsabit	Marsabit	Marsabit
	27			Moyale
North Eastern	28	Garissa	Garissa	Garissa
	29	Mandera	Mandera	Mandera
	30	Wajir	Wajir	Wajir
Nyanza	31	Kisii	Gusii	Kisii
	32		Nyamira	Nyamira
	33	Kisumu	Kisumu	Kisumu
	34	Siaya	Siaya	Siaya
	35	South Nyanza	Homa Bay	Suba
	36		Migori	Migori
	37			Kuria
	38			Hoabay
	39			Rachuonyo
Rift Valley	40	Kajiado	Kajiado	Kajiado
	41	Kericho	Kipsigis	Kericho
	42		Bomet	Bomet
	43	Laikipia	Laikipia	Laikipia
	44	Nakuru	Nakuru	Nakuru
	45	Narok	Narok	Narok
	46		Transmara	Transmara
	47	Trans Nzoia	Trans Nzoia	Trans Nzoia
	48	Uasin Gishu	Uasin Gishu	Uasin Gishu
	49	Baringo	Baringo	Baringo
	50			Koibatek
	51	Marakwet	Marakwet	Keiyo
	52			Marakwet
	53	Nandi	Nandi	Nandi
	54	Samburu	Samburu	Samburu
	55	Turkana	Turkana	Turkana
	56	West Pokot	West Pokot	West Pokot
Western	57	Bungoma	Bungoma	Mr. Elgon
	58			Bungoma
	59	Busia	Busia	Busia
	60			Teso
	61	Kakamega	Vihiga	Vihiga
	62		Kakamega	Kakamega
	63			Malava-Lugari

Sources: 1) Kenya Population Census 1959, March 1994, Central Bureau of Statistics
2) Kenya Administrative Boundary Map, January 1996, Survey of Kenya
3) Kenya Parliamentary Constituencies Map, December 1997, Survey of Kenya

Table - 2.1.2 Distribution by District, 1991 - 1998

(Unit: 1,000 for Population)

Province	Code	District	1991		1992		1993		1994		1995		1996		1997		1998		Average Annual Growth Rate
			Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	
Nairobi	110	Nairobi	1,564	6.4	1,635	6.5	1,708	6.6	1,782	6.7	1,857	6.7	1,932	6.8	2,009	6.9	2,086	7.0	
Central	210	Kisumu	1,644	4.3	1,072	4.2	1,100	4.2	1,128	4.2	1,156	4.2	1,182	4.2	1,209	4.2	1,234	4.1	2.4%
	220	Kirinyaga	412	1.7	426	1.7	435	1.7	444	1.7	453	1.6	461	1.6	469	1.6	477	1.6	1.9%
	230	Muranga	516	3.7	535	3.7	554	3.7	572	3.6	590	3.6	1,006	3.6	1,023	3.5	1,038	3.5	1.6%
	240	Nyandarua	358	1.5	368	1.5	378	1.5	388	1.4	398	1.4	408	1.4	417	1.4	426	1.4	2.5%
	250	Nyeri	668	2.7	680	2.7	692	2.7	704	2.6	715	2.6	725	2.6	735	2.5	744	2.5	1.6%
			3,403	13.9	3,451	13.8	3,559	13.7	3,636	13.6	3,712	13.5	3,782	13.4	3,853	13.3	3,919	13.2	2.0%
Coast	310	Kilifi	659	2.7	677	2.7	696	2.7	714	2.7	732	2.7	750	2.7	767	2.6	784	2.6	2.5%
	320	Kwale	428	1.7	439	1.7	450	1.7	460	1.7	471	1.7	481	1.7	491	1.7	501	1.7	2.3%
	330	Lamu	65	0.3	67	0.3	69	0.3	71	0.3	73	0.3	75	0.3	76	0.3	78	0.3	2.6%
	340	Mombasa	517	2.1	531	2.1	545	2.1	559	2.1	573	2.1	586	2.1	600	2.1	612	2.1	2.4%
	350	Taita	215	0.9	220	0.9	225	0.9	230	0.9	235	0.9	240	0.8	244	0.8	249	0.8	2.1%
	360	Tana River	147	0.6	152	0.6	157	0.6	161	0.6	166	0.6	171	0.6	175	0.6	180	0.6	2.9%
				2,031	8.3	2,066	8.3	2,142	8.2	2,195	8.2	2,250	8.2	2,303	8.1	2,353	8.1	2,404	8.1
Eastern	410	Embu	402	1.6	414	1.6	425	1.6	436	1.6	448	1.6	458	1.6	469	1.6	480	1.6	2.6%
	420	Isiolo	78	0.3	81	0.3	85	0.3	88	0.3	91	0.3	94	0.3	98	0.3	101	0.3	3.8%
	430	Kitui	437	1.8	450	1.8	462	1.8	475	1.8	487	1.8	500	1.8	512	1.8	524	1.8	2.6%
	440	Masaku	743	3.0	763	3.0	783	3.0	804	3.0	823	3.0	842	3.0	862	3.0	880	3.0	2.5%
	450	Marsabit	143	0.6	147	0.6	150	0.6	154	0.6	157	0.5	161	0.6	164	0.6	167	0.6	2.2%
	460	Mera	516	2.1	532	2.1	547	2.1	562	2.1	577	2.1	592	2.1	607	2.1	621	2.1	2.7%
	470	Nyambene	490	2.0	505	2.0	519	2.0	534	2.0	548	2.0	562	2.0	576	2.0	590	2.0	2.7%
	480	Tharaka Nithi	284	1.2	292	1.2	301	1.2	309	1.2	317	1.2	326	1.2	334	1.2	342	1.1	2.7%
	490	Mwingi	279	1.1	287	1.1	296	1.1	304	1.1	312	1.1	319	1.1	327	1.1	335	1.1	2.6%
	4A0	Makueni	805	3.3	827	3.3	849	3.3	870	3.3	892	3.2	913	3.2	933	3.2	954	3.2	2.5%
			4,177	17.1	4,298	17.0	4,417	17.0	4,536	16.9	4,653	16.9	4,767	16.9	4,882	16.8	4,994	16.8	2.6%
North-Eastern	510	Garissa	198	0.8	203	0.8	209	0.8	215	0.8	220	0.8	226	0.8	231	0.8	236	0.8	2.5%
	520	Mandera	190	0.8	188	0.8	206	0.8	215	0.8	223	0.8	231	0.8	240	0.8	248	0.8	3.9%
	530	Wajir	197	0.8	202	0.8	206	0.8	210	0.8	214	0.8	217	0.8	221	0.8	224	0.8	1.9%
			585	2.4	603	2.4	621	2.4	640	2.4	657	2.4	674	2.4	692	2.4	708	2.4	2.8%
Nyanza	610	Gusii	1,153	4.9	1,233	4.9	1,268	4.9	1,303	4.9	1,337	4.9	1,371	4.9	1,405	4.8	1,437	4.8	2.6%
	620	Kisumu	792	3.2	814	3.2	836	3.2	857	3.2	878	3.2	899	3.2	919	3.2	939	3.2	2.5%
	630	Siaya	698	2.9	711	2.8	722	2.8	733	2.7	744	2.7	754	2.7	763	2.6	771	2.6	1.4%
	640	Homa Bay	802	3.3	825	3.3	848	3.3	871	3.3	893	3.2	915	3.2	937	3.2	958	3.2	2.6%
	650	Migori	558	2.3	574	2.3	590	2.3	605	2.3	621	2.3	636	2.2	651	2.2	666	2.2	2.6%
	660	Nyanira	263	1.1	271	1.1	278	1.1	286	1.1	294	1.1	301	1.1	308	1.1	315	1.1	2.6%
				4,311	17.6	4,428	17.5	4,542	17.5	4,655	17.4	4,767	17.3	4,876	17.3	4,983	17.2	5,087	17.1
Rift Valley	710	Kajiado	284	1.2	297	1.2	310	1.2	324	1.2	338	1.2	352	1.2	366	1.3	381	1.3	4.3%
	720	Kipsigis	543	2.2	562	2.2	582	2.2	602	2.2	622	2.3	642	2.3	661	2.3	681	2.3	3.3%
	730	Laikipia	247	1.0	257	1.0	268	1.0	279	1.0	291	1.1	302	1.1	313	1.1	325	1.1	4.0%
	740	Nakuru	947	3.9	987	3.9	1,028	4.0	1,069	4.0	1,111	4.0	1,154	4.1	1,196	4.1	1,240	4.2	3.9%
	750	Narek	281	1.1	295	1.2	310	1.2	326	1.2	342	1.2	358	1.3	374	1.3	391	1.3	4.9%
	760	Trans Nzoia	447	1.8	464	1.8	481	1.8	499	1.9	516	1.9	534	1.9	551	1.9	569	1.9	3.5%
	770	Uasin Gishu	509	2.1	528	2.1	547	2.1	566	2.1	585	2.1	604	2.1	623	2.1	642	2.2	3.4%
	780	Reinet	521	2.1	540	2.1	559	2.2	578	2.2	597	2.2	616	2.2	636	2.2	655	2.2	3.3%
	790	Transmara	151	0.6	159	0.6	167	0.6	175	0.7	184	0.7	193	0.7	202	0.7	211	0.7	4.9%
	810	Baringo	376	1.3	386	1.3	397	1.3	407	1.3	417	1.3	427	1.3	437	1.3	447	1.3	2.9%
	820	Elgeyo Marakwet	239	1.0	247	1.0	255	1.0	262	1.0	270	1.0	278	1.0	285	1.0	293	1.0	3.0%
	830	Nandi	494	2.0	511	2.0	528	2.0	545	2.0	562	2.0	579	2.0	596	2.1	613	2.1	3.1%
	840	Samburu	122	0.5	126	0.5	130	0.5	134	0.5	137	0.5	141	0.5	145	0.5	148	0.5	2.8%
	850	Turkana	192	0.8	195	0.8	197	0.8	199	0.7	201	0.7	203	0.7	204	0.7	205	0.7	0.9%
860	West Pokot	252	1.0	259	1.0	267	1.0	275	1.0	282	1.0	289	1.0	297	1.0	304	1.0	2.7%	
			5,555	22.7	5,763	22.8	5,976	23.0	6,190	23.1	6,405	23.3	6,621	23.4	6,836	23.6	7,055	23.7	3.5%
Western	910	Bungoma	827	3.4	858	3.4	889	3.4	920	3.4	951	3.5	982	3.5	1,014	3.5	1,045	3.5	3.4%
	920	Busia	435	1.8	446	1.8	458	1.8	469	1.8	480	1.7	491	1.7	502	1.7	512	1.7	2.4%
	930	Nakanya	1,032	4.2	1,065	4.2	1,098	4.2	1,130	4.2	1,162	4.2	1,195	4.2	1,227	4.2	1,258	4.2	2.9%
	940	Vihiga	556	2.3	573	2.3	591	2.3	609	2.3	626	2.3	643	2.3	660	2.3	677	2.3	2.9%
			2,850	11.6	2,942	11.7	3,036	11.7	3,128	11.7	3,219	11.7	3,311	11.7	3,402	11.7	3,492	11.7	2.9%
NATIONAL			24,476	100.0	25,236	100.0	26,001	100.0	26,762	100.0	27,520	100.0	28,266	100.0	29,011	100.0	29,745	100.0	2.8%

Source: Kenya Population Census 1989, Analytical Report Volume VII, April 1996, Central Bureau of Statistics

Table - 2.1.3 (1/5) Urban Centre and Its Population in 1989

Province	Code	District	Code	Urban Centre Name	Code	Location Name	Population in 1989 Census (nos)	Area (km ²)	Population Density (nos/km ²)		
Nairobi	110	Nairobi	U - 1	Nairobi	110.0	Nairobi	1,324,570	693.00	1,911		
Central	210	Kiambu	U - 2	Githunguri	215.1	Githunguri	3,673	2.00	1,837		
			U - 3	Karuri	211.1	Kiambaa	14,929	0.93	16,139		
			U - 4	Kiambu	211.4	Kiambaa S/ Area	6,522	2.59	2,521		
			U - 5	Kikuyu	216.6	Kikuyu	6,247	1.78	3,519		
			U - 6	Limuru	213.1	Limuru	1,742	1.00	1,742		
			U - 7	Ndumberi	211.3	Ndumberi	5,763	1.25	4,610		
			U - 8	Ruiru	214.1	Ruiru	23,316	18.79	1,241		
			U - 9	Thika	214.4	Thika Municipality	57,603	52.64	1,094		
						District Total			119,795	80.96	1,480
			220	Kirinyaga	U - 10	Baricho	222.4	Mwena	940	0.96	984
	U - 11	Kagumo			222.1	Mutira	498	0.30	1,660		
	U - 12	Kerugoya/Kutus			222.6	Inoi South	9,585	1.96	4,903		
	U - 13	Kianyaga			223.3	Baragwi	406	0.39	1,055		
	U - 14	Kimunye			223.2	Kabare	823	0.56	1,462		
	U - 15	Sagana			222.5	Kiine South	2,546	2.94	867		
	U - 16	Waguru			221.1	Tebere	3,093	0.68	4,582		
						District Total			17,891	7.77	2,302
	230	Murang'a	U - 17	Kandara	236.1	Muruka	582	0.40	1,473		
			U - 18	Kangema	233.4	Iyego	1,277	1.60	798		
			U - 19	Makuyu	235.1	Makuyu	2,607	1.33	1,968		
			U - 20	Maragua	232.3	Nginda	30,931	83.00	373		
			U - 21	Muranga	234.3	Mbirri	21,650	11.66	1,856		
						District Total			57,047	97.98	582
	240	Nyandarua	U - 22	Engineer Town	245.2	Engineer	446	0.46	963		
			U - 23	Mairo Inya	243.3	Kiriita	1,473	0.71	2,066		
			U - 24	Miharali	244.1	Wanjohi	1,058	0.59	1,809		
			U - 25	Murungaru	245.2	Engineer	743	0.70	1,061		
			U - 26	Nduya Njeru	245.1	North Kinangop	1,141	1.22	939		
			U - 27	Njabini	245.3	Njabini	1,265	0.46	2,780		
			U - 28	Nyabururu	246	Nyabururu Township	14,829	17.00	872		
			U - 29	Oi Joro Orok	242.2	Gathanji	646	0.46	1,395		
			U - 30	Oi Kalou	241.3	Oi Kalou	2,546	4.58	556		
U - 31			Wanjohi	244.1	Wanjohi	825	0.68	1,208			
					District Total			24,972	26.86	930	
250			Nyeri	U - 32	Endarasha	252.3	Endarasha	2,358	0.84	2,807	
				U - 33	Karatina	254.7	Karatina Town	5,554	2.00	2,777	
	U - 34	Mweiga		252.1	Mweiga	1,557	2.65	588			
	U - 35	Naro Moru		251.2	Naro Moru	1,379	3.07	450			
	U - 36	Nyeri		257.1	Mukaro	91,258	167.00	546			
	U - 37	Othaya		255.1	Karima	4,811	1.33	3,631			
					District Total			106,917	176.88	604	
Coastal	310	Kilifi	U - 38	Kilifi	313.1	Tezo	14,145	8.18	1,730		
			U - 39	Majengo	313.5	Mtwapa	1,984	1.20	1,653		
			U - 40	Malindi	314.4	Malindi Town	34,047	15.58	2,186		
			U - 41	Mamburi	314.6	Magarini	2,951	7.22	409		
			U - 42	Mariakani	311.3	Mariakani	8,372	5.00	1,674		
			U - 43	Watamu	314.3	Gede	2,089	2.11	992		
						District Total			63,588	39.27	1,619
			320	Kwale	U - 44	Kwale	321.1	Tshimba	3,510	7.75	453
	U - 45	Lungalunga			324.4	Lungalunga	7,926	3.35	2,370		
	U - 46	Msamwani			324.1	Msamwani	5,680	3.49	1,628		
						District Total			17,116	14.58	1,174

Table - 2.1.3 (2/5) Urban Centre and Its Population in 1989

Province	Code	District	Code	Urban Centre Name	Code	Location Name	Population in 1989 Census (nos)	Area (km ²)	Population Density (nos/km ²)
Coastal (cont'd)	330	Lamu	U - 47	Lamu	333.1	Amu	8,959	1.00	8,959
			U - 48	Matondon T.C	333.1	Amu	1,728	0.45	3,840
			U - 49	Mokowe T.C	333.2	Makowe	1,842	4.11	449
			U - 50	Mpeketoni T.C	332.2	Mpeketoni	631	0.93	682
			U - 51	Witu	331.0	Witu	1,200	0.29	4,167
				District Total			14,360	6.77	2,122
	340	Mombasa	U - 52	Mombasa	340.0	Mombasa	461,753	282.00	1,637
	350	Taita	U - 53	Mwatate	354.4	Mwatate	1,659	3.68	451
			U - 54	Taveta	351.1	Chala/ Kimirigo	10,378	7.93	1,310
			U - 55	Voi	352.4	Voi	13,202	16.05	823
			U - 56	Wundanyi	353.2	Wundanyi	2,764	1.71	1,616
				District Total			28,003	29.36	954
	360	Tana River	U - 57	Bura & Madogo	361.3	Madogo	608	18.19	33
					362.3	Bura			
			U - 58	Garsen	364.1	Bilisa	3,186	3.15	1,011
U - 59			Hola	363.3	Zabaki	9,508	13.40	710	
			District Total			13,302	34.74	383	
Eastern	410	Embu	U - 60	Embu	413.7	Embu Municipality	26,525	24.00	1,105
			U - 61	Runyenjes	414.4	Kagaari South	1,979	3.06	646
						District Total			28,504
	420	Isiolo	U - 62	Garbatula	422.1	Garbatula	1,077	1.95	552
			U - 63	Isiolo	421.1	Central	16,824	12.82	1,313
			U - 64	Madogash	424.2	Madogash	2,010	2.20	914
			U - 65	Merti	423.1	Merti	4,957	6.48	766
				District Total			24,868	23.44	1,061
	430	Kitui	U - 66	Kavati	434.1	Mutunguni	569	0.51	1,110
			U - 67	Kalungu	432.2	Endau	555	0.90	615
			U - 68	Kitui	431.4	Changwithya	9,305	6.00	1,551
				District Total			10,429	7.41	1,407
	440	Masaku	U - 69	Ashi River	442.3	Settlement Area	13,072	14.53	900
			U - 70	Kathiani T.C	442.2	Mitaboni	854	0.49	1,750
			U - 71	Machakos	441.1	Muputi	116,293	723.00	161
			U - 72	Masii T.C	443.3	Masii	669	1.16	575
			U - 73	Masinga	446.2	Masinga	753	1.46	515
			U - 74	Matuu	444.1	Matuu	2,849	1.30	2,192
			U - 75	Mitaboni	442.2	Mitaboni	655	0.54	1,220
			U - 76	Syathani	443.2	Mwala	791	0.56	1,405
			U - 77	Tala + Kangundo	445.1	Kangundo	10,880	26.54	410
						445.2	Matungulu		
				U - 78	Wamunyu	443.3	Wamunyu	906	0.48
			District Total			147,722	770.06	192	
450	Marsabit	U - 79	Kargi	452.2	Kargi	4,055	1.87	2,165	
		U - 80	Korr	453.1	Korr	5,161	1.90	2,716	
		U - 81	Laisamis	453.2	Logologo	1,215	3.73	326	
		U - 82	Marsabit	454.1	Mountain	11,113	6.05	1,837	
		U - 83	Moyale	456.2	Butije	7,049	5.74	1,228	
		U - 84	North Horr	451.1	North Horr	2,080	2.18	956	
		U - 85	Sololo	455.2	Sololo	3,640	13.75	265	
			District Total			34,313	35.21	974	
460	Meru	U - 86	Meru	461.4	Ntima	94,947	10.54	9,008	
		U - 87	Nkubu	463.1	Nkuene	5,138	3.30	1,556	
			District Total			100,085	13.84	7,230	
470	Nyambene	U - 88	Lare	471.1	Athima	1,270	1.40	907	
		U - 89	Maua	472.1	Maua	4,175	1.95	2,141	
			District Total			5,445	3.35	1,625	
480	Tharaka Nithi	U - 90	Choka	481.3	Karingani	4,258	6.93	614	
490	Mwingi	U - 91	Mwingi	493.1	Mwingi	3,742	3.79	988	

Table - 2.1.3 (3/5) Urban Centre and Its Population in 1989

Province	Code	District	Code	Urban Centre Name	Code	Location Name	Population in 1989 Census (nos)	Area (km ²)	Population Density (nos/km ²)
Eastern (cont'd)	4A0	Makueni	U - 92	Kambu T.C	4A4.3	Mito Andei	186	0.20	930
			U - 93	Kibwezi	4A4.4	Kikumbulyu	2,432	1.35	1,804
			U - 94	Kikima	443.4	Wamunyu	1,879	2.16	869
			U - 95	Kilala Market	443.6	Kibauni	611	0.21	2,875
			U - 96	Machinery T.C	4A4.4	Kikumbulyu	390	0.29	1,354
			U - 97	Mbumbuni Market	4A1.4	Kisau	248	0.30	827
			U - 98	Mito Andei	4A4.3	Mito Andei	3,854	1.38	2,803
			U - 99	Sultan Hamud	4A2.2	Kasikeu	1,529	1.06	1,438
			U - 100	Tawa Market	4A1.3	Kiteta	755	1.80	419
			U - 101	Wote	4A3.1	Makueni	1,294	0.55	2,374
				District Total			13,178	9.30	1,417
North Eastern	510	Garissa	U - 102	Dadaab	518.0	Dadaab	1,228	5.26	233
			U - 103	Damajare	512.2	Damajare	573	3.13	183
			U - 104	Garissa	519.2	Township	31,319	40.32	777
			U - 105	Liboi	512.1	Liboi	2,380	10.38	229
			U - 106	Mudo Gashe	513.1	Modogashe	1,004	2.05	490
							District Total		36,504
	520	Mandera	U - 107	Banissa	525.1	Banissa	723	8.75	83
			U - 108	Elwak	523.1	Elwak	7,473	168.00	44
			U - 109	Mandera	521.1	Township	22,699	25.58	887
			U - 110	Rhamu	526.2	Rhamu	4,878	66.00	74
			U - 111	Takaba	526.1	Takaba	1,873	10.15	185
							District Total		37,646
	530	Wajir	U - 112	Buna	536.2	Buna	846	35.15	24
			U - 113	Bute	534.1	Bute	2,593	16.05	162
			U - 114	Eldas	535.4	Eldas	1,854	3.18	584
			U - 115	Wagalla	535.1	Wagalla	734	15.18	48
			U - 116	Wajir	532.4	Wajir Township	19,382	133.00	146
							District Total		25,409
Nyanza	610	Gusii	U - 117	Kisii	615.0	Kisii Municipality	44,149	34.00	1,299
			U - 118	Ogembo	617.1	Majoge Chache	899	0.22	4,086
							District Total		45,048
	620	Kisumu	U - 119	Ahero	623.1	South East Kano	9,097	3.15	2,893
			U - 120	Kisumu	622.6	Township	192,733	141.00	1,367
			U - 121	Maseno	626.5	North East Kano	3,331	6.42	519
			U - 122	Muhoroni	626.2	Muhoroni East	9,538	5.48	1,742
							District Total		214,699
	630	Siaya	U - 123	Asiro	634.3	South Alego	2,922	0.81	3,594
			U - 124	Bondo	636.1	East Ungenya	1,936	1.81	1,070
			U - 125	Siaya	634.1	East Alego	16,103	12.03	1,339
			U - 126	Ukwala	636.2	Ukwala	1,083	1.93	563
			U - 127	Usenge T.C	632.7	West Yimbo	1,248	0.21	5,859
			U - 128	Yala	633.2	East Gem	2,141	3.03	708
							District Total		25,433
	640	Homa Bay	U - 129	Homa Bay	641.7	Homa Bay	23,335	18.00	1,296
			U - 130	Kendu Bay	645.6	North Karachuonyo	2,694	1.46	1,845
			U - 131	Mbita	642.4	Gembe	4,497	0.67	6,712
			U - 132	Ndhiwa	643.4	Kanyamwa / Kosewe	1,611	2.33	691
			U - 133	Oyugis	644.4	Central Kasipul	4,933	2.40	2,055
					District Total		37,070	24.86	1,491
	650	Migori	U - 134	Awendo/Sare	651.9	East Sakwa	6,982	4.14	1,686
			U - 135	Kehancha	654.1	Bukira East	2,082	3.43	607
			U - 136	Migori	652.2	Suna Cental	12,274	7.96	1,542
U - 137			Nyabikaye	654.2	Bukira West	3,656	0.89	4,108	
U - 138			Rongo	651.2	Central Kamagambo	3,401	2.00	1,701	
				District Total		28,395	18.42	1,542	
660	Nyaniria	U - 139	Keroka	663.1	East Kitutu	2,321	1.05	2,210	
		U - 140	Nyaniria + Kebirigo	665.2	Ekerubo	6,338	2.63	2,410	
						District Total		8,659	3.68

Table - 2.1.3 (4/5) Urban Centre and Its Population in 1989

Province	Code	District	Code	Urban Centre Name	Code	Location Name	Population in 1989 Census (nos)	Area (km ²)	Population Density (nos/km ²)
Rift Valley	710	Kajiado	U - 141	Kajiado	713.1	Ildamat	6,326	31.00	204
			U - 142	Magadi	714.1	Magadi	3,139	0.59	5,320
			U - 143	Namanga	713.5	Namanga	4,710	4.18	1,128
			U - 144	Ngong	712.3	Ngong	8,775	3.86	2,273
			U - 145	Oloitokitoki	711.1	Odomongi	5,922	22.56	263
			U - 146	Ongata Longai	712.3	Ngong	17,288	9.45	1,829
				District Total			46,160	71.63	644
	720	Kipsigis	U - 147	Keduwa	724.2	Kedowa	357	2.38	150
			U - 148	Kericho	721.7	Kericho Municipality	48,511	8.00	6,064
			U - 149	Kipkelion	722.1	Kipchorian	2,319	6.07	382
			U - 150	Litein	723.4	Kisira	1,575	0.66	2,386
			U - 151	Lendiani	724.1	Londian	3,988	6.59	605
			U - 152	Sotik	723.2	Techoget	3,725	2.16	1,725
				District Total			60,475	25.86	2,339
	730	Laikipia	U - 153	Nanyuki	731.5	Nanyuki	24,070	26.65	903
			U - 154	Rumuruti	733.4	Rumuruti	2,434	9.26	263
				District Total			26,504	35.91	738
	740	Nakuru	U - 155	El Burgon	747.3	Elburgon	12,072	4.53	2,668
			U - 156	Gilgil	743.2	Gilgil	14,304	3.87	3,701
			U - 157	Molo	747.1	Molo	11,175	4.13	2,709
			U - 158	Naivasha	744.1	Naivasha	34,519	9.89	3,490
			U - 159	Nakuru	749.0	Nakuru Municipality	163,927	108.00	1,518
			U - 160	Njoro	746.1	Njoro	9,026	6.88	1,313
			U - 161	Rongai	745.2	Rongai	908	0.78	1,164
				District Total			245,931	138.06	1,781
	750	Narok	U - 162	Nairagie (Enkare)	752.5	Keekonyoike	543	0.33	1,671
			U - 163	Narok	752.9	Oloitoto	11,629	9.00	1,292
				District Total			12,172	9.33	1,305
	760	Trans Nzoia	U - 164	Kitale	762.1	Kitale Municipality	56,218	91.80	612
	770	Uasin Gishu	U - 165	Burn Forest	774.6	Olare	2,041	3.00	680
			U - 166	Eldoret	772.2	Kiplombe	111,882	89.27	1,253
					773.1	Kapseret			
					773.4	Tulwet			
					773.5	Kapsoya			
			U - 167	Lemok	773.1	Kapseret	3,444	7.73	446
			U - 168	Magoon	773.2	Ngeria	566	1.60	354
			U - 169	Moi's Bridge	771.2	Moi's Bridge	2,833	1.20	2,361
			U - 170	Simat	773.1	Kapseret	5,732	12.24	468
			U - 171	Soy	772.1	Soy	1,037	1.05	988
			U - 172	Turbo	772.3	Turbo	3,096	0.67	4,621
				District Total			130,631	116.76	1,119
	780	Bomet	U - 173	Bomet	782.4	Ekwen	765	1.57	457
	790	Transmara	U - 174	Kilgoris	791.2	Moitani West	5,059	3.47	1,458
			U - 175	Lolgorian	792.1	Siria East	1,608	3.06	525
U - 176			Nkararo	792.2	Siria West	647	1.41	459	
			District Total			7,314	7.94	921	
810	Baringo	U - 177	Arabal	818.0	Muchongoi	701	2.38	295	
		U - 178	Eldama Ravine	814.5	RAVine	6,831	4.67	1,463	
		U - 179	Kabarnet	812.5	Kabarnet Mosop	9,268	7.48	1,239	
		U - 180	Maji Mazuri	814.3	Maji Mazuri	6,815	2.37	2,876	
		U - 181	Marigat	816.2	Marigat	3,887	3.30	1,178	
		U - 182	Mogotio	815.1	Lembus Soi	3,182	5.36	594	
			District Total			30,684	25.56	1,200	
820	Elgeyo Marakwet	U - 183	Iten	822.3	Irong	4,658	2.51	1,856	
		U - 184	Tambach	822.4	Kiptuitlong	999	1.27	790	
			District Total			5,657	3.78	1,499	
830	Nandi	U - 185	Kapsabet + Baraton	832.2	Chemundu	10,537	14.00	753	
		U - 186	Nandi Hills	831.3	Nandi Hills	1,317	0.58	2,271	
			District Total			11,854	14.58	813	

Table - 2.1.3 (5/5) Urban Centre and Its Population in 1989

Province	Code	District	Code	Urban Centre Name	Code	Location Name	Population in 1989 Census (nos)	Area (km ²)	Population Density (nos/km ²)
Rift Valley (cont'd)	840	Samburu	U - 157	Baragoi	843.8	Baragoi	795	22.00	36
			U - 158	Maralal	841.4	Townshio	8,962	13.58	660
			U - 159	Wamba	842.1	Wamba	3,531	43.00	82
				District Total			13,288	78.58	169
	850	Tarkana	U - 190	Kakuma T.C	851.5	Kakuma	2,174	3.12	697
			U - 191	Kalokol	853.3	Kalokol	2,455	4.27	583
			U - 192	Kapendo T.C	855.1	Lomeko	1,340	3.82	351
			U - 193	Katilu T.C	854.1	Katilu	715	2.83	253
			U - 194	Lodwar	853.2	Lodwar Town	13,619	6.53	2,086
			U - 195	Lokitaung	852.3	Ngissiger	4,201	3.15	1,334
		District Total			24,534	23.71	1,035		
	860	West Pokot	U - 196	Chepareria	862.1	Kipkomo	767	0.74	1,036
			U - 197	Kapenguria	861.1	Kapenguria	7,729	6.58	1,175
			U - 198	Makutano	861.4	Mnangei	6,134	0.61	10,056
				District Total			14,630	7.93	1,845
Western	910	Bungoma	U - 199	Bungoma	912.6	Musikomo	26,805	35.00	766
			U - 200	Chapatais	916.1	Chaptais	2,467	3.61	684
			U - 201	Kapsakwony	918.1	Kapsokwony	592	1.19	500
			U - 202	Kimilili	913.1	Kimilili	5,483	4.00	1,371
			U - 203	Mawalie + Malakisi	911.4	South Malakisi	2,271	4.91	463
			U - 204	Sirisia	911.3	Sirisia	944	2.40	394
			U - 205	Webuye	914.2	Webuye	27,758	12.58	2,207
		District Total			66,320	63.67	1,042		
	920	Busia	U - 206	Busia	925.1	West Teso	20,781	2.18	9,533
			U - 207	Malaba Town	921.2	Central Teso	2,734	1.28	2,136
			U - 208	Nambale	922.2	Central Bukhayo	2,234	1.28	1,791
				District Total			25,799	4.74	5,449
	930	Kakamega	U - 209	Butere	931.2	Central Marama	2,369	1.48	1,601
			U - 210	Kakamega	939.0	Kakamega Municipality	58,862	48.00	1,226
			U - 211	Mumias	932.5	Central Wanga	23,668	8.92	2,655
				District Total			84,899	58.40	1,454
	940	Vihiga	U - 212	Chavakali	941.2	West Maragoli	420	0.14	3,111
			U - 213	Luanda	944.2	West Bumyore	3,361	1.68	2,007
			U - 214	Mbale	941.4	Edzava	2,871	0.89	3,244
			U - 215	Vihiga + Majengo	943.1	Central Maragoli	4,335	3.73	1,164
			District Total			10,987	6.42	1,711	
TOTAL						3,955,543	3975.96	995	

Source : Kenyan Population Census 1989, Central Bureau of Statistics

Table - 2.2.1 Population and Density by District, 1991 - 1998

(Unit: 1,000 for population)

Province	Code	District	Area (km ²)	1991		1992		1993		1994		1995		1996		1997		1998	
				Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²	Pop.	Pop./km ²
Nairobi	110	Nairobi	693	1,554	2,257	1,635	2,359	1,708	2,465	1,782	2,571	1,857	2,663	1,932	2,786	2,009	2,892	2,666	3,010
Central	210	Kitima	2,587	1,044	0.404	1,072	0.414	1,100	0.425	1,128	0.435	1,156	0.447	1,182	0.457	1,209	0.467	1,234	0.477
	220	Kirinyaga	1,455	417	0.281	426	0.287	435	0.293	444	0.299	453	0.305	461	0.310	469	0.315	477	0.321
	230	Muranga	2,525	916	0.363	935	0.370	954	0.378	972	0.385	990	0.392	1,006	0.398	1,023	0.405	1,038	0.411
	240	Nyandarua	3,973	358	0.090	368	0.093	378	0.096	388	0.099	398	0.102	408	0.105	417	0.107	426	0.110
	250	Nyeri	3,756	668	0.178	680	0.181	692	0.184	704	0.187	715	0.190	725	0.193	735	0.196	744	0.199
			13,286	3,403	0.257	3,451	0.263	3,519	0.269	3,586	0.275	3,712	0.280	3,782	0.286	3,853	0.291	3,919	0.296
Coast	310	Kitui	13,006	659	0.051	677	0.052	696	0.054	714	0.055	732	0.056	750	0.058	767	0.059	784	0.060
	320	Kwale	8,260	426	0.052	439	0.053	450	0.054	460	0.055	471	0.057	481	0.058	491	0.059	501	0.061
	330	Lamu	6,818	63	0.010	67	0.010	69	0.010	71	0.010	73	0.011	75	0.011	76	0.011	78	0.011
	340	Mombasa	282	517	1.833	531	1.883	545	1.933	559	1.982	573	2.032	586	2.078	600	2.126	612	2.170
	350	Taita	16,965	215	0.013	220	0.013	225	0.013	230	0.014	235	0.014	240	0.014	244	0.014	249	0.015
	360	Tana River	38,782	147	0.004	152	0.004	157	0.004	161	0.004	166	0.004	171	0.004	175	0.005	180	0.005
				84,113	2,051	0.024	2,086	0.025	2,142	0.025	2,198	0.026	2,250	0.027	2,303	0.027	2,353	0.028	2,404
Eastern	410	Embu	2,825	492	0.174	494	0.174	498	0.175	502	0.176	506	0.177	510	0.178	514	0.179	518	0.180
	420	Isiolo	25,604	78	0.003	81	0.003	85	0.003	88	0.003	91	0.004	94	0.004	98	0.004	101	0.004
	430	Kimii	19,892	437	0.022	459	0.023	482	0.024	505	0.025	528	0.026	550	0.027	572	0.028	594	0.029
	440	Makindu	6,249	743	0.119	763	0.122	783	0.125	804	0.129	823	0.132	842	0.135	862	0.138	880	0.141
	450	Marsabit	72,290	143	0.002	147	0.002	150	0.002	154	0.002	157	0.002	161	0.002	164	0.002	167	0.002
	460	Meru	3,523	516	0.146	532	0.151	547	0.155	562	0.160	577	0.164	592	0.168	607	0.172	621	0.176
	470	Nyambene	4,066	490	0.121	505	0.124	519	0.128	534	0.131	548	0.135	562	0.138	576	0.142	590	0.145
	480	Tharaka Nithi	2,295	264	0.115	262	0.114	261	0.113	260	0.112	259	0.111	258	0.110	257	0.109	256	0.108
	490	Wajir	9,911	279	0.028	287	0.029	296	0.030	304	0.031	312	0.032	319	0.033	327	0.034	335	0.035
	495	Makindu	7,719	825	0.107	827	0.107	829	0.107	831	0.107	833	0.107	835	0.107	837	0.107	839	0.107
				154,254	4,177	0.027	4,286	0.028	4,417	0.029	4,536	0.029	4,653	0.030	4,767	0.031	4,882	0.032	4,994
North-Eastern	510	Garissa	43,392	198	0.005	203	0.005	209	0.005	215	0.005	220	0.005	226	0.005	231	0.005	236	0.005
	520	Mandera	25,871	190	0.007	196	0.008	206	0.008	215	0.008	223	0.009	231	0.009	240	0.009	248	0.010
	530	Wajir	56,923	197	0.003	202	0.004	206	0.004	210	0.004	214	0.004	217	0.004	220	0.004	224	0.004
			126,186	585	0.005	603	0.005	621	0.005	640	0.005	657	0.005	674	0.005	692	0.005	708	0.006
Nyanza	610	Gusii	1,252	1,198	0.957	1,233	0.985	1,268	1.013	1,303	1.041	1,337	1.068	1,371	1.095	1,405	1.122	1,437	1.148
	620	Kituma	2,077	792	0.381	814	0.392	836	0.403	857	0.413	878	0.423	899	0.433	919	0.442	939	0.452
	630	Siaya	2,524	698	0.277	711	0.282	722	0.286	733	0.290	744	0.295	754	0.299	763	0.302	771	0.305
	640	Homa Bay	3,105	802	0.258	825	0.266	848	0.273	871	0.280	893	0.286	915	0.293	937	0.300	958	0.309
	650	Ngori	2,603	558	0.214	574	0.220	590	0.227	605	0.232	621	0.238	636	0.244	651	0.250	666	0.256
	660	Nyamira	946	263	0.278	271	0.286	278	0.294	286	0.302	294	0.310	301	0.318	308	0.325	316	0.334
				12,507	4,311	0.345	4,428	0.354	4,542	0.363	4,655	0.372	4,767	0.381	4,876	0.390	4,983	0.398	5,087
Rift Valley	710	Kajiado	21,756	284	0.013	297	0.014	310	0.014	324	0.015	338	0.016	352	0.016	366	0.017	381	0.018
	720	Kipsigis	2,569	543	0.211	562	0.219	582	0.227	602	0.234	622	0.242	642	0.250	661	0.257	681	0.265
	730	Lakipia	9,162	247	0.027	257	0.028	268	0.029	279	0.030	291	0.032	302	0.033	313	0.034	325	0.035
	740	Nakuru	7,190	947	0.132	967	0.137	1,028	0.143	1,069	0.149	1,111	0.155	1,154	0.161	1,196	0.166	1,240	0.172
	750	Narok	15,128	281	0.019	295	0.020	310	0.020	326	0.022	342	0.023	358	0.024	374	0.025	391	0.026
	760	Trans Nzoia	2,487	447	0.181	464	0.188	481	0.195	499	0.202	516	0.209	534	0.216	551	0.223	569	0.231
	770	Uasin Gishu	3,218	509	0.158	528	0.164	547	0.170	566	0.176	585	0.182	604	0.188	623	0.194	642	0.200
	780	Bomet	2,371	521	0.220	549	0.232	579	0.244	608	0.256	637	0.268	666	0.280	695	0.292	724	0.304
	790	Transmara	2,874	151	0.053	159	0.055	167	0.058	175	0.061	184	0.064	193	0.067	202	0.070	211	0.073
	810	Baringo	10,954	326	0.030	336	0.031	347	0.032	357	0.033	367	0.034	377	0.034	387	0.035	397	0.036
	820	Elgeyo Marakwet	3,649	239	0.066	247	0.068	255	0.069	263	0.071	270	0.073	278	0.075	285	0.077	293	0.079
	830	Nandi	2,783	454	0.163	471	0.170	488	0.177	505	0.184	522	0.191	539	0.198	556	0.205	573	0.212
	840	Samburu	20,866	122	0.006	126	0.006	130	0.006	134	0.006	137	0.007	141	0.007	145	0.007	148	0.007
	850	Turkana	69,146	192	0.003	195	0.003	197	0.003	199	0.003	201	0.003	203	0.003	204	0.003	205	0.003
	860	West Pokot	8,937	252	0.028	259	0.029	267	0.030	275	0.031	282	0.032	289	0.033	297	0.033	304	0.034
			182,412	5,355	0.030	5,763	0.032	6,190	0.034	6,630	0.036	7,076	0.038	7,521	0.040	7,966	0.042	8,409	0.044
Western	910	Bungoma	3,072	827	0.269	856	0.279	889	0.289	920	0.299	951	0.310	982	0.320	1,014	0.330	1,045	0.340
	920	Busia	1,652	435	0.263	446	0.270	458	0.277	469	0.284	480	0.291	491	0.297	502	0.304	512	0.310
	930	Kakamega	3,020	1,022	0.342	1,063	0.353	1,098	0.364	1,130	0.374	1,162	0.385	1,195	0.396	1,227	0.406	1,258	0.416
	940	Vihiga	541	556	1.027	573	1.060	591	1.093	609	1.125	626	1.157	643	1.189	660	1.221	677	1.252
			8,285	2,860	0.344	2,942	0.355	3,026	0.366	3,112	0.378	3,199	0.389	3,281	0.400	3,363	0.411	3,442	0.421
NATIONAL			581,786	24,476	0.042	25,236	0.043	26,011	0.045	26,782	0.046	27,520	0.047	28,266	0.048	29,011	0.049	29,745	0.051

Source : Kenya Population Census 1989, Analytical Report Volume VII, April 1996, Central Bureau of Statistics

Table - 2.3.1 Overview of Income Status by District, Per capita and Household

Province Name	District Name	Mean Household Size	Annual Per capita Income		Mean Monthly Household Income						
			Per capita Income ¹⁾ (Ksh)	National Average (Index=100)	Total Income (Ksh)	Non Agriculture Income			Agriculture Income		
						Wages (Ksh)	Others (Ksh)	Share (%)	Agriculture (Ksh)	Crops (Ksh)	Share (%)
Nairobi	Nairobi	3.7	62,565	228	16,789	13,557	2,795	97.4	436	2	2.6
Central	Kambu	4.8	25,170	92	10,143	3,953	1,844	57.2	1,380	2,966	42.8
	Kirinyaga	5.1	16,078	59	5,986	2,547	1,237	63.2	1,201	1,002	36.8
	Muranga	5.9	27,011	99	11,513	7,451	1,844	80.7	1,567	651	19.3
	Nyandarua	5.7	20,548	75	9,497	3,583	1,540	53.9	2,760	1,615	46.1
	Nyeri	5.3	16,034	59	6,898	3,448	981	64.2	1,714	755	35.8
Coast		5.3	22,262	81	9,268	4,489	1,572	65.4	1,604	1,603	34.6
	Kitifi	6.2	12,209	45	4,492	2,349	1,330	79.7	750	162	20.3
	Kwale	5.8	37,551	137	15,070	5,204	1,313	43.2	2,825	5,728	56.8
	Lamu	4.7	32,167	117	10,321	6,859	1,753	83.4	697	1,012	16.6
	Mombasa	4.4	57,011	208	14,252	11,935	2,249	99.5	69	0	0.5
	Taita	4.2	15,208	55	3,526	1,896	1,043	83.3	514	74	16.7
Eastern	Tana River	6.3	30,210	110	11,023	6,076	2,127	74.4	2,596	224	25.6
		5.3	32,547	119	9,893	6,034	1,625	77.4	1,028	1,206	22.6
	Embu	6.0	17,997	66	7,995	4,221	1,417	70.5	1,752	605	29.5
	Isiolo	5.3	13,685	50	3,543	2,913	293	90.5	304	32	9.5
	Kitui	5.1	22,769	83	5,628	2,363	1,559	69.7	1,580	125	20.3
	Masaku	5.6	15,999	58	6,307	3,112	1,088	66.6	1,615	492	33.4
	Marsabit	6.1	9,910	36	3,745	1,727	557	61.0	1,247	214	39.0
	Meru	6.0	19,499	71	9,321	4,537	1,115	60.6	2,296	1,373	39.4
	Nyambene	6.0	19,499	71	9,321	4,537	1,115	60.6	2,296	1,373	39.4
	Tharaka Nithi	6.2	9,680	35	4,256	1,299	323	38.1	1,799	834	61.9
North-Eastern	Mwingi	5.1	22,769	83	5,628	2,363	1,559	69.7	1,580	125	20.3
	Makueni	6.2	11,238	41	5,520	2,142	1,200	60.5	2,060	118	39.5
		5.8	16,809	61	6,572	3,046	1,138	63.7	1,812	577	35.3
	Garissa	5.8	32,567	119	13,050	1,143	3,350	34.4	8,555	2	65.6
	Mandera	6.7	22,642	83	9,175	4,176	1,695	64.0	3,188	116	36.0
Nyanza	Wajir	5.9	20,658	75	7,325	4,728	633	73.2	1,943	22	26.8
		6.1	25,504	93	9,931	3,283	1,926	52.5	4,678	44	47.5
	Ousii	5.7	23,733	87	10,074	3,871	1,778	56.1	2,768	1,658	43.9
Rift Valley	Kisumu	4.9	20,774	76	7,627	4,627	1,971	86.5	801	229	13.5
	Siaya	4.3	19,559	71	5,463	2,213	1,290	64.1	1,424	536	35.9
	Homa Bay	4.4	16,548	60	4,482	2,190	965	70.4	1,079	248	29.6
	Migori	5.3	19,498	71	6,641	1,586	1,540	47.1	2,874	641	52.9
	Nyamira	5.7	16,230	59	5,607	2,413	1,035	61.3	1,656	513	38.7
		5.0	19,665	72	6,750	2,920	1,457	64.8	1,721	652	35.2
	Kajiado	4.7	34,721	127	10,362	4,697	1,102	56.0	3,822	741	44.0
Western	Kipsigis	5.6	29,415	107	10,369	2,511	883	32.7	4,946	2,029	67.3
	Laikipia	5.8	23,926	87	10,044	4,208	1,230	54.1	2,509	2,097	45.9
	Nakuru	4.3	21,790	80	6,607	4,471	663	77.7	1,145	338	22.3
	Narok	5.6	39,213	143	18,164	9,970	1,270	61.9	5,692	1,233	38.1
	Trans Nzoia	5.7	52,922	193	22,462	6,454	1,754	36.5	8,383	5,871	63.5
	Uasin Gishu	5.2	52,758	193	25,172	6,837	912	30.8	6,781	10,641	69.2
	Bomet	5.9	25,823	94	11,265	3,057	1,262	38.3	5,774	1,172	61.7
	Transmara	5.6	39,213	143	18,164	9,970	1,270	61.9	5,692	1,233	38.1
	Baringo	5.1	27,556	101	9,533	3,624	2,713	66.5	2,924	272	33.5
	Elgeyo Marakwet	5.4	17,987	66	8,113	2,368	2,336	58.2	2,600	790	41.8
	Nandi	5.8	20,936	76	9,925	4,487	1,481	60.1	3,057	900	39.9
	Samburu	5.1	8,991	33	2,652	1,109	383	56.2	1,160	1	43.8
	Turkana	5.2	13,283	48	7,087	2,199	3,944	86.7	896	48	13.3
	West Pokot	5.5	38,692	141	14,324	8,322	716	63.1	3,201	2,085	36.9
		5.3	30,585	112	12,241	4,853	1,262	50.0	3,892	2,225	50.0
Bungoma	6.6	15,466	56	7,982	3,112	1,238	54.5	2,257	1,374	45.5	
Busia	5.5	13,074	48	5,106	2,247	1,060	64.8	1,338	462	35.2	
Kakamega	5.5	27,034	99	7,270	3,753	1,086	66.6	1,867	564	33.4	
Vihiga	5.8	20,115	73	9,900	4,993	1,236	62.9	1,421	2,250	37.1	
	5.8	20,364	74	7,659	3,602	1,158	62.1	1,792	1,107	37.9	
NATIONAL		5.2	27,403	100	9,695	4,941	1,497	66.4	2,105	1,149	33.6
- Urban		4.0	51,009	186	17,673	11,266	2,456	77.6	2,534	1,418	22.4
- Rural		5.6	21,305	78	5,130	3,307	1,250	88.8	463	111	11.2

Source: Welfare Monitoring Survey II Basic Report 1994, Central Bureau of Statistics

Notes: 1) Per capita income - Annual Household Incomes / Household Size

Table - 3.1.1 Distribution of Population by Type of Sickness by District

Province Name	District Name	Vomit / Diarrhoea		Fever / Malaria		Cough / Cold	Wound / Injury	Measles	Skin Rash	Eye Infection	Others	
		Case Population %	National Average (Index=100)	Case Population %	National Average (Index=100)	Case Population %	Case Population %	Case Population %	Case Population %	Case Population %	Case Population %	
Nairobi	Nairobi	6.4	68.1	47.8	92.8	23.7	2.6	-	4.6	2.4	12.3	
	Central	Kiambu	6.0	63.8	39.3	76.3	27.4	3.8	0.2	7.5	2.2	13.8
		Kirinyaga	6.3	67.0	45.4	88.2	29.2	5.5	0.4	5.1	0.6	7.5
		Moranga	3.0	31.9	35.7	69.3	35.1	8.4	0.8	3.6	1.8	11.7
		Nyandarua	13.8	146.8	19.7	38.3	46.3	3.9	0.4	3.5	-	12.4
		Nyeri	6.8	72.3	21.7	42.1	52.6	2.8	-	2.4	1.0	12.6
	6.3	67.0	34.6	67.2	35.7	5.1	0.4	4.8	1.4	11.6		
Coast	Kilifi	12.9	137.2	51.8	100.8	20.6	5.5	1.0	1.8	0.4	5.9	
	Kwale	24.3	258.5	56.3	108.9	8.1	1.3	0.7	0.8	1.5	7.1	
	Lamu	25.7	273.4	38.2	74.2	15.2	4.9	-	5.6	1.4	9.0	
	Montbasa	27.4	291.5	50.4	97.9	8.0	4.6	0.4	-	-	9.1	
	Taita	2.0	21.3	42.7	82.9	31.7	5.5	0.3	1.6	1.4	14.7	
	Tana River	5.2	55.3	52.7	112.0	57.7	0.7	2.0	2.0	0.7	16.4	
		17.7	188.3	51.1	99.2	51.1	4.1	0.7	1.6	0.8	8.7	
Eastern	Erbabu	6.3	67.0	50.1	97.3	29.2	4.2	0.2	1.3	1.1	7.7	
	Isiolo	2.1	22.3	53.7	104.3	25.9	0.5	-	2.4	-	15.4	
	Kisumu	5.0	53.2	47.5	92.2	25.8	6.8	0.2	1.4	1.7	11.7	
	Masake	12.0	127.7	56.7	110.1	11.2	6.5	-	3.1	1.0	9.4	
	Marsabit	16.2	172.3	33.7	65.4	31.2	0.3	-	0.4	8.7	9.5	
	Meru	7.5	79.8	36.6	71.1	41.4	3.2	0.5	1.9	3.7	5.2	
	Nyambone	7.5	79.8	36.6	71.1	41.4	3.2	0.5	1.9	3.7	5.2	
	Tharaka Nithi	11.6	123.4	45.6	88.5	27.2	2.5	-	3.5	2.1	7.4	
	Mwingi	5.0	53.2	47.5	92.2	25.8	6.8	0.2	1.4	1.7	11.7	
	Makueni	4.7	50.0	56.3	109.3	19.7	2.3	-	1.5	0.5	15.1	
		7.7	81.9	47.1	91.5	27.7	4.1	0.2	2.1	2.0	9.1	
North-Eastern	Garissa	13.2	140.4	47.4	92.0	12.6	1.6	3.3	4.7	6.7	10.3	
	Mandera	2.3	24.5	46.4	90.1	13.0	6.4	0.6	1.1	4.5	25.7	
	Wajir	2.3	24.5	67.3	130.7	20.5	4.3	-	0.7	2.4	2.5	
		5.7	60.6	52.7	102.3	15.1	4.3	1.3	2.1	4.6	14.2	
Nyanza	Cusisi	7.2	76.6	72.7	141.2	12.7	1.4	0.5	2.7	0.3	2.6	
	Kisumu	11.5	122.3	53.9	104.7	12.8	3.6	1.2	3.1	1.4	12.6	
	Siaya	10.4	110.6	56.1	108.9	10.9	2.4	1.1	1.9	3.0	9.2	
	Homa Bay	9.3	98.9	61.4	119.2	10.2	1.3	4.0	2.2	2.3	9.3	
	Mogori	17.8	189.4	40.5	78.6	17.0	1.6	3.4	1.5	3.1	15.2	
	Nyanza	2.9	30.9	72.0	139.8	18.2	1.5	1.9	0.8	0.9	2.0	
		10.0	106.4	59.4	115.3	13.3	2.9	1.9	2.2	1.8	8.6	
Rift Valley	Kajiado	11.4	121.3	46.7	90.7	23.6	6.3	1.3	1.2	3.7	5.7	
	Kipsigis	9.5	101.1	45.7	88.7	34.5	3.6	0.7	1.3	-	4.8	
	Laikipia	9.6	102.1	37.8	73.4	27.8	4.1	0.5	2.6	2.0	15.6	
	Nakuru	8.5	90.4	29.6	57.5	33.6	3.2	-	5.6	2.0	17.5	
	Narok	4.6	48.9	75.0	145.6	11.9	1.3	-	0.5	0.2	6.5	
	Trans Nzoia	12.4	131.9	60.0	116.5	14.9	2.5	-	4.0	1.2	5.0	
	Uasin Gishu	6.6	70.2	63.0	122.3	13.9	1.3	1.0	5.0	1.7	7.5	
	Bomet	6.1	64.9	30.5	59.2	37.8	1.8	1.1	3.0	6.0	13.7	
	Tranmara	4.6	48.9	75.0	145.6	11.9	1.3	-	0.5	0.2	6.5	
	Baringo	13.7	145.7	24.6	47.8	50.7	3.4	-	0.5	0.4	6.7	
	Elgeyo Marakwet	15.1	160.6	22.7	44.1	38.8	8.2	0.9	1.3	2.7	10.3	
	Nandi	5.1	54.3	62.9	122.1	14.7	4.3	1.4	1.3	0.6	9.8	
	Samburu	13.6	144.7	58.0	112.6	13.6	3.8	1.3	1.6	3.7	4.4	
	Turkana	9.2	97.9	52.0	101.0	8.0	1.3	1.1	2.1	5.6	20.8	
	West Pokot	17.2	183.0	57.0	110.7	9.8	2.6	-	-	3.5	10.0	
	9.1	96.8	50.1	97.3	22.9	3.2	0.6	2.6	1.8	9.7		
Western	Bungoma	15.5	164.9	56.5	109.7	16.8	2.4	0.5	2.0	1.3	5.0	
	Busia	10.7	113.8	48.9	95.0	15.3	3.8	3.8	2.4	1.7	13.5	
	Kakamega	8.8	93.8	55.5	107.8	19.3	4.6	1.0	3.7	0.5	6.5	
	Vihiga	3.3	35.1	71.6	139.0	9.9	4.4	-	0.9	0.9	9.0	
		9.1	97.9	57.9	112.4	16.1	3.9	1.2	2.5	1.0	7.9	
NATIONAL		9.4	100.0	51.5	100.0	21.0	3.6	0.9	2.6	1.6	9.4	
- Urban		10.4	110.6	50.9	98.8	20.4	2.4	0.2	3.0	1.7	11.1	
- Rural		9.2	97.9	51.6	100.2	21.1	3.8	1.0	2.6	1.6	9.1	

Source : Welfare Monitoring Survey II Basic Report 1994, Central Bureau of Statistics

Table - 3.1.2 Distribution of Households with Access to Safe Water and Main Water Sources by District

Province Name	District Name	Access to Safe Water		Main Sources of Water										
		Access Ratio %	National Average (Index=100)	Piped Water %	River %	Lake Pond Dam %	Roof Catchment %	Protected Spring %	Unprotected Spring %	Protected Well %	Unprotected Well %	Borehole %	Others %	
Nairobi	Nairobi	96.2	214	95.6	2.6	-	-	-	-	-	0.5	-	-	1.2
Central	Kiambu	43.6	97	34.5	32.9	0.6	2.8	0.7	2.8	5.7	2.5	16.4	1.1	
	Kirinyaga	30.4	68	25.3	55.0	-	-	0.5	1.8	4.6	0.4	1.2	11.3	
	Muranga	34.9	89	29.7	37.1	-	-	2.7	6.0	12.6	1.6	7.4	1.5	
	Nyandarua	56.1	125	39.0	20.8	6.7	9.1	1.1	4.8	6.9	3.6	6.9	1.1	
	Nyeri	59.9	133	52.7	32.1	0.3	6.4	-	3.1	0.8	0.9	1.2	2.6	
		45.5	101	36.2	35.3	0.9	3.8	1.8	5.3	3.7	3.2	7.0	2.7	
Coast	Kilifi	57.4	128	55.2	9.2	11.6	-	-	-	2.2	12.1	9.8	-	
	Kwale	22.5	50	20.5	5.6	44.1	0.6	-	-	1.4	3.7	24.0	-	
	Lamu	60.8	135	19.2	-	2.0	-	3.3	0.6	38.2	24.4	-	12.2	
	Mombasa	94.3	210	94.3	-	-	-	-	-	-	-	1.1	4.6	
	Taita	55.4	123	54.3	31.6	-	-	-	1.1	5.8	-	0.4	0.7	
	Tana River	23.0	51	19.6	63.2	0.1	-	-	0.8	-	-	1.3	6.4	
		59.2	132	56.2	11.6	12.4	0.1	0.3	0.7	2.5	5.2	8.6	2.2	
Eastern	Enbu	45.6	102	40.8	20.4	9.1	1.0	3.1	5.9	0.6	10.3	8.3	0.3	
	Isiolo	55.4	123	50.5	41.0	-	0.9	0.9	1.3	3.0	0.9	0.6	0.8	
	Kiuri	16.9	38	5.3	68.5	8.5	0.3	1.2	0.5	10.1	3.2	0.9	1.5	
	Marsabit	29.4	65	23.2	34.1	3.3	0.3	1.2	0.9	1.6	9.3	9.6	3.4	
	Marsabit	38.1	85	22.3	0.5	15.3	-	0.3	5.2	15.5	15.8	21.5	2.6	
	Muru	62.5	139	59.8	14.9	0.3	0.2	2.1	15.6	0.4	6.7	-	-	
	Nyambone	62.5	139	59.8	14.9	0.3	0.2	2.1	15.6	0.4	6.7	-	-	
	Tharaka Nithi	32.2	72	26.6	38.2	-	-	-	1.9	3.9	3.7	23.3	1.5	0.9
	Mwingi	16.9	38	5.3	68.5	8.5	0.3	1.2	0.5	10.1	3.2	0.9	1.5	
	Milkumui	16.7	37	14.9	54.7	5.6	1.3	0.5	9.4	-	11.5	1.2	1.1	
		35.1	78	29.3	37.4	4.6	0.5	2.1	8.1	3.2	9.2	4.0	1.4	
North Eastern	Garissa	31.8	71	29.7	10.9	25.3	-	1.6	9.9	0.6	9.3	6.4	6.3	
	Mandera	8.2	18	6.5	28.5	38.0	-	-	1.5	1.7	14.1	9.6	0.2	
	Wajir	9.4	21	1.0	2.8	38.6	-	0.5	-	8.0	23.7	25.5	-	
		16.9	38	12.7	13.5	33.6	-	0.7	3.9	3.4	15.7	13.9	2.3	
Nyanza	Gusii	31.5	70	3.3	17.7	-	1.1	25.4	49.6	1.7	1.0	-	0.2	
	Kisumu	42.7	95	31.1	27.6	2.7	0.5	0.6	3.7	10.4	6.8	5.4	1.1	
	Siaya	29.7	66	1.5	7.1	27.5	3.6	16.8	13.7	7.8	10.2	14.8	-	
	Hima Bay	18.8	42	8.0	33.5	22.0	7.9	-	3.6	2.8	15.0	7.3	-	
	Migori	5.5	12	2.5	44.0	2.6	2.5	0.4	24.8	-	21.5	1.2	0.5	
	Nyamira	39.0	87	4.5	3.6	-	1.0	19.5	52.5	14.9	0.9	3.1	-	
		28.1	63	9.2	24.8	10.2	3.0	19.1	22.2	5.8	9.3	5.1	0.3	
Rift Valley	Kajiado	63.1	141	60.1	11.4	6.8	0.5	2.1	1.3	0.4	5.7	9.8	1.8	
	Kipsigis	32.0	71	15.7	57.4	4.0	3.4	5.6	3.9	7.2	1.9	3.1	0.8	
	Lakipia	29.0	65	26.4	33.8	18.6	1.8	-	2.3	0.8	15.7	0.3	0.4	
	Nakuru	73.4	159	44.8	24.1	2.4	21.9	0.7	0.8	4.0	0.5	3.1	0.6	
	Narok	24.9	55	10.5	38.4	12.7	4.2	5.7	15.1	4.6	3.3	1.0	4.6	
	Trans Nzoia	24.9	55	14.5	28.1	0.8	1.1	0.3	4.6	9.0	20.8	14.7	6.0	
	Uasin Gishu	57.8	129	23.1	21.2	0.3	0.2	0.5	2.9	34.0	16.3	0.6	0.9	
	Bomet	28.3	63	13.1	23.6	6.8	11.7	1.5	30.3	2.0	3.1	1.3	6.6	
	Transmara	24.9	55	10.5	38.4	12.7	4.2	5.7	15.1	4.6	3.3	1.0	4.6	
	Baringo	22.8	51	8.1	51.2	9.2	9.4	4.6	13.5	0.7	0.6	1.8	0.8	
	Elgeyo Marakwet	21.0	47	12.0	58.0	-	-	0.7	16.6	8.3	1.2	2.4	0.8	
	Nandi	32.5	72	18.4	28.4	-	1.2	8.8	31.0	4.1	3.6	4.3	0.3	
	Samburu	38.0	85	37.1	30.5	5.9	0.9	-	5.0	-	10.6	5.4	4.5	
	Turkana	45.8	104	34.6	7.9	0.5	-	3.0	2.4	9.2	29.8	12.5	-	
West Pokot	6.0	13	3.5	63.1	0.2	0.6	0.5	28.7	-	-	1.3	11.6		
		41.6	93	25.0	32.4	4.1	7.0	2.6	9.9	6.9	6.1	3.9	1.9	
Western	Bungoma	41.9	93	26.6	7.8	-	0.4	9.6	14.1	5.4	3.8	23.6	8.8	
	Busia	27.1	60	3.8	5.4	0.3	0.2	13.9	17.6	9.2	9.5	39.5	0.4	
	Kakamega	60.5	135	13.2	8.2	-	4.8	11.8	25.4	10.6	8.8	15.1	2.0	
	Vihiga	60.1	134	7.3	15.0	-	11.2	23.9	5.2	14.1	12.4	-	2.0	
			42.9	96	14.0	9.1	0.0	4.3	11.1	17.0	10.6	9.4	18.1	3.5
NATIONAL		44.9	100	32.1	24.9	5.3	3.2	4.5	10.2	5.1	6.7	6.3	1.8	
- Urban		93.3	208	91.2	3.1	0.0	0.3	0.4	0.7	2.3	0.7	0.7	1.4	
- Rural		32.5	72	17.3	30.5	6.6	3.9	5.6	12.6	5.8	8.2	7.7	1.9	

Source : Welfare Monitoring Survey II Basic Report 1994, Central Bureau of Statistics

Table - 3.1.3 Distribution of Households by Access to Sanitation, Type of Toilet and District

Province Name	District Name	Access to Sanitation		Type of Main Toilet					
		Access Ratio %	National Average (Index=100)	Pit %	V.I.P %	Bucket %	Water Closet %	Pour Flush %	None %
Nairobi Central	Nairobi	98.2	122	39.6	4.6	-	26.6	27.4	1.8
	Kiambu	100.0	124	87.6	2.0	0.4	6.6	3.4	-
	Kirinyaga	97.8	122	93.3	-	-	4.5	-	2.2
	Muranga	98.5	123	92.1	4.0	-	0.4	2.1	1.5
	Nyandarua	100.0	124	91.8	0.4	-	-	7.8	-
	Nyeri	99.8	124	92.8	3.0	-	0.1	3.8	0.2
			99.3	124	90.8	2.3	0.2	2.9	3.2
Coast	Kilifi	73.4	91	68.9	0.3	-	2.4	1.7	26.6
	Kwale	40.9	51	39.5	0.9	-	0.4	-	59.1
	Lamu	91.8	114	78.6	-	-	5.4	7.8	8.2
	Mombasa	98.6	123	72.3	2.1	-	20.3	4.0	1.4
	Taita	90.4	112	81.5	6.1	-	-	2.8	9.6
	Tana River	30.9	38	29.2	1.7	-	-	-	69.1
		74.6	93	63.6	1.8	-	7.0	2.3	25.4
Eastern	Embu	93.5	116	87.0	3.2	-	2.8	0.4	6.5
	Isiolo	51.6	64	50.9	0.7	-	-	-	48.4
	Kitui	40.4	50	35.6	2.6	-	-	2.1	59.6
	Masaku	52.2	102	68.9	9.6	1.1	0.1	2.5	17.8
	Marsabit	20.0	25	18.8	1.2	-	-	-	80.0
	Meru	88.3	110	86.8	0.3	0.8	0.1	0.4	11.7
	Nyambene	88.3	110	86.8	0.3	0.8	0.1	0.4	11.7
	Tharaka Nithi	98.6	123	96.5	2.2	-	-	-	1.4
	Mwingi	40.4	50	35.6	2.6	-	-	2.1	59.6
	Makueni	89.9	112	87.8	1.8	-	-	0.2	10.1
		76.6	95	71.5	3.4	0.4	0.3	1.1	23.4
North-Eastern	Garissa	32.6	41	28.7	1.9	-	2.1	-	67.4
	Mandera	29.7	37	27.4	2.3	-	-	-	70.3
	Wajir	14.1	18	8.3	-	5.8	-	-	85.9
		25.4	32	21.3	1.4	2.0	0.7	-	74.6
Nyanza	Ousii	99.0	123	96.8	1.4	-	-	0.9	1.0
	Kisumu	78.6	98	67.4	5.2	-	3.6	2.3	21.4
	Siaya	73.9	92	70.9	2.1	-	0.9	-	26.1
	Homa Bay	50.4	63	40.6	1.8	-	4.4	3.6	49.6
	Migori	33.6	42	31.8	1.8	-	-	-	66.4
	Nyamira	98.9	123	94.9	0.9	-	0.8	2.3	1.1
		72.0	90	66.4	2.3	-	1.8	1.6	28.0
Rift Valley	Kajiado	63.8	79	55.9	6.5	-	1.1	0.2	36.2
	Kipsigis	73.5	91	72.1	-	-	0.3	1.0	26.5
	Lakipia	92.6	115	84.7	-	5.5	1.6	0.8	7.4
	Nakuru	94.9	118	80.0	3.9	-	2.4	8.6	5.1
	Narok	27.2	34	21.4	2.1	-	-	3.7	72.8
	Trans Nzoia	97.3	121	87.1	-	-	-	10.2	2.7
	Uasin Gishu	90.5	113	83.8	-	-	6.7	-	9.5
	Bomet	73.5	91	72.2	1.3	-	-	-	26.5
	Transmara	27.2	34	21.4	2.1	-	-	3.7	72.8
	Baringo	49.1	61	46.5	2.4	-	-	0.2	50.9
	Elgeyo Marakwet	69.1	86	66.0	1.3	-	0.9	0.9	30.9
	Nandi	74.7	93	73.1	0.4	-	0.8	0.4	25.3
	Sanbura	22.0	27	19.0	2.2	-	0.8	-	78.0
	Turkana	15.1	19	12.1	1.5	-	-	1.5	84.9
West Pokot	27.4	34	26.2	0.3	-	0.9	-	72.6	
		71.9	89	65.3	1.8	0.2	1.4	3.1	28.1
Western	Bungoma	93.1	116	82.7	3.1	-	5.9	1.5	6.9
	Busia	85.1	106	83.3	1.2	-	0.6	-	14.9
	Kakamega	93.4	116	83.9	1.3	-	4.2	4.0	6.6
	Vihiga	98.4	122	94.8	3.7	-	-	-	1.6
			93.1	116	85.8	2.3	-	3.2	1.9
NATIONAL		80.4	100	68.6	2.5	0.2	4.5	4.6	19.6
- Urban		97.6	121	50.7	5.0	0.5	20.5	20.8	2.4
- Rural		75.9	94	73.2	1.9	0.1	0.4	0.4	24.1

Source : Welfare Monitoring Survey II Basic Report 1994, Central Bureau of Statistics

Table - 3.1.4 Distribution of Households by Time Taken for Water Carrying by District

Province Name	District Name	Less than 5 Min.		6-30 Min.		31-60 Min.		61-120 Min.		More than 121 Min.	
		Wet Season %	Dry Season %	Wet Season %	Dry Season %	Wet Season %	Dry Season %	Wet Season %	Dry Season %	Wet Season %	Dry Season %
Nairobi	Nairobi	84.8	83.2	15.2	16.2	-	0.6	-	-	-	-
Central	Kiambu	44.1	37.0	46.0	50.1	3.6	5.8	4.8	4.6	1.3	2.6
	Kirinyaga	29.4	26.2	56.5	55.7	14.8	14.8	0.3	0.4	-	-
	Muraanga	39.2	27.2	54.8	65.3	6.0	7.3	1.1	0.3	-	-
	Nyandarua	52.2	40.8	38.9	40.0	8.0	12.9	0.9	6.3	-	-
	Nyeri	55.6	42.6	32.4	41.5	11.6	15.5	0.4	0.4	-	-
		43.8	34.8	45.1	52.1	7.5	9.8	2.1	2.4	0.4	0.9
Coast	Kilifi	25.9	21.3	52.6	38.1	16.4	12.3	4.0	9.2	1.1	19.0
	Kwale	16.9	13.6	72.5	38.3	10.1	14.7	0.5	13.0	-	20.5
	Lamu	50.6	48.8	35.2	34.4	7.6	7.6	5.5	9.2	-	-
	Mombasa	69.8	61.6	24.2	21.1	2.4	13.4	3.5	3.9	-	-
	Taita	28.1	26.6	56.8	55.1	14.0	17.3	1.1	1.1	-	-
	Tana River	21.6	20.8	39.7	31.4	21.8	23.6	7.6	11.8	9.2	12.3
			38.1	33.4	47.1	34.6	10.7	14.3	3.1	7.5	0.9
Eastern	Embu	39.9	33.1	46.6	37.5	10.8	14.7	1.8	7.7	0.8	7.1
	Isiolo	45.2	41.8	38.6	40.7	11.3	12.6	4.9	4.9	-	-
	Kitui	12.4	4.0	55.4	22.2	25.0	32.9	5.1	24.7	2.2	16.3
	Masaku	21.0	15.8	56.6	48.9	17.8	20.4	4.0	12.8	0.5	2.1
	Marsabit	7.4	2.5	46.8	17.8	21.0	18.1	11.6	15.7	13.3	45.8
	Meru	22.4	18.8	51.8	43.3	19.2	14.6	5.4	11.3	1.1	12.0
	Nyambene	22.4	18.8	51.8	43.3	19.2	14.6	5.4	11.3	1.1	12.0
	Tharaka Nithi	11.3	9.7	65.8	65.0	19.2	21.6	3.7	3.7	-	-
	Mwingi	12.4	4.0	55.4	22.2	25.0	32.9	5.1	24.7	2.2	16.3
	Makueni	14.3	4.3	53.4	46.1	18.9	19.7	11.2	15.3	2.0	14.7
		19.8	13.8	53.8	41.3	19.0	20.6	5.7	13.7	1.6	10.6
North-Eastern	Garissa	33.6	34.0	42.9	34.3	9.5	14.4	6.2	8.5	7.8	8.9
	Mandera	8.8	14.5	41.8	17.1	28.3	17.8	4.1	6.6	17.1	44.0
	Wajir	3.9	3.9	44.2	28.5	11.7	11.9	7.6	7.8	32.7	47.9
		15.8	17.7	42.9	27.0	16.0	14.5	6.0	7.7	19.2	33.1
Nyanza	Gusii	11.6	12.0	65.9	53.2	14.7	21.4	7.7	13.3	-	-
	Kisumu	44.3	38.8	45.1	44.8	10.4	13.5	0.2	2.7	-	0.2
	Siaya	12.6	9.9	63.7	50.3	20.3	21.4	3.1	6.8	0.3	11.6
	Homa Bay	28.5	13.8	53.0	52.2	16.5	15.3	2.0	8.4	-	10.3
	Migori	22.6	7.8	68.6	56.8	8.2	12.8	-	12.9	0.5	9.8
	Nyamira	11.5	12.5	68.8	46.8	16.5	30.6	3.3	5.6	-	4.5
		22.8	16.5	59.7	50.9	14.4	18.5	2.8	8.3	0.1	6.0
Rift Valley	Kajiado	34.3	32.2	44.7	38.2	13.9	15.8	4.2	8.1	2.9	5.7
	Kipsigis	31.4	27.0	54.9	48.5	10.0	15.4	3.7	4.2	-	4.9
	Lakopia	24.8	21.5	58.4	53.7	16.7	22.7	0.3	2.2	-	-
	Nakuru	54.3	27.4	40.3	44.1	3.7	5.9	2.6	12.5	-	9.9
	Narok	22.2	14.5	49.0	35.7	23.6	30.2	5.3	13.2	-	6.4
	Trans Nzoia	30.0	29.2	62.8	64.3	6.4	6.1	0.7	0.4	-	-
	Uasin Gishu	32.2	32.1	52.1	43.7	12.7	10.4	2.5	10.5	0.6	3.4
	Bomet	34.3	20.8	48.0	43.1	12.4	25.9	5.4	8.6	-	1.6
	Transmara	22.2	14.5	49.0	35.7	23.6	30.2	5.3	13.2	-	6.4
	Baringo	22.5	7.5	58.4	39.5	16.3	30.3	2.9	17.7	-	5.0
	Elgeyo Marakwet	15.9	13.7	69.9	65.7	11.9	14.6	1.9	4.9	0.5	1.2
	Nandi	24.0	22.6	70.7	70.6	5.4	6.8	-	-	-	-
	Samburu	4.8	5.1	45.1	37.5	42.1	46.3	8.1	11.1	-	-
	Turkana	11.6	11.0	60.6	46.6	17.6	27.9	10.1	12.3	0.2	2.2
West Pokot	6.6	3.3	64.5	60.4	18.0	20.6	7.8	10.4	3.0	4.8	
		31.6	22.5	53.1	45.6	11.7	15.8	3.2	8.6	0.4	4.5
Western	Bungoma	13.8	11.7	63.6	58.6	19.9	24.7	2.9	4.5	-	0.5
	Busia	8.2	4.7	65.8	50.3	23.4	26.7	2.2	12.5	0.4	5.8
	Kakamega	24.8	23.9	67.4	64.7	7.3	10.8	0.6	0.6	-	-
	Vihiga	25.1	6.7	52.9	54.1	10.6	25.5	8.4	8.5+4.1	-	1.2
		19.8	14.0	63.2	58.5	13.8	20.1	3.1	6.0	0.1	1.3
NATIONAL		33.9	27.4	50.2	44.8	11.9	15.1	3.1	7.3	0.9	5.5
- Urban		77.0	73.6	20.8	21.9	1.3	3.3	0.6	0.7	0.2	0.4
- Rural		22.8	15.5	57.8	50.6	14.6	18.1	3.8	9.0	1.1	6.8

Source : Welfare Monitoring Survey II Basic Report 1994, Central Bureau of Statistics

Table - 3.2.1 (1/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997 - 2001

District	Agency	On-Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water-Related Project			
							Water	Sewerage	Both	
Kirinyaga	MWR	On-Going Projects	Kerugoya Municipality W.S. Rehabilitation	Municipality	1	GOK	●			
			Wanguru Urban W.S. Rehabilitation	Mwea	2	GOK	●			
			Kabare Rural W.S. Rehabilitation II	Gichugu	3	GOK/NGO	●			
			Kakoo Women Group W.P. (adequate water for domestic use)	Mwea	4	NGO/Community	●			
			Kenera Woman Group W.P. (water provision)	Gichugu/Mwea	5	NGO/Community/GOK	●			
			South Women Group W.P.	Gichugu	6	NGO/Community	●			
			(safe water for domestic and livestock farming use)							
			Kariru Water Project	Gichugu	7	NGO/Community	●			
		New Project Proposals	District Headquarters Office Block	Ndia	8	GOK				
			(create a working space for officers)	(Municipality)						
			Kerugoya Kulus Muhi, Water and Sewerage Systems	Municipality	1	Donor/GOK			●	
			Wanguru Major Rural W.P. and Sewerage System	Gichugu/Mwea	2	NGO/GOK			●	
			Ndia Major Rural W.S.	Mwea/Ndia	3	NGO/GOK	●			
			Kirinyaga Ruvumba Water and Sewerage System		4	NGO/GOK			●	
			Motungara Women Group W.P.	Mwea	5	NGO/GOK	●			
			(Pipe laying for domestic and livestock use)							
	Mwiterendi Women Group W.P.		Mwea	6	NGO/GOK/Community	●				
	(water supply for domestic and livestock production)									
	Riamara W.P. (reconstruction of a new intake)		Gichugu	7	NGO/GOK/Community	●				
	Guthungu Women Group W.P.		Gichugu	8	NGO/GOK/Community	●				
	Riani W.P.		Gichugu	9		●				
	Dam on Ruvumba, Kirinyaga and Upper Thiba Rivers		District wide	10	NGO/GOK					
	Sagana Urban W.S. Rehabilitation and Sewerage System		Ndia	11	GOK			●		
	Institutional and Self Help W.P.		District wide	12	Community	●				
	Purchase of Vehicles		District wide	13	GOK					
	Motor Vehicle Electrical and Carpentry Workshop		14	GOK						
	Office Accommodation, Divisional Headquarters (office construction)	District wide	15							
	Staff House Construction	District wide	16	GOK						
	MOLA (Kerugoya)	On-Going Projects	Kerugoya Bus Park	Kerugoya Town	1	Council				
			Street Lighting	Kulus Town	2	GOK				
			Sewerage W.S.	Kulus Town	1	Donor/GOK			●	
				Kulus Town	2	Donor/GOK	●			
			Road (tarmacking and maintenance)	Kerugoya/Kulus	3	Donor/GOK				
			Exhauster Vehicle for the Service of the Septic Tank	Kulus Town	4	Donor/GOK				
			Acquire Refuse Vehicles	Kulus Town	5	Donor/GOK				
Open Air Market (concrete slab and market stalls)			Kerugoya/Kulus	6	Donor/GOK					
Acquire Fire Brigade Vehicles		Kulus Town	7	Donor/GOK						
New Project Proposals		Completion of the Staffed Slaughterhouse	Kulus Town	8	Council					
		Street Lighting	Kerugoya/Kulus	9	Council					
		Construction of Town Hall and Offices	Kerugoya/Kulus	10	Donor/GOK					
		MOLA (Kirinyaga)	On-Going Projects	Kobirigwi Bridge Construction	Ndia	1	Council			
				Induni Bridge	Gichugu	2	Council			
	Construction of Social Hbit			Gichugu	3	Council				
Construction of Children's Home and Matron's House	Gichugu			4	Council					
New Project Proposals	Construction of Stadium	Mwea	5	Council						
	Murrining of access road	district wide	6	Council						
	Construction of Rental Houses	Gichugu	1	Council						
	Construction of Rental Houses	Buricho Ndia	2	Council						
	Construction of Kanyaga Slaughter House	Gichugu	3	Council						
	Construction of Buricho Slaughter House	Ndia	4	Council						
	Construction of Bute Market	Mwea	5	Council						
	Planning of Urban Center	district wide	6	Ministry of L. G.						
	Nyandarua	MWR	On-Going Projects	Oi Kalou W.P.	Oi Kalou	1	GOK	●		
				Kipipiri W.P.	Kipipiri	2	GOK/Self-help	●		
Nyakaranga W.P. Pump House and Pumping Unit				Oi Joro Oroko	3		●			
Leshaa W.P. Intake and Pumping Unit				Ndaragwa	4	GOK/Self-help	●			
Nyahiri W.P. Intake				Kinangop	5	GOK	●			
Muhonia W.P. Intake				Kinangop	6	GOK	●			
Mukungu W.P. Intake				Kinangop	7	Red Cross	●			
Ruri W.P. Tank				Oi Kalou	8	GOK	●			
Rehabilitation Programme				district wide	9	GOK	●			
Hahiro W.P. Intake				Ndaragwa	10	Red Cross	●			
Kigaa W.P.				Oi Kalou	11	GOK/Self-help	●			
Kirima W.P.				Ndaragwa	12	GOK/Self-help	●			
New Project Proposals		Construction of District Headquarters Offices	Oi Kalou	1	GOK					
		Greater Oi Kalou W.P.	Oi Kalou	2	GOK					
		Githai W.P.	Kinangop	3	GOK/Self-help					
		Mubao W.P.	Kipipiri	4	GOK/Community					
		Kirigo W.P.	Ndaragwa	5	GOK/Community					
		Kieni W.P.	Oi Kalou	6	GOK/Community					
		Gachaj W.P.	Oi joro Oroko	7	GOK/Community					
		Wambeka W.P.	Ndaragwa	8	GOK/Community					
		MOLA (Nyandarua)	On-Going Projects	Road Improvement Programme	district wide	1	NCC			
				Mark of Drainage System	district wide	2	NCC			●
				Garbage Collection	district wide	3	NCC			
				Construction of Public Toilet Facilities	district wide	4	NCC			
Construction of Pits for Sewage	district wide			5	NCC			●		
Assistance to Nursery Schools	district wide			6	NCC					
New Project Proposals	Construction of Council Offices	Oi Kalou	1	GOK Loan						
	Establishment of Stock Yards	district wide	2	GOK Loan						
	Protection of Public Dams	Dam district wide	3	NCC						
	Construction of Market Stall	district wide	4	GOK Loan						
	MOLA (Oi Kalou)	On-Going Projects	Road Improvement Programme	Oi Kalou	1	OTC				
			Bus Park	Oi Kalou	2	OTC				
Construction of the Open Air Market			Oi Kalou	3	OTC					
Sanitation Services Project			Oi Kalou	4	OTC					
Harama Estate Development				5	OTC					
New Project Proposals		Sewerage System	Oi Kalou	1	GOK Loan			●		
		Construction of Slaughter House	Oi Kalou	2	GOK Loan					
		Street Lighting	Oi Kalou	3	GOK					

Table - 3.2.1 (2/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997 - 2001

District	Agency	On Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water Related Project			
							Water	Sewerage	Roth	
Nyeri	MWR	On-Going Projects	Tetu/Tbergence W.S. Rehabilitation and augmentation	Tetu	1	GOK/SDD	●			
			Waraco-Lusoi W.P	Kieni East	2	GOK/Self-help	●			
			Karatina Urban W.S	Karatina	3	GOK	●			
			Mukuruwini W.S	Mukuruwini	4	GOK	●			
			Mweiga Jolai W.P	Kieni West	5	GOK/Self-help	●			
			Endyasha W.S	Kieni West	6	GOK/Self-help	●			
			Chehe W.P	Muthira	7	GOK/Self-help	●			
			Kamberani W.P	Kieni East	8	IFAD-GOK	●			
			Ndahi-Mitiri W.P	Kieni East	9	Community Self-help	●			
			Oburalwa-Mugunda W.P	Kieni West	1	GOK/SDD/IFAD	●			
		Mwigo Location W.P	Kieni West	2	GOK/Self-help	●				
		Mweiga Location/Simbara W.P	Kieni West	3	GOK/Self-help/SDD	●				
		Thunguri W.P	Kieni East	4	GOK/IFAD/Self-help	●				
		Karimbi W.P	Muthira	5	GOK/Self-help	●				
		NWPC	On-Going Projects	Karima Self-Help W.P	Othaya	1	GOK/Self-help	●		
	Muhiga Self-Help W.P			Othaya	2	GOK/Self-help	●			
	Chinga Self-Help W.P			Othaya	3	GOK/Self-help	●			
	Kigwandi Self-Help W.P			Tetu	4	GOK/Self-help	●			
	New Project Proposals	Muthira W.S.F.S. Rehabilitation	Muthira	1	GOK	●				
		Othaya W.S	Othaya	2	GOK	●				
		Bus Mataru Park	Othaya	2	GOK/Donor		●			
	MOLA (Othaya)	New Project Proposals	Improvement of Roads and Storm Water Drainage	Othaya	1	GOK		●		
			Construction of Complete Market System	Othaya	3	GOK/Donor				
			Cleaning and Levelling of Open Air Market	Othaya	4	GOK/Donor				
	MOLA (Nyeri Munic)	New Project Proposals	Rehabilitation of W.S	Nyeri	1	MLG	●			
			Construction of Modern Market	Nyeri	2	MLG				
			Upgrading of Town Roads	Nyeri	3	GOK				
			Extension of Sewers	Nyeri	4	GOK		●		
			Green Town Environmental Action Plan	Nyeri	5	Donor				
			Street Lighting	Nyeri	6	MLG				
	MOLA (Nyeri County)	New Project Proposals	Grading of Tea and Coffee Access Roads		1	Cess Funds				
			Mweiga Water Scheme	Kieni West	2	GOK/Donor	●			
			Naromoru W.S	Kieni East	3	GOK/Donor	●			
	MOLA (Karatina)	On-Going Projects	Credit Guarantee Scheme	Karatina	1	SEPCO				
			WTD Provision of Loans to Women Group	Karatina	2	FES/FFP/OWT/KREP				
		New Project Proposals	Sewerage Rehabilitation (Re-routing of lines)	Karatina	1	GOK/LGA		●		
			Sewerage Treatment Works Phase II(Rehabilitation)		2	External		●		
			Small Towns Water Use Tests/Sanitation	Karatina	3	GOK/MOWD		●		
			Sewerage Phase IV(construction of sewers)	Karatina	4	MLG/LGA		●		
			Purchasing Fire Fighting Truck	Karatina	5	External MLG				
			Construction of Wholesale Market	Karatina	6					
			Tarmacking of Roads	Karatina	7	External MLG/USAID				
			Street Lighting	Karatina	8	Internal LASC				
	MOLA (Embu Ngori North Dev. Authority)	New Project Proposals	Dam Construction	Kieni East/West	1	GOK/Donor				
			Horticultural and Irrigation Development Programmes		2	GOK/Donor				
Thika	MWR	On-Going Projects	Juja Farm Self-Help Project(Pipe laying)	Ruiru	1	GOK/Harambee Donor	●			
			Ruiru W.S (rehabilitation of tanks and lines)	Ruiru	2	GOK	●			
			Juja W.P(Construction of steel tanks)	Ruiru	3	GOK	●			
			Ragio Self-Help W.P(Complete laying of the mainline)		4	GOK/Harambee	●			
			Ndarugu W.P(Complete the main mainline)	Gatundu	5	GOK	●			
			Karimenu W.P(Complete the twin mainline)	Gatundu	6	GOK	●			
			Ithanga W.P(rehabilitation of intake)	Kakuzi	7	GOK/Donor	●			
			Ginaaba Community W.P(travelling line)	Kakuzi	8	Donor/Harambee	●			
			Munyua/Guanayaga Self-help W.P	Thika	9	GOK/Harambee Donor	●			
			New Project Proposals	Kinyathira w/p	Ruiru	1	GOK/Donor/Community	●		
	Kaithoa w/p	Ruiru		2	GOK/Donor/Community	●				
	Agriculture, Livestock Dev. Marketing									
Kwale	MWR	On-Going Projects	Lunga Lungu W.S(Borehole pump)	Mbambweni	1	GOK	●			
			Shimba Hill W.S	Kubo	2	GOK	●			
			Mwongoni W.S(construction of tank)	Kubo	3	GOK	●			
			Vanga W.S(rehabilitation of pumping unit)	Kubo	4	GOK	●			
			Kikoneni W.S pumping units	Mbambweni	5	GOK	●			
			Mwambweni W.S(construction of tank)	Mbambweni	6	GOK	●			
			Kwale W.S(construction of tank)	Timba	7	GOK	●			
			Kinango W.S(pumping unit)	Kinango	8	GOK	●			
			New Project Proposals	Asipit station of Mwambweni W.S and Mwambweni Dam	Mbambweni	1	GOK	●		
				Samburu/Vigurgani W.P(pipeline)	Kinango and Samburu	2	GOK	●		
		Mwamburi W.P(pipeline)		Samburu	3	GOK	●			
		Chonyi Dam(reservoir/embankment)		Kinango	4	GOK	●			
		Mwaluphaa Rock Catchment		Sagharu	5	GOK	●			
		Mwakiembe Dam(reservoir/embankment)		Kinango	6	GOK	●			
		Ndavya Dam(reservoir/embankment)		Kinango	7	GOK/Community	●			
	Nyando Dam(reservoir and fencing)	Kinango		8	GOK	●				
	Samburu W.P(pipeline)	Samburu		9	GOK	●				
	Samburu South Group Ranch w/p(pipeline)	Samburu		10	GOK	●				
	Coast Dev. Authority	On-Going Projects	Wafui Dhaba W.P	Mbambweni	11	GOK/Donor	●			
			Kilishi Rock (Boulder) wall, pipes and fencing)	Samburu	12	GOK	●			
			Mwamburi W.S(pumping unit and distribution lines)	Kubo	13	GOK	●			
			Lekore W.S(pumping unit and storage tank)	Kubo	14	GOK/Donor	●			
			Mwaluphaa W.S(pumping unit and storage tank)	Kubo	15	GOK	●			
			Kigwango Dam(embankment)	Mbambweni	16	GOK/Donor	●			
			Maji Moto Dispensary(Health Project)		1	GOK/Community				
			Mkanda Experimental Farm (demonstration farm)	Mbambweni	2	GOK				
			Mwananyama Farm(Establish Nucleus estate)	Mbambweni	3	GOK				
			Soybean Programme (promotion of oil crops)	Mbambweni	4	GOK				
			Model School(improve the education level)	Samburu	5	GOK/Community Donor				

Table - 3.2.1 (3/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997
- 2001

District	Agency	On-Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water Related Project				
							Water	Severage	Both		
Kwana (cont'd)	Coast Dev. Authority (cont'd)	New Projects Proposed	Water Resource Development (dams and wells)	ASAL	1	GOK/CDA					
			Participatory Rural Appraisal (Agriculture)	district wide	2	GOK/CDA/Community					
			Small-Scale Enterprises (Income generation)	district wide	3	GOK/Community					
			Livestock Development	Matoga	4	GOK					
Lamu	MWR	On-Going Projects	Sugar Industry (Formation of a company)	Mbamurani	5	Community					
			Lamu W.P. Augmentation Project (rehabilitation)	Amu	1	GOK/IFAD	●				
			Mkokoni W.S. (rehabilitation)	Kiunga	2	GOK	●				
			Community Wells Construction / Rehabilitation	Faza/Kiunga	3	GOK/Donors	●				
			Community Training	Faza/Kiunga	4	GOK/IFAD	●				
			Faza Desalination Plant (F.S.)	Faza	1	GOK/Donor	●				
	MOLA	On-Going Projects	New Project Proposals	Livestock W. Prog. (well)	District wide	2	GOK/Donor	●			
				Wetland Inventory	District wide	3	GOK				
				Lamu Town Market Extension	Amu	1	Council				
				Rehabilitation of Donkey Holding Stand	Amu	2	Council				
				Rehabilitation of Stadium	Amu	3	Council				
				Construction of Sewerage System	Amu	1	Urban Development Pro.		●		
Mombasa	MWR	On-Going Projects	Second Mzimba Spring Pipeline	Witu/Amu	2	National Housing Corp.					
			Open Air Market	Witu/Amu	3	County Council					
			New Project Proposals	Rehabilitation of Wells	Likoni	1	World Bank	●			
				Rehabilitation of Wells	Changamwe	2	GOK/Donor	●			
				Wells Rehabilitation	Kisumu	3	GOK/Donor	●			
				Boreholes Project	Districtwide	4	GOK/Donor	●			
				Denyenye Line Rehabilitation Project		5	GOK/Donor	●			
				Burungu Nyungu W.P.	Kisumu	6	GOK/Donor	●			
				Timbani Line Rehabilitation	Likoni	7	GOK/Donor	●			
				Burubura Mshomoni W.P.	Kisumu	8	GOK	●			
				Hodi-Hodi Port-Raita W.P.	Changamwe	9	GOK	●			
				Kembeni Unga W.P.	Kisumu	10	GOK	●			
Mkopanga Primary School W.P.	Kisumu	11		GOK	●						
Tana River	MWR	On-Going Projects		Oda W.P. (tank, recubation system)	Garsen	1	GOK	●			
			Coast/ASAL Development Program (regular wells)	district wide	2	IFAD/GOK	●				
			New Project Proposals	Garsen W.S. (rehabilitation)	Garsen	1	GOK	●			
				Kisumu W.S. (rehabilitation)	Garsen	2	GOK	●			
				Hiriani Earth Pan (Site investigation planning)		3	GOK	●			
				Wayu Earth Pan (Site investigation planning)	Coole	4	GOK	●			
				Chandende Earth Pan (Site investigation planning)	Madogo	5	GOK	●			
				Kisumu W.S. (rehabilitation augmentation of pipeline)	Kyeni	1	GOK	●			
				Embu Rural (improvement of the intake)		2	GOK	●			
				Makindu W.P.	Mariyati	3	GOK	●			
				Kisumu W.P. (New intake)	Runyenge	1	GOK	●			
				Githimu/Gathigi W.P.	Manyartha	2	GOK	●			
Embu	MWR	On-Going Projects		Low Cost Housing Scheme (Construction)	Central	1	NGO/LGSH				
				Youth Polytechnic (Construction)	Central	2	NGO/LGSH				
			Children's Clinic (Health)	Central	3	NGO/LGSH					
			Fire station and Firemen quarters	Central	4	Local Service Charge					
			Main Sewer Line Pumping	Central	5	NGO/LGSH					
			Sewerage (construction)	Central	1	Donor/World Bank		●			
	MOLA (Embu Mani. Council)	New Project Proposals	Urban Transport Improvement Rehabilitation		2	World Bank					
			Street Lighting	Central	3	Local Service Charge					
			MOLA (Embu County Council)	New Project Proposals	Manyartha Slaughter-house construction	Manyartha	1	GOK			
					Kathande Factory Road (murraining)	Runyenge	2	GOK			
					Josephat Njoki's Private Office Road (murraining)	Nembere	3	GOK			
					Kibetei factory road (murraining)	Nembere	4	GOK			
Livestock Market Development (construction)	Kyeni	5			GOK						
Kiangangi Secondary School Water Tank (construction)	Kyeni	6			GOK	●					
Mombasa	MWR	On-Going Projects	Kigera/Kisumu Road (murraining)	Manyartha	7	GOK					
			Rabutu Bridge Construction	Nembere	8	GOK					
			Kathandi Karumathi Bridge Construction	Manyartha	9	GOK					
			Kungu Factory Road (murraining)	Manyartha	10	GOK					
			New Project Proposals	Karara W.S. (rehabilitation)	Central	1	Community/GOK	●			
				Budasa W.S. (new source)	Central	2	GOK	●			
				Bigi Water Pan (dishing)	Central	3	GOK	●			
				Laisamis W.S. (rehabilitation)	Laisamis	4	GOK	●			
				Murille W.S. (construction of pump house and tank)	Laisamis	5	GOK	●			
				Logolole W.S. (rehabilitation)	Laisamis	6	GOK	●			
				Loiyangalani W.S. (construction/rehabilitation)	Loiyangalani	7	GOK	●			
				Gatub W.S. (rehabilitation)	Loiyangalani	8	GOK	●			
Kalacha W.S. (equipping/rehabilitation)	Maitona	9		GOK	●						
Koya w/s (borehole)	Laisamis	1		Community/GOK	●						
Maitona Borehole	Central	2		Community/GOK	●						
Maitona w/s (wells, storage tank, distribution system)	Maitona	3		GOK	●						
Dukana w/s (borehole)	North Horr	4	Community/GOK	●							
North w/s (solar and distribution system)	North Horr	5	GOK	●							
Meru	MWR	On-Going Projects	Kamigo W.P. (tanks and pipes)	Aburiga West	1	Community/GOK	●				
			Nyonga Makandune Kamoni W.P. (tanks and pipes)	Aburiga East	2	Community/GOK	●				
			Mugana Igip Nkavene W.P.	Miriga Meru West	3	Community/GOK	●				
			Munitha Women Group W.P. (pipes)	Miriga Meru East	4	Community/GOK	●				
			Kimuri W.P. (tank and pipes)	Aburiga West	5	Community/GOK	●				
			Githonga W.P. (distribution network)	Aburiga West	6	Community/GOK	●				
			Kangau W.P. (pipes)	Timau-Kisima	7	Community/GOK	●				
			Ithambara Kidindu (pipelaying)	Mt. Kenya	8	Community/GOK	●				
			Nyamba Yathi W.P. (water tank and pipe laying)	Aboceta	9	Community/GOK	●				
			Kigochia Gathimbi W.P. (water tank and pipe laying)	Aburiga East	10	Community/GOK	●				
			Kanja Women Group W.P. (water tank and pipe laying)	Miriga Meru East	11	Community/GOK	●				
			Nari-Kirua W.P. (pipe laying)	Miriga Meru West	12	Community/GOK	●				
			Uthimbi Meru W.P. (water tank and pipe laying)	Aburiga West	13	Community/GOK	●				
			Kibari Murungi W.P. (water tank and pipe laying)	Aburiga West	14	Community/GOK	●				

Table - 3.2.1 (4/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997 - 2001

District	Agency	On-Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water-Related Project						
							Water	Severage	Both				
Meru (cont'd)	MWR (cont'd)	New Project Proposals	Meru w/s (pipes)	Mirigamiru West	1	GOK	●						
			Nkuba w/s	Nkune	2	GOK	●						
			Kanyakine W/S (pipeline intake)	Abogeta	3	GOK	●						
			Merumbi w/s (pipes)	Igoj	4	GOK	●						
			Mwangathi (construction of intake and distribution)	Abothugochi East	5	GOK	●						
			Kibirichia w/s (tank line)	Abothugochi West	6	GOK	●						
			Gikoi Mweru w/p (tank line)	Igoj/Igoj	7	GOK/Community	●						
			Thura Giki w/p (intake line)	Mirigamiru East	8	GOK/Community	●						
			Kithithina Umoga w/p (water treatment, distribution line)	Timau	9	GOK/Community	●						
			Katheri Omtuli w/p (intake distribution)	Timau	10	GOK/Community	●						
			Ithambara w/p (intake distribution)	Abothugochi West	11	GOK/Community	●						
			Muguna Katharantandi w/p	Timau	12	GOK/Community	●						
			Muguna Mtenjera w/p	Timau	13	GOK/Community	●						
	MOLA (Municipal Council of Meru)	On-Going Projects	New Project Proposals	Construction of Fire station		1	Service charge						
				Urban Infrastructure Project	Municipality	1	IFAD/World Bank						
				Improvement of Sewerage ponds	Mirigamiru West	2	Local Gov. Local Authority		●				
				Construction of 3 additional Sewerage Ponds	Mirigamiru West	3	Local Gov. Local Authority		●				
				Catoromone Market Repair	Mirigamiru West	4	Service charge						
				Street Lighting	Kaga Road	5	Service charge						
				Sewer Line Extension	Makutano to Timau	6	Service charge		●				
				Makutano clinic (health)	Makutano	7	Housing Fund						
				Street Lighting	Tunda and Ngata	8	Service charge						
				Trunk Sewer	Municipality	9	GOK		●				
	MOLA (Meru County Council)	New Project Proposals	New Project Proposals	Construction of divisional office at Timau and Gatinbi	Abothugochi East	1	County Council						
				Purchase vehicle for revenue collection		2	County Council						
				Construction of divisional office at Katheri	Abothugochi West	3	County Council						
				Construction of divisional office at Thura and Igoj	Mirigamiru East	4	County Council						
				Construction of Stadium	Kaga, Timau, Nkuba	5	County Council						
				Makueni	MWR	On-Going Projects	Kitumbuyu W/S Phase II (electrification of pumping)	Makindu	1	GOK/Arise Ad Krwa	●		
							Wote W/S (pipe, pumping)	Wote	2	GOK	●		
							Makindu W/S (pipe, tank)	Makindu	3	GOK	●		
							Mbunguni W/S (rehabilitation, pumping)	Kani	4	GOK/WUAS	●		
							Mahangathi Rock Catchment (tank)	Mahangathi	5	World Vision Kenya	●		
Ithomba W/P (tank pipelines)	Nyumbi	6	World Vision Kenya				●						
Mbitini W/P (pipeline)	Kyusuu/Makindu	7	World Vision Kenya				●						
Kyusuu W/P (intake, pump house tank, pipeline)	Mbiti-Andei	8	Catholic church				●						
Small Earth Dams Pans	district wide	9	NGOs				●						
Shallow wells-Springs Sans Dams	district wide	10	NGOs				●						
Emali W/P (pipeline)	Emali/Makindu	11	NWPC				●						
Simba W/P (pipeline)	Nyumbi/Makindu	12	NWPC				●						
New Project Proposals	New Project Proposals	New Project Proposals	Muani-Kakitea w/p				Ngome	1	GOK/Donor	●			
			Katamba Dam		Makindu	2	GOK/Donor	●					
			Mbiti-Andei w/s (rehabilitation)		Nyumbi-Mbiti-Andei	3	GOK/Donor	●					
			Kigani-Kalawa w/p (rehabilitation and expansion)		Kalawa	4	GOK/Donor	●					
			Borehole Project		Districtwide	5	NGOs/Donor	●					
			Dam Project		Districtwide	6	GOK/NGO/TARDS	●					
			Mwingi		MWR	On-Going Projects	Mwingi W/S (rehabilitation of intake)	Central	1	GOK	●		
							Kiambera W/P (reconstruction of a new water supply)	Mwingi, Kani, Gata	2	GOK	●		
							Mgwani W/S (replacement/construction)	Mgwani	3	GOK	●		
							Ngomeni W/S (rehabilitation, desilting)	Nguni	4	GOK	●		
Kyuso w/s	Kyuso	5					GOK	●					
Kanzu W/S	Nyu	6		GTZ/GOK			●						
Ukazi W/P (retaining wall, pumping house tank)	Nguni	7		EEOGOK			●						
Ukazi Borehole (distribution extension)	Nguni	8		GOK			●						
Kyuso Borehole (borehole pipeline)	Kyuso	9		AAK/GTZ/GOK			●						
Muthuki-Kalindi W/S (gravity)	Nyu	10		GOK			●						
New Project Proposals	New Project Proposals	New Project Proposals	Thitani W/P (boreholes)	Mgwani	11	GTZ/GOK	●						
			Kyuso w/s (FS on alternative water supply)	Kyuso	1	GOK/Donor	●						
			Ngomeni w/s (rehabilitation of line)	Nguni	2	GOK/Donor	●						
			Nzimu w/s (pump house/ tank/dam)	Tackuru	3	GOK/Donor	●						
			Planning and design of w/p	District wide	4	GOK/Donor	●						
			Water Conservation	Districtwide	5	GOK/Donor	●						
			groundwater Dev (boreholes)	Districtwide	6	GOK/Donor	●						
			Ubi W/Su Sub-Surface Dam	Tackuru	7	GOK/Donor	●						
			Thitani w/p (rehabilitation and extension)	Mgwani	8	GOK/Donor	●						
			Kilo Rock Catchment	Central	9	GOK/Donor	●						
MOLA	On-Going Projects	New Project Proposals	Kwa Kasovi Earth Dam	Central	11	GOK/Donor	●						
			Subsurface Dams along Tira River		12	GOK/Donor	●						
			Road Grading (feeder road)	District wide	1	Service charge							
			Public Conveniences (toilets)	District wide	2	Service charge							
			Construction of County Hall	Central	1	Rate / Service charge							
			Fencing of market	district wide	2								
			Public Conveniences (toilets)	district wide	3	Service charge/donor							
			Grading of Roads	district wide	4	MCC/Donor							
			Borehole Earth Project	district wide	5			●					
			Tourism Development		6								
Mwingi Urban Council	On-Going Projects	New Project Proposals	Road Grading	Central	1	Local Authority/Service Charge							
			Bus park and open air market	Central	2	GOK							
			Construction of Town Hall	Central	1	MUC							
			Access road grading	Urban council	2	MUC/Donor							
			Sewerage, treatment works and drainage lines	Urban council	3			●					
			Refuse collection	Towa	4	MUC/Donor							
			Purchase vehicle for revenue collection	Urban council	5	MUC/Donor							
			Stadium Fencing	Urban council	7	MUC/Donor							
Town W/S	Urban council	6	MUC/Donor		●								
Street Lighting	Towa	8	MUC/Donor										

Table - 3.2.1 (5/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997 - 2001

District	Agency	On Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water-Related Project		
							Water	Sewerage	Both
Tharaka Nithi	MWR	On Going Projects	Chuka W/S (intake/pipes/gravity)	Chuka	1	GOK	●		
			Chogoria/Thiga W/P (intake/pipes/gravity)	Mwimbi	2	GOK/Community	●		
			Karigani Rural W/S (rehabilitate/extension of tank)	Chuka	3	GOK	●		
			Mwanuu W/S (gravity rehabilitation)	Tharaka South	4	GOK	●		
			Kuma Magutuni W/P (gravity tank distribution)	Mwimbi	5	GOK Church/Self help	●		
			Maguoni water and sanitation P	Tharaka South	6	GOK/EC/Self help	●		
			Murugi Makumango W/P (distribution)	Muthambi	7	GOK/Self help	●		
			Gania Karima W/P (pipes intake)	Mithera	8	GOK/Self help	●		
			Gachuku W/P	Mwimbi	9	GOK/Self help	●		
			Niantuni/Mutungo W/P	Chuka	10	GOK/Self help	●		
			Mhoguri W/P (gravity)	Mwimbi	11	GOK/Self help	●		
			Makuri W/P	Mwimbi	12	GOK/Self help	●		
			SK W/P	Muthambi	13	GOK/Self help	●		
			Marimani water furrow	Tharaka South	14	GOK/Self help	●		
			Niondi water furrow	Tharaka Central	15	GOK/Self help	●		
			Mitunguu Tumai water furrow	Tharaka Central	16	GOK/Self help	●		
			Water use supply P	District wide	17	GOK/SIDA	●		
			Water use resources assessment study	District wide	18	GOK	●		
			Self help W/P	District wide	19	GOK	●		
			Urban W/S and sewerage	Chuka	20	GOK	●		
			Rehabilitation of water supplies	District wide	21	GOK	●		
			Tharaka Water and sanitation P	Tharaka South	22	GOK/SIDA	●		
Mwamboni	MWR	On Going Projects	Gatunga W/P	Tharaka North	1	GOK	●		
			Mwimbi East/West w/p	Mwimbi	2	GOK	●		
			Mwaa W/S (rehabilitation)	Central Mwaa	1	GOK	●		
		New Project Proposals	Tigania Rural w/s	Tigania	2	GOK	●		
			Mikinduri market water supply	Mikinduri	3	Local Community	●		
			Tigania Rural w/s (intake tank lines)	Tigania	1	GOK/Donor	●		
			Mwaa w/s (line tank)	Igembe	2	GOK/Donor	●		
Mwea	MWR	On Going Projects	Tura/Lhof Rural w/s (boreholes/pan)	Igembe	3	GOK/Donor	●		
			Northern Grazing Area w/s (borehole)	Igembe	4	GOK/Donor	●		
			F/S Planning and Design (surface and ground water)		5	GOK	●		
		New Project Proposals	Era/Siakago W/P (pipes/intake)	Cachoka/Siakago	1	GOK	●		
			Gangaa W/P (intake line)	Siakago	2	GOK	●		
Carissa	MWR	On Going Projects	Ishara W/S (intake line)	Ishara	3	GOK	●		
			Cachoka w/p (F/S)	Cachoka	1	Plan International	●		
			Makima w/p (distribution lines)	Mwea	2	GOK/UNICEF	●		
		New Project Proposals	Ndja - Muthenge w/p (intake/pumping/distribution)	Cachoka	3	GOK	●		
			Office construction	Siakago	4	GOK	●		
			Kiambere Dam w/p	Siakago	5	TARDA/GOK	●		
			Borehole Drilling Programme	Mwea	6	Plan International	●		
			Carissa Urban W/S (boreholes/distribution)	Township/Central	1	GOK	●		
			Jara Water Dam	Jara	2		●		
			New Carissa Urban W/S	Township/Central	3	GOK	●		
Dujs Borehole	Dujs/Balambale	4	GOK/UNICEF	●					
Masalani W/S (rehabilitation)	Masalani	5	GOK	●					
Mandera	MWR	On Going Projects	Boreholes Project	Districtwide	1	GOK/Egyptian Gov.	●		
			Rural w/s (rehabilitation)	Districtwide	2	GOK/UNICEF	●		
			Jara w/s	Jara/Masalani	3	GOK	●		
		New Project Proposals	Dam Construction Unit (rehabilitation of machinery)		4	GOK/UNICEF	●		
			Mogogobe w/s		5	GOK/SDD	●		
			Kamathi w/s	Kamathi/Bura	6	GOK/SDD	●		
			Pollution Control and Water Sources Protection	Districtwide	7	GOK	●		
			Nanighi w/s	Nanighi/Bura	8	GOK/SDD	●		
			Office construction	Dadaab/Jara	9	GOK	●		
			Danyere Dam	Danyere/Balambale	10	GOK	●		
			Bodhali w/s		11	GOK	●		
			Alango Arba w/s	Bodhali/Jara	12	GOK	●		
			Rehabilitation of water supplies (modern water pumping)	District wide	1	GOK	●		
Construction of w/s (in stock w/s)	District wide	2	GOK	●					
Construction of w/s (in stock w/s)	Central/Mandera I	3	GOK	●					
Construction of w/s (tank line)	Eldak	4	GOK	●					
Construction of w/s (tank pump)	Rhamu	5	GOK	●					
Construction of w/s (tank line)	Khalafyo	6	GOK	●					
Construction of w/s (tank pump)	Central	7	GOK	●					
Construction of w/s (pan)	Shimbi/Faruma	8	GOK	●					
Construction of w/s (pan)	Malkamari	9	GOK	●					
Drilling of a borehole	Dabshi	10	GOK	●					
Wajir	MWR	On Going Projects	Construction of w/s (investigation/planning/design)	Herei	1	GOK/Donor	●		
			Hydrogeological Survey	Herei	2	GOK/Donor	●		
			Drilling of Boreholes	Herei	3	GOK/Donor/NGO	●		
		New Project Proposals	Danda w/s (rock catchment)	Danda	4	GOK/Donor/NGO	●		
			Shaf-Shafey w/s (new water supply)	Central	5	GOK/Donor	●		
			Shaf-Shafey II and B.P. I w/s (shallow wells)	Central	6	GOK/Donor	●		
			Rhama Dintu w/s (line)	Rhama Dintu	7	GOK/Donor	●		
			Araba w/s (tank)	Fino	8	GOK	●		
			Lafey w/s (tank line)	Lafey	9	GOK/Donor	●		
			Cleaning of Boreholes	Herei	10	GOK/NGO's/Donors	●		
			Construction of workshop/store	Central	11	GOK/Donor	●		
			Construction of divisional water office	Central	12	GOK	●		
			Staff Housing and Electrification	Central	13	GOK	●		
New Project Proposals	Ethen borehole/drilling	Tarbsaj	1	GOK	●				
	Cleaning and equipping of Boreholes	Ethen/Quar	2	GOK	●				
	Maximum Utilization Prog. (boreholes)	Districtwide	1	GOK	●				
	Development of New Facilities (boreholes)	Districtwide	2	GOK/ENDDA/NGO	●				
	Pans Dams (drilling/construction)	Districtwide	3	GOK/ENDDA/NGO	●				
District Water Development	Districtwide	4	GOK	●					
Sub-district HQ construction	Habarwein/Bote	5	GOK	●					

Table - 3.2.1 (6/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997
- 2001

District	Agency	On-Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water-Related Project			
							Water	Sewerage	Bath	
Wajir (cont'd)	MOLA	New Project Proposals	Township Sanitation Conservancy Project	Central	1	GOK/WWC				
			Wajir Town Sewerage System (design/construction)	Central	2	GOK/WWC		●		
			Market construction		3	WWC				
			Street Lighting	Central	4	WWC				
			Estate development	Central	5	WWC				
			Construction of Town Social Hall	Central	6	WWC				
Kisii	MWR	On-Going Projects	Keroka W.P. (line/tank pumping set)	Masaba	1	GOK	●			
			Gesuse/Cateri W.P. (electrification of intake)	Masaba	2	GOK	●			
			Kiarenj W.P. (storage tank/pipes)	Krejanya	3	GOK	●			
			Kikindo W.P. (treatment works)	Kreumbu	4	GOK	●			
			Kiongo W.P. (extension of lines/storage pan)	Kreumbu	5	KFFHC	●			
			Rigena W.P. (water supply)	Nyacheiki	6	GOK	●			
			Etago W.P. (distribution lines)	Nyarambe	7	GOK/Community	●			
			Gonsteri Phase II (distribution)	Nyamache	8	GOK/Community	●			
			Kioge W.P. (electrification)	Mosochi	9	GOK/Community	●			
			Catera W.P. (rehabilitation of w/s)	Ogembo	10	GOK/Community	●			
			Sengeru W.S. (rehabilitation of w/s)	Ogembo	11	GOK/Community	●			
			New Project Proposals	Kisii w/s Project Ph I & II (increase capacity)	Municipality	1	GOK	●		
				Tabaka-Hubago w/s	Nyamarambe	2	EEC	●		
				Ogembo w/s (full treatment supply)	Ogembo	3	GOK	●		
	Nyacheiki w/s (clean water to market center/schools)	Nyachi/Nyamachi		4	GOK/Community	●				
	Maturua w/s (full treatment supply)	Kreumbu		5	GOK	●				
	Moniaka w/s (gravitational system)	Nyamarambe		6	GOK	●				
	Ironga/Mitongo (clean water)	Suneka		7	GOK/Community	●				
	MOLA (County Council)	On-Going Projects		Market Planning	District-wide	1	County Council			
				Refuse collection	District-wide	2	County Council			
			Building cheap shades	District-wide	3					
			Rural electrification		4	County Council				
			Isolated Plop and hawkers	District-wide	5					
			Improvement of feeder roads	District-wide	6	County Council				
			Provision of land for the construction of shade	District-wide	7	County Council				
			Health	District-wide	8	County Council				
			Fencing of Public Land	District-wide	9	County Council				
			Construction of Slaughter House	Ogembo	10	County Council				
	New Project Proposals	Upgrade of Suneka market	Suneka	1	MOLG					
		MOLA (Kisii Municipality)	On-Going Projects	Kisii Sewerage Programme	Municipality	1	GOK/ADB		●	
	Daraja Nibbi Open Air Market			Municipality	2	Dutch Gov./GOK				
	Kenya Urban Transport Infrastructure project			Municipality	1	GOK/World Bank				
	W.S. Improvement			Municipality	2	Municipal Council	●			
Refuse collection improvement	Municipality			3	GOK					
Kisii Bypass Project	Municipality			4	GOK/World Bank					
Provision of On-Site Infrastructure	Municipality			5	Municipal Council					
Construction of fire station	Municipality			6	GOK/MOLG					
Improvement of stadium	Municipality			7	GOK					
Construction of New Hall	Municipality			8	GOK					
Kisumu	MWR	On-Going Projects	Development of Nyakongo site (drainage)	Municipality	9	Municipal Council		●		
			Nyando Flood Control activities	Nyando	1	GOK				
			Kisumu Rural Water Supply phase I	Maseno	2	GOK	●			
			Nyakato Women Group Borehole	Mwani	3	GOK	●			
			Tamu W.S. (rehabilitation/replacement)	Muhoroni	4	GOK	●			
			Vitendo W.P. (survey and design)	Vitendo	5	GOK	●			
			Mwendwa Kanyaw W.S.	Mwendwa	6	GOK	●			
			Katho W.P. (tank distribution)		7	GOK	●			
			Rural Domestic Water Supply and Sanitation Project	Nyakach	8	GOK/Netherlands	●			
			Nyakach W.S.	Nyakach	9	GOK	●			
			Maseno Kombewa W.S.	Maseno	10	GOK	●			
			Nyando/Kadibo Water and sanitation programme	Nyando/Kadibo	11	GOK/Netherlands	●			
			New Project Proposals	Child Survival and Development Programme (CSD)	Mwani/Maseno	1	GOK/UNICEF	●		
				Muhoroni w/s (tank)	Muhoroni	2	GOK	●		
	North East Kano w/s (Kibioni w/s intake)	Mwani		3	GOK	●				
	Songer Muhoroni w/s	Muhoroni		4	GOK/Donor	●				
	Kajulu Gravity Line (ES)	Winam		5	GOK	●				
	Kisumu Municipality	On-Going Projects		Kenya Urban Transport project	Winam	1	GOK/World Bank			
				Lumumba Health Center	Winam	2	Municipality			
			Got Nyabondo Dispensary	Winam	3	Municipality				
			Nyabongo Dispensary	Winam	4	Municipality				
Obunga Dispensary			Winam	5	Municipality					
Kisumu Municipal Cemetery			Winam	6	Municipality					
New Project Proposals			W.S. Kisumu Town	Winam	1	Municipality	●			
	Sewerage System Kisumu Town	Winam	2	Municipality		●				
	New Mechanical / Electrical Workshop	Winam	3	Municipality						
	Construction of horticultural market	Winam	4	Municipality						
	Bus Park Project Kisumu Town	Winam	5	Municipality						
	Rehabilitation of Municipal Market	Winam	6	Municipality						
	Construction of Parking depot	Winam	7	Municipality						
	Construction of New fire station	Winam	8	Municipality						
	Parks development	Winam	9	Municipality						
	Installation of parking meters	Winam	10	Municipality						
	Off-street parking facility	Winam	11	Municipality						
	Town Hall extension	Winam	12	Municipality						
	Modern Telephone Exchange	Winam	13	Municipality						
	Street Lighting	Winam	14	Municipality						
Bar Dgwai dispensary	Winam	15	Municipality							
Chiga Dispensary	Winam	16	Municipality							
Ojella Dispensary	Winam	17	Municipality							
Tiengere Dispensary	Winam	18	Municipality							
Wathorego Dispensary	Winam	19	Municipality							
Airport Dispensary	Kisumu Town	20	Municipality							
Garbage Dumping Site	Kisumu Town	21	Municipality							

Table - 3.2.1 (7/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997 - 2001

District	Agency	On Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water Related Project			
							Water	Sewerage	Both	
Kisumu (cont'd)	Kisumu County Council	New Project Proposals	Sugar Belt Feeder Roads	Mwani/Mathoroni	1	County Council				
			Construction of market shed	East/Avani/Pan/Alaska/Kit	2	County Council				
			Construction of Slaughter House	North/Alaska/Mwani/Pan/Alaska/Kit	3	County Council				
			Establishment of tree planting nurseries	North/Alaska/Mwani/Pan/Alaska/Kit	4	County Council				
			Assistance to Women Groups	District-wide	5	County Council				
			Street Lighting	North/Alaska/Mwani/Pan/Alaska/Kit	6	Donor				
			Construction of market shed	North/Alaska/Mwani/Pan/Alaska/Kit	7	County Council				
Nyamira	MWR	On Going Projects	Rural Domestic Water Supply and Sanitation Project	District-wide	1	GOK/Netherlands	●			
			Rehabilitation of Nyamira W.S	Nyamira	2	GOK/LRRWD	●			
			Rehabilitation of Tongbe W.S	Manga	3	GOK	●			
			Construction of Nakome W.S	Manga	4	GOK/Netherlands	●			
			Rural Domestic W.S Programme III	District-wide	1	GOK	●			
	New Project Proposals	Keera Water Office	Nyamira	2	GOK	●				
		Eronge w.s	Eronge	3	GOK	●				
		Nyamaria	Geima	4	GOK	●				
		Tinga w.s	Nyamira	5	GOK	●				
		MOLA (Nyamira Town Council)	On-Going Projects	Opening of Access Roads	Nyamira	1	Lot of Activities/Service Charge			
Fencing of borders	Nyamira			2	Service Charge					
Nyamira County Council	New Project Proposals	Market development	Nyamira	1	Service Charge					
		Refuse collection facilities	Nyamira	2	GOK					
		Provision of sanitation facilities	District-wide	1	Market rates/Service charge					
		Coffee factories feeder roads	District-wide	2	Coffee Cess					
		Construction of a hotel	Manga	3	KTDC/CDC					
Homa Bay	MWR	On-Going Projects	Minor Urban/Rural W.S	Asago	1	GOK/NORAD	●			
			Obera W.S (rehabilitation)	Ndhiwa	2	GOK	●			
			Nyandwa W.S (intake line tank)	Rangwe	3	GOK	●			
			Kochia W.S (treatment works)	Rangwe	4	GOK	●			
			Ndhiwa Rapedhi W.S	Ndhiwa	5	GOK	●			
			Got Kojuri W.S (distribution tank)	Nyarongi	6	GOK	●			
			Water Pan	Nyarongi	7	GOK	●			
			Water quality and pollution control activities	District-wide	8	GOK	●			
			Farmer group and community support	Nyarongi	9	IFAD	●			
			New Project Proposals	New Rural w.p (survey and design)	Ndhiwa/Mgori	1	GOK	●		
	Asumbi Rangwe W.P (F.S)	Rangwe		2	GOK	●				
	Rangwe w.p (design and construction)	Rangwe		3	GOK	●				
	Construction of Dams	Nyarongi		4	GOK	●				
	Construction and Protection of Springs	Nyarongi		5	GOK	●				
	MOLA	New Project Proposals	Groundwater Development	Ndhiwa	6	GOK/CARE	●			
Ground Water Development			District-wide	7	GOK/IFAD/ICA	●				
Homa Bay Sewerage repair			Asago	1	GOK		●			
Homa Bay Bus Park			Asago	2	GOK		●			
Homa Bay Municipality Roads			Asago	3	GOK/World Bank		●			
Kuria	MWR	On-Going Projects	Kehancha W.S (rehab of dam, w.p pump, pump tank)	Kehancha	1	GOK	●			
			Isabania W.S (pump)	Kehancha/Isabani	2	GOK	●			
			Rural water points (spring shallow well boreholes)	District-wide	3	GOK/Donor/KWAHO	●			
			Construction of district water office	District-wide	4	GOK/IFAD/LBDA	●			
	New Project Proposals	Nyirocha girls Sec. School W.P	Kezonga	5	GOK/Donor	●				
		Mbaraka Health Center W.S (shallow well boreholes)	Mabera	1	GOK/Donor	●				
		Nimaru w.s (intake tank)	Nimaru	2	GOK/Donor	●				
		Kezonga w.s (intake tank)	Kezonga	3	GOK/Donor	●				
		Mabera w.s (intake tank)	Mabera	4	GOK/Donor	●				
		Itetege w.s (intake tank)	Kehancha	5	GOK/Donor	●				
		MOLA	New Project Proposals	Water network (distribution)	Kehancha	1	GOK/Donor/Council	●		
				Sewerage network/sewerage treatment work	Kehancha	2	GOK/Donor/Council		●	
Construction of social hall hotels	Kehancha			3	Council/Donor					
Potential revenue study	Kehancha			4	Council					
Valuation toll	District-wide			5	GOK/Council					
Fencing of auction rings for animal auction	Ogiteembe			6	Council					
Planting of wasteland within the council	Kehancha			7	GOK/Council					
Fence and clear dumping site for the solid waste	Kehancha			8	Council					
Baringo	MWR	On-Going Projects	Sacho Remo W.P	Sacho	1	GOK	●			
			Kabartoojo W.P (intake)	Kabartoojo	2	GOK	●			
			Kapitong W.P (intake/pipeline)	Sacho	3	GOK	●			
			Construction of W.S Livestock Programme (water)	East Baringo...	4	GOK	●			
			Rehabilitation of W.S	District-wide	5	GOK	●			
			Purchase of Plant & Equipment	District-wide	6	GOK	●			
			Cheptambus W.P (boreholes)	Tenges	7	GOK	●			
			Kampi Ya Samaki W.P	Marigat	8	GOK	●			
New Project Proposals	Chelaba W.P (booster station)	Marigat	9	GOK	●					
	Kyikach W.P (intake)	Kabarot	10	GOK/SDD	●					
	Ngeimoi W.P (intake & rehabilitation)	Kabarot	11	GOK	●					
	Sandai Kapitoojo W.P (distribution)	Marigat	12	GOK/SDD	●					
	Kuitui W.P	Barwasa	13	GOK	●					
	Seretania W.P (distribution)	Kabarot	14	GOK/SDD	●					
	Perwai W.P (distribution line)	Kabarot	15	GOK	●					
	Moi W.P (distribution)	Marigat	16	GOK	●					
	Kapitoojo W.P	Kabartoojo	17	GOK/SDD	●					
	Construction of W.S	East Baringo...	18	GOK/SDD	●					
	Aror Saimo W.P	Kabarot	19	GOK	●					
	Livestock Water Project (investigation/planning)	Marigat	20	GOK	●					
	Kabasis W.P	Sacho	21	GOK	●					
	Ochiu Kapitoojo W.P	Sacho	22	Lot of Water/Value/Commitment	●					
Jatai W.P	Kabarot	23	GOK	●						
Chereron-Safani W.P	Marigat	24	GOK/SDD	●						
Timboyo W.P	Sacho	25	GOK	●						
Tenges W.P	Tenges	26	GOK	●						
Sabor W.P	Marigat	27	GOK	●						

Table - 3.2.1 (8/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997 - 2001

District	Agency	On Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water-Related Project		
							Water	Sewerage	Both
Baringo (cont'd)	MWR (cont'd)	On-Going Projects (cont'd)	Tangulbei W.P.	Tangulbei	28	Community/GOK	●		
			Burussa Yeptos W.P.	Burussa	29	Community/UNICEF/GOK	●		
			Emkwa W.P.	Marigat	30	GOK(SDD)	●		
			Segeter W.P.	Kibartono	31	GOK(SDD)	●		
			Burubwa Dam W.P.	Burussa	32	GOK	●		
			Nikoi/Kofimor W.P.	Burussa	33	Community/UNICEF	●		
			Ng'umbo W.P.	Marigat	34	GOK	●		
			Kinjach W.P.	Kipsaraman	35	World Vision/Community	●		
			Mogoro W.P.	Tenges	36	GOK/AMABA	●		
			Koyona W.P.	Kabaret	37	Community/GOK(SDD)	●		
			Mochongoi W.P.	Mochongoi	38	GOK(SDD)	●		
			Sagal W.P.	Sacho	39	GOK(SDD)	●		
			Koriema/Kmalet W.P.	Marigat	40	GOK	●		
			Kimadom W.P.	Marigat	41	NVDA	●		
			Miswo W.P.	Tenges	42	Community/GOK(SDD)	●		
			Bekind W.P.	Tenges	43	Community/UNICEF	●		
			Kipsoi W.P.	Kabaret	44	UNICEF/World Vision	●		
			Cheongo W.P.	Burussa	45	UNICEF/World Vision	●		
			Water resource Assessment and planning Project	District-wide	46	Netherlands/GOK	●		
			Construction of water pans	Tangulbei...	47	KFFHC	●		
			Drilling of boreholes	District-wide	48	Egyptian Gov./GOK	●		
			Drilling of boreholes	Tangulbei...	49	Japan Gov./UNICEF/GOK	●		
			Investigation/planning/design	Baringo	50	GOK	●		
			Kabaret sewerage	Kabaret	51	GOK	●	●	
			Beregi Dam w/s	Kabartono	1	GOK	●		
			Training of Communities 5 Pilot Projects		2	GOK/NGOs	●		
			Rain Water Harvesting Roof Catchment	Districtwide	3	GOK/AMABA/NGOs	●		
			Kasok w/p	Kipsaraman	4	GOK	●		
			Lerek w/p	Kabartono/Ngong	5	GOK	●		
			Pekerra Multi-Purpose Dam and Kipsaram Dam		6	GOK	●		
			Kipsaa Dam w/p	Tenges/Sacho	7	GOK	●		
			Emmo w/s	Kabartono	8	GOK/Community	●		
			Kiling'et W.P.	Kabartono	9	GOK	●		
	L. Baringo/Ngemp w/p		10	GOK	●				
	Marigat Sewerage	Marigat	11	GOK	●	●			
	Oi waki w/p	Marigat	12	GOK/NA/CPC	●				
	Kampiti Samaki Sewerage	Marigat	13	GOK	●	●			
	Kabartono Sewerage	Kabartono	14	GOK	●	●			
	Tenges Sewerage	Tenges	15	GOK	●	●			
	Arid Lands Resource Management Project		16	GOK/World Bank	●				
	MOLA (Baringo County Com)	New Project Proposals	Construction of revenue office	Kabartono	1	GOK			
			Construction of modern market	Tenges	2	GOK			
			Design Plan for Sewerage	Marigat	3	GOK		●	
			Construction of modern market	Kabartono	4	GOK			
			Construction of Slaughter House	Marigat	5	GOK			
			Construction of Slaughter slabs	District-wide	6	GOK			
			Design Plan for Sewerage	Marigat	7	GOK		●	
			Construction of stock sales yards	Mochongoi	8	GOK			
	MOLA (Kabaret Council of Kabaret)	New Project Proposals	Sewerage System	Kabaret Town	1	Donors		●	
			Township Road	Kabaret Town	2	GOK/World Bank			
			Construction of rental houses	Kabaret Town	3	World Bank/Donors			
			Bus park	Kabaret Town	4	World Bank			
			Street Lights	Kabaret Town	5	World Bank			
			Fire station	Kabaret Town	6	GOK			
	Kajiado	MWR	On-Going Projects	Eremu W.P.	Ngong	1	GOK	●	
Bisel Mparash W.P.				Namanga	2	GOK	●		
Kipeto Kisaju W.P.				Ngong	3	GOK	●		
Ewaso-Kisaju W.P.				Ngong	4	GOK	●		
Mosiro W.P.				Ngong	5	GOK	●		
Rehabilitation of W.P.				District-wide	6	GOK	●		
Orinik W.P.				Central	7	GOK	●		
Livestock Water Project				District-wide	8	GOK	●		
Community self-help water harvesting project				Arid areas	9	ASAL/Community	●		
Water users association support project				District-wide	10	Japan/ASAL/Community	●		
New Project Proposals		Itareto w/p	Central	1	GOK/Community	●			
		Isara w/p	Lodhok	2	GOK/Community	●			
		Fackid Mite w/p	Ngong	3	GOK/Community	●			
		Kiserian Kande w/p	Ngong	4	GOK/Community	●			
		Nkama w/p	Mashara	5	GOK/Community	●			
		Namanga w/p	Namanga	6	GOK/Community	●			
		Ewaso Nyiro South Multi-purpose project	District-wide	1	GOK				
		Catchment Conservation and rehabilitation	District-wide	2	GOK				
Livestock development	District-wide	3	GOK						
Ewaso Nyiro South Development	District-wide	4	GOK/Donor						
Laikipia	MWR	On-Going Projects	Dam Construction	District-wide	1	GOK/ASAL	●		
			Livestock Development Program	District-wide	2	GOK/ASAL	●		
			Rehabilitation of W/S	District-wide	3	GOK/ASAL	●		
			Wjumbiride W.P.	District-wide	4	GOK/ASAL/Self-help	●		
			Nyaharuru Settlement Scheme W.P.	Nyaharuru	5	GOK/ASAL/Self-help	●		
			Nyakoma W.P. (pump/tank line)	Central	6	GOK/ASAL/Self-help	●		
			Kwathia W.P. (pump/tank line)	Nyaharuru	7	GOK/ASAL	●		
			Laliala Karaba W.P. (distribution line)	Ngarua	8	GOK	●		
	New Project Proposals	Dams Construction & Rehabilitation Programme	Districtwide	1	GOK/ASAL	●			
		Livestock Development Programme	Districtwide	2	GOK/ASAL	●			
		Rehabilitation of Water Supplies Programme	Districtwide	3	GOK/ASAL	●			
		Kinamba w/p	Ngarua	4	GOKSH	●			
		Lamuria w/p	Ngarua	5	GOKSH	●			
		Rumaruf w/p	Rumaruf	6	GOK/ASAL/NGO/C.C	●			
Mitara w/s	Rumaruf	7	GOKSH	●					

Table - 3.2.1 (9/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997 - 2001

District	Agency	On Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water Related Project		
							Water	Sewerage	Both
Nandi	MWR	On-Going Projects	Nandi Hills W.S (dam water treatment)	Nandi Hills	1	GOK	●		
			Lemokere W.S (gravity)	Misop	2	GOK	●		
			Kimeloi-Kobujel W.S	Aldai	3	GOK/Donor	●		
			Mesitai W.P (distribution line)	Tinderet	4	Belgium Gov.	●		
			Chepkongony Kipilelto W.S (pumphouse/tank)	Kapsabet	5	EEC	●		
			Kapumo-Mosombor W.P	Kapumo	6	GOK	●		
			Lessos W.S (gravity)	Kilbawoni	7	GOK	●		
			Lessos W.S (Chepfil) W.S	Kilbawoni/Misop	8	GOK	●		
			Cheptenwai W.S (dam power supply)	Misop	9	GOK	●		
			Sarora W.S	Misop	10	GOK/Donor	●		
		New project Proposals	Kabiyet w.p	Kabiyet	1	EEC/GOK	●		
			Chemase w.p	Aldai	3	GOKSH	●		
			Kamarich W.P	Aldai	4	GOK/Donor	●		
			Kebarak w.p	Nandi Hills	5	GOKSH/Donor	●		
			Lessos Dam	Kilbawoni	6	GOK	●		
			Kimarkel w/s	Tinderet	7	GOK/NGO	●		
	Margeret w.p		Kosirai	8	GOKSH	●			
	Koyo-Kapuas w.p		Aldai	9	GOK/NGO	●			
	Investigation, Planning and Design (all W.P)		Districtwide	10	GOK	●			
	Roof Catchment Programme		Districtwide	11	GOK/Donor	●			
	Spring Protection Programme		Districtwide	12	GOK/Donor	●			
	Office Accommodation		District HQs	13	GOK/Donor	●			
	Hydro-Met Station		All	14	GOK/Donor	●			
	Transport (vehicle)	Districtwide	15	GOK/Donor	●				
	Laboratory (water)	District HQs	16	GOK/Donor	●				
	MOLA	On-Going Projects	Kapsabet Town Sewerage Phase II	Kapsabet Mun.	1	GOK/JICA		●	
			Kapsabet National Housing Project	Kapsabet	2	GOK/SHC/Donor			●
		New project Proposals	Kapsabet W.S	Kapsabet	1	GOK/Donor	●		
			Urban Transport Project	Kapsabet	2	GOK/Donor			●
			Kapsabet Slaughter House	Kapsabet	3	GOK/Donor			●
			Grading of access roads	District wide	4	Local Auth. General Fund			●
			Planning of survey of Local Market centers	Districtwide	5	GOK/Local Auth.Fund			●
			Construction of new markets	District wide	6	Local Auth. General Fund			●
Construction of residential houses			District HQs	7	Private Housing Corporation			●	
Construction of sheds at the bus stations			District wide	8	Local Auth. General Fund/Service Charge			●	
Grading of roads				9				●	
Grading of hatchery			Kapsabet	10	Donor/Private Investor			●	
Charcoal Briquettes Plant			Kapsabet/Kilbawoni	12	Donor/Private Investor			●	
Wood/wood products manufacture project			Kapsabet/Kilbawoni	13	Donor/Private Investor			●	
Jaggaries Establishment			Tinderet	14	Private Investor			●	
Fruit Processing Plant			Kapsabet/Kilbawoni	15	Local Investors			●	
Trans Nzoia			MWR	On-Going Projects	Kimini W.P	Saboti	1	GOK	●
	Kipondo W.P	Kwana			2	GOK/Self-help	●		
	Situnga W.P	Cherangani			3	GOK/Self-help	●		
	Cherangani Kachibora W.P	Cherangani			4	GOK/Self-help	●		
	Saboti W.P	Saboti			5	GOK	●		
	New Project Proposals	Greater Cherangani w.p	Central	1	GOK	●			
		Tugoch w.p	Cherangani	2	GOKSH	●			
		Giruaaba w.p	Saboti	3	GOKSH	●			
		MOLA	On-Going Projects	Physical Development Plans	Districtwide	1	Nzoia county Council		
				Rehabilitation of Roads	Districtwide	2	Nzoia county Council		
Rehabilitation and reconstruction of roads	Kisile Muni.			1	World Bank				
Gravity aided W.S	Kisile Muni.			2	GOK	●			
Bus park	Kisile Muni.			3	World Bank				
Uasin Gishu	MWR	On-Going Projects	Construction of tourist hotel	Kisile Muni.	4	KTDC			
			Construction of a housing estate	Kisile Muni.	5	NHC			
			Kalitor W.P	Meibon	1	GOK	●		
			Sambut W.P	Turbo	2	GOK	●		
			Sogoi W.P	Sugoi	3	GOK	●		
			Kipsankoi W.P	Soi	4	GOK	●		
			W.S Rehabilitation	District wide	5	GOK	●		
			Burnt forest W.S	Ainabkoi	6	GOK	●		
			Ainabkoi Complex Self-help W.P	Ainabkoi	7	GOK	●		
			Bahari W.P	Ainabkoi	8	GOK	●		
			Kapilfil self-help W.P		11	GOK	●		
Tarakwa self-help W.P			12	GOK	●				
Kipkabus W.P			13	GOK	●				
Yumumbi phase II self-help W.P			14	GOK	●				
New Project Proposals	Kesasa w.p	Kesasa	1	GOK/Donor	●				
	Chepkasoi w/s	Kesasa	2	GOK	●				
	Zima Sirkwa Machine w.p	Meibon	3	GOK	●				
	Nairiri Kapalabach w.p	Kesasa	4	GOK	●				
	Rehabilitation of Dams	Districtwide	5	GOK	●				
	Investigation, Planning and Design	Districtwide	6	GOK	●				
	Keijo	MWR	On-Going Projects	Nyaji Military W.S	Tambach	1	ASALS/self-help/Community	●	
Chepkoi-kei-Cheber W.S				Tambach	2	ASALS/self-help	●		
Epke Emis W.S				Soy	3	GOK	●		
Sogoi W.S Tanks				Kamariny	4	GOK	●		
Melkei W.P				Chepkorioel	5	GOK	●		
Lekwa W.S				Tambach	6	GOK	●		
Emannoo W.P				Tambach	7	ASALS/self-help	●		
Kaptoi W.S				Kamariny	8	GOK	●		
New Project Proposals				Ben w/s	Kamariny	1	GOKSH	●	
				Kamefil-Kamsong W.P	Chepkorio	2	GOKSH	●	
				Chemakabul w.p	Chepkorio	3	GOKSH	●	
	Kamefil w.p	Tambach	4	GOKSH	●				
Kapergong w.p	Chepkorio	5	GOKSH	●					
Kipkaron	Tambach	6	GOKSH	●					
Chepkorio	Chepkorio	7	GOKSH	●					
Tooi w/s	Chepkorio	8	GOKSH	●					
Chepsimoo w.p	Chepkorio	9	GOKSH	●					
Keimar W.P	Soy	10	GOKSH	●					
Cheota W.P	Chepkorio	11	GOKSH	●					

Table - 3.2.1 (10/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997 - 2001

District	Agency	On Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water-Related Project			
							Water	Sanitation	Both	
Keiyo (cont'd)	MWR (cont'd)	New Project Proposals (cont'd)	Changach Barak w/s	Cheptero	12	GOKSH	●			
			Katunoi w/p	Soy	13	GOKSH	●			
			Emsoo w/p	Tambach	14	ASALSH	●			
			Chergit w/p	Tambach	15	GOKASAL	●			
			Loogoo Dam w/p	Kamariny	16	GOKSH	●			
	MOLA (Keiyo C.C.)	On-Going Projects	New project Proposals	Planning of survey of Local Markets	District wide	1	GOK/Plot Owners			
				Rural Access and Cess Roads	District wide	2	Cess and Service Charge			
				Construction of classroom of Nursery School	Keiyo, Cheptero, Soy, Tambach	1	GOK/Service Charge			
				Construction of Slaughter slab	Keiyo, Soy, Kamariny	2	GOK/Service Charge			
				Minor W/S	Keiyo, Soy, Kamariny	3	GOK/Service Charge	●		
	MOLA (Iten Town Council)	New Project Proposals	New Project Proposals	Iten w/s (survey design)	Tambach	1	GOK/ASAL/Community	●		
				Market Stalls	Tambach	2	GOK			
				Town Planning	Tambach	3	GOK			
				Street Lighting	Tambach	4	GOK			
				Kipsaya Sashya W/P	Chebiemit	5	ASAL	●		
Marakwet	MWR	On-Going Projects	Olut Kotul W/P	Tet	6	World Vision	●			
			Cheptonjoo Chesengei W/P	Chebiemit	7	Africa Housing Fund	●			
			Kapsowar w/p (ES)	Chebiemit	1	GOK	●			
			Molben Dam w/p	Chebiemit	2	GOK	●			
			Tutoyo w/p	Tet	3	GOK	●			
		New Project Proposals	Kamoi Chesubet w/p	Kapcherop	4	GOKSH	●			
			Mwangaza w/p	Kapcherop	5	GOKSH	●			
			Kaploshokwo Karaworion/Chebit w/p	Chebiemit	6	GOKSH	●			
			Tenden w/p	Kapcherop	7	GOKSH	●			
			Chesongoch w/p	Tet	8	KVDA	●			
	Trans Mara	MWR	On-Going Projects	Cheptonjoo Chesengei w/p	Chebiemit	9	Africa Housing Fund (AFH)	●		
				Kigoris Township W/S (rehabilitation)	Kigoris	1	GOK	●		
				Lolgorian W/S	Lolgorien	2	GOK/Community	●		
				Njipship W/S (pump tank/distribution)	Sharuka	3	GOK	●		
				Lolgorian health center borehole Project	Lolgorien	4	AMDA/International	●		
Ot Shilang W/P				Kigoris	5	GOK	●			
Angata Barinkoi W/S (rehabilitation)				Lolgorien	6	GOK	●			
Nkarage W/S (rehabilitation)				Keiyan	7	GOK	●			
Emarú W/S (rehabilitation)				Kirindoni	8	GOK	●			
Enoscan W/S (rehabilitation)				Keiyan	9	GOK	●			
New Project Proposals		Ot Donyo Rasha W/P	Kigoris	10	GOK	●				
		Dams and pans (construction)	District wide	11	GOK	●				
		Hydro-meteorological network	District wide	12	GOK	●				
		Investigation, Planning and Design	District wide	13	GOK/OTZ/TDP	●				
		Enoscan Rural w/s	Keiyan	1	GOK/Community	●				
MOLA	New Project Proposals	New Project Proposals	Sharuka Rural w/s	Pirar	2	GOK	●			
			Kirindoni Rural w/s	Kirindoni	3	GOK/Community	●			
			Ot Donyo Rasha w/p	Kigoris	4	GOK/Community	●			
			Pokora Rural w/s	Kigoris	5	GOK/Community	●			
			Sewerage System (lagoon)	Kigoris	1	County Council/Donor		●		
			Construction of Abattoir	Kigoris	2	County Council/Donor				
			Construction of staff housing	Kigoris	3	County Council				
Bungoma	MWR	On-Going Projects	Bungoma Town W/S (pumping/treatment)	Kanduyi	1	AIDB/GOK	●			
			Webuye Town W/S	Webuye	2	AIDB/GOK	●			
			Ndindi W/S	Ndindi	3	AIDB/GOK	●			
			Makusela W/S	Kimili	4	AIDB/GOK	●			
			Chechaki W/S	Sirisia	5	AIDB/GOK	●			
			Kibehori Bekoni W/S	Central	6	AIDB/GOK	●			
			Little Nicola West W/S	Tongaren	7	AIDB/GOK	●			
MOLA (Bungoma Main Council)	On-Going New Project Proposals	New Project Proposals	Mateka W/S	Bumula	8	AIDB/GOK	●			
			Bungoma Sewerage Project	Bungoma Town	1	AIDB/GOK		●		
			Road rehabilitation	Bungoma Town	1	GOK				
			Bus Park	Bungoma Town	2	GOK				
			Traffic Management	Bungoma Town	3	GOK				
			Street Lighting	Bungoma Town	4	GOK				
			Road maintenance equipment	District-wide	5	GOK				
(Bungoma C.C.)	New Project Proposals	New Project Proposals	Land acquisition	Kanduyi	6	GOK				
			Renovation of social hall	Central	1	GOK/Service Charge				
			Construction of Slaughter slab	all	2	GOK/Service Charge				
			Roads program	District wide	3	GOK/Service Charge				
			Construction of action rings	District wide	4	GOK/Service Charge				
			Construction of market sheds	Malakisi	1	GOK/Cess				
			Construction of public toilets	Malakisi	2	GOK/Service Charge				
(Webuye Main Council)	On-Going New Project Proposals	New Project Proposals	Construction of market sheds	Malakisi	3	GOK/Service Charge				
			Construction of public toilets	Malakisi	4	GOK/Service Charge				
			Feeding Town Hall	Webuye	1	GOK/Service Charge				
			Renovation of Slaughter house	Webuye	2	GOK/Service Charge				
			Renovation of the Market	Webuye	1	GOK/Service Charge				
			Street Lighting	Webuye	2	GOK/Service Charge				
			Road resurfacing	Webuye	3	GOK/Service Charge				
(Sirisia Main Council)	New Project Proposals	New Project Proposals	Access roads	Webuye	4	GOK/Service Charge				
			Construction of stadium	Webuye	5	GOK/Service Charge				
			Construction of social hall	Webuye	6	GOK/Service Charge				
			Land acquisition	Webuye	7	GOK/Service Charge				
			Purchase of fire fighting	Webuye	8	GOK/Service Charge				
			Sewerage phase II	Webuye	9	GOK/Service Charge			●	
			Rental Housing scheme	Webuye	10	GOK/Service Charge				
(Sirisia Main Council)	New Project Proposals	New Project Proposals	Construction of market sheds	Sirisia	1	OTZ/USAID/C.C.				
			Renovation of Slaughter house	Sirisia	2	GOK/Service Charge				

Table - 3.2.1 (11/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997
- 2001

District	Agency	On-Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water Related Project		
							Water	Sewerage	Poth
Busia	MWR	On-Going Projects	Opbo-Namasumbi Project(Power house/tank)	Ageng'a Fanyula	1	GOK/SDD	●		
			Lugulu-Malanga W.P (Distribution)	Nambale Butula	2	GOK/Donor	●		
			Fanyula-Bumala W/S(rehabilitation of pipeline)	Nambale Butula	3	GOK/Donor	●		
			Busia-Mundika W/S	Malayos	4	GOK/Donor	●		
			Nzola River Flood Control	Budalangi	5	GOK/Donor	●		
		New Project Proposals	Busia HII w/p	Fanyula,Budalangi	1	SDD/GOK	●		
			Sio Port w/s	Fanyula	2	SDD/GOK	●		
			Bujumba W/S	Fanyula	3	SDD/GOK	●		
			Opbo-Namasumbi Ph II w/p	Fanyula	4	SDD/GOK	●		
			Sibirira w/p	Butula	5	GOK/Donor	●		
			Namonye Dam	Budalangi	6	SDD/GOK	●		
	Sigalame w/p		Fanyula	7	GOK/Donor	●			
	Wakhungu w/s		Fanyula	8	GOK/Donor	●			
	Buhaya w/s		Butula	9	GOK/Donor	●			
	Murende B' Women Group w/p		Malayos	10	SDD/GOK	●			
	Ghusakad w/p	Nambale	11	GOK/Donor	●				
	MOLA (Busia Municipality Council)	On-Going New Project Proposals	Construction of stadium	Busia	1	Municipal Council			
			Road Reconstruction	Municipality	1	World Bank			
			Street Lighting	Municipality	2	World Bank			
			Bus Park Rehabilitation	Municipality	3	World Bank			
			Construction of Cycle track and pedestrian	Municipality	4	World Bank			
			Construction of service line road	Municipality	5	World Bank			
			Land Compensation	Municipality	6	GOK			
			Construction of market sheds	Municipality	7	GOK			
			Construction of residential housing	Municipality	8	GOK			
			Fire station	Municipality	9	GOK			
		Construction of Sewerage Treatment	Municipality	10	GOK		●		
	(Busia C.C.)	On-Going Projects	Feeder roads	District-wide	1	GOK/County Council			
	Fencing of market and construction of pit latrines		District wide	2	GOK/County Council				
	Renovation of social hall		Butula	3	GOK/County Council				
	New Project Proposals		Elevation of Nambale Town to a council status	Nambale	1	GOK/County Council			
			Elevation of Port Victoria Town to a council status	Budalangi	2	GOK/County Council			
			Elevation of Fanyula Town to a council status	Fanyula	3	GOK/County Council			
Elevation of Bumala Town to a council status			Butula	4	GOK/County Council				
Purchase land for auction ring	Butula	5	GOK/County Council						
Open new market center	Butula	6	GOK/County Council						
Open new market center	Nambale	7	GOK/County Council						
Kakamega	MWR	On-Going Projects	Street Lighting	Butula	8	GOK/Donor			
			Shifoti Phase II W/P	Ikolouani	1	GOK	●		
			Iheho W.P	Iheho	2	GOK/Community	●		
			Kambiri W.P	Iheho	3	GOK/Community	●		
			Nyakholo W.P	Nyakholo	4	GOK/Community	●		
			Shikunga W.P	Butere	5	GOK/Community	●		
			Khwisero W.P	Khwisero	6	GOK/Community	●		
			New Project Proposals	Line Nzola w/s	Nzola/Lugari	1	GOK	●	
		Butere w/s		Butere	2	GOK	●		
		Lumakanda w/s		Lumakanda/Lugari	3	GOK	●		
		MOLA (Kakamega)	New Project Proposals	Malava w/s	Malava	4	GOK	●	
	Mumias w/s			Mumias	5	GOK	●		
	Chekalini			Chekalini/Lugari	6	GOK	●		
	Municipality w/s			Kakamega	7	GOK	●		
	Construction of office complex			BQ Kakamega Mutai	1	RCCO			
	Construction of residential housing	BQ Kakamega Mutai	2	RCCO					
Purchase Vehicle	BQ Kakamega Mutai	3	RCCO						
Purchase exhaustor	BQ Kakamega Mutai	4	RCCO						
Construction of Bus park	Kogara, Butere	5	RCCO						
(Malava Urban Council)	New Project Proposals	Construction of office complex	Malava	1	Funds from Cess				
		Electricity Connection from main installation	Malava	2	Urban Council S.C.				
		Renovation of housing	Malava	3	Urban Council				
		Construction of open air market	Malava	4	Urban Council				
		Construction of Slaughter slab	Malava	5					
(Mumias Town Council)	On-Going Projects	Construction and murraining of roads	Mumias	1	Council/Cess				
		Open air market	Mumias	2	Council/Cess				
		Construction of sheds	Mumias	3	Council/Cess				
		Stadium	Mumias	4	Council/Cess				
		Sewerage System	Mumias	5	Council/Cess		●		
		New Project Proposals	Street Lighting	Mumias	1	Service Charge			
			Access roads	Mumias	2	Service Charge			
			Construction of sheds	Mumias	3	Service Charge			
	Construction of Slaughter slab		Mumias	4	Council/Cess S.C.				
	Construction of Town hall		Mumias	5	revenue collection				
	Purchase of market plot		Mumias	6	Council Cess				
	Exhauster		Mumias	7	Service Charge				
	Purchase of civic car		Mumias	8	Council revenue				
	(Kakamega Municipality Council)	On-Going Projects	Water Undertakership	Municipality	1	Municipal Council/GOK/Donor	●		
			Planning of Council	Municipality	2	KMC			
			Revenue potential study	Municipality	3	KMCGOK			
Unloading of sewerage treatment ponds			Municipality	4	KMC		●		
Rehabilitation of enclosed market			Municipality	5	KMCGOK/Donor				
Computerization of finance section			Municipality	6	KMCGOK/Donor				
Revival of dormant market			Municipality	7	KMC				
Dumping site			Municipality	8	KMC				
Exhauster			Municipality	9	KMC/Donor				
Rehabilitation of town hall			Municipality	10	KMC/Donor				
Bus Park			Municipality	11	KMCGOK/Donor				
Culvert crossing in extended areas			Municipality	12	KMC				
Extension of sewer network			Municipality	13	KMC				
Extension of water network			Municipality	14	KMCGOK/Donor	●			
Purchase of hearse			Municipality	15	KMCGOK/Donor				
Street Lighting			Municipality	16	KMCGOK/Donor				

Table - 3.2.1 (12/12) Priority Projects of MWR and MOLA Proposed in District Development Plan, 1997 - 2001

District	Agency	On-Going or New Project	Project Name	Division	Priority Ranking	Funding Source	Water Related Project			
							Water	Sewerage	Rubb	
Vihiga	MWR	On-Going Projects	Male W/P Phase II	Vihiga/Sabaha	1	GOK	●			
			Kaimosi W/S	Sabaha, Taiti East	2	GOK	●			
			Maseno W/S Expansion	Luganda, Emuhaya	3	GOK	●			
			Chavayo Mhanga W/P	Maragoli/Vihiga	4	GOK	●			
			Bumbo-Shamalheko W/P	Shusunkoko Ter.	5	GOK	●			
			Ebonagwe W/P	Luanda	6	GOK	●			
			Ematindi, Zirulo W/P	Emuhaya	7	GOK	●			
			Nasuli-Bukoyuni W/P	Central Maragoli	8	GOK	●			
			New Project Proposals	Sabaha Eye Clinic w/s	Sabaha	1	GOK	●		
	Vihiga Water Wells	Districtwide		2	GOK	●				
	Vihiga Hemi w/p	Vihiga/Taiti East		3	GOK	●				
	Lake Basin Dev. Autho.	On-Going Projects	Effluent Monitoring and health surveillance	Districtwide	1	GOK, LBDA				
			Solonzo brick and tiles	Sabaha	2	GOK, LBDA				
			Fisheries development project	Districtwide	3	GOK, LBDA				
	MOLA (Vihiga Muni. C.)	On-Going Projects	Improvement of township roads	Municipal area	1	GOK				
			Water, drainage and sewerage Project	Municipal area	2	GOK			●	
		New Project Proposals	Bus Park	Vihiga	1	GOK				
			Open air market	Vihiga	2	VSC				
(Vihiga C.C.)	New Project Proposals	Construction of Town hall	Male, Vihiga	3	Municipal Council					
		Street Lighting	Municipal area	4	GOK					
		Vihiga Children's home/Vocational training center	Districtwide	1	County Council					
		Jepthah slaughter house	Taiti East	2	County Council, Donor					
Teso	MWR	On-Going Projects	Melaba Kochofia W/P	Anguria, Mbaraka, Amurora	1	GOK	●			
			Kochofia Rock Catchment Project	Amurora	2		●			
			Lakofia W/P	Amurora	3	GOK	●			
			Angural Dam	Angural	4	GOK, Community, Donor, NGO	●			
			Rain water harvesting	Districtwide	5	GOK, Donor, NGO	●			
			New Project Proposals	Lakofia H w/s	Amurora	1	GOK, Donor, NGO	●		
	District Headquarters Offices (construction)	Amurora		2	GOK, SH					
	Divisional Offices (construction)	Amurora, Subukhanga, Amurora		3	GOK, SH					
	Rain Water Harvesting	Districtwide		4	GOK, NGO, Stakeholders	●				
	Stadium Walls, Basketball, Spring Protection, Dams and Water Pans	Districtwide		5	GOK, NGO's, Donor	●				
	Mt. Elgon	MWR		On-Going Projects	Kapsokwony W/S	Kapsokwony	1	GOK	●	
			Chesitaki W/S		Chesitaki	2	GOK	●		
Kuere Kigabula W/S			Kapsiro		3	GOK	●			
Kimoba W/P			Kapsokwony		4	GOK	●			
New Project Proposals			Kapsiro W/S		Kapsiro	1	GOK	●		
		Kapoywo W/S	Kapama	2	GOK	●				
		Community Water Supply Management Programme.	Districtwide	3	GOK, FN, DA	●				
MOLA		On-Going Projects	Kapsokwony Town Hall Construction	Kapsokwony	1	Harambee				
			Construction of public toilets	Kapsiro	2	Town Council				
		New Project Proposals	Acquisition of land	Districtwide	1	GOK				
	Construction of public toilets		Districtwide	2	GOK					
	Construction of Slaughter slab		Districtwide	3	GOK					
Tenant Purchase Housing scheme	Kapsokwony	4	GOK, NRC							
Construction of sewerage system	Kapsokwony	5	GOK			●				
Street Lighting	Kapsokwony	6	GOK							
Construction of stadium	Kapsokwony	7	GOK							

Source: District Development Plan, 1997 - 2001

Districts Without Data:

Isiolo, Kitui, Masaku, Moyale, Nithi, Siaya, Migori, Gucha, Rachuonyo, Suba, Kipsigis, Nakuru, Narok, Bomet, Samburu, Turkana, West Pokot, Koibatek and Malava/Lugari, Kiambu, Muranga, Maragwa, Kilifi, Taita Taveta, Malindi.