



THE REPUBLIC OF KENYA

Review and Analysis of Existing Drought Risk Reduction Policies and Programmes in Kenya

National Report on Drought Risk Reduction Policies and Programmes

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NATIONAL REPORT ON DROUGHT RISK REDUCTION POLICIES AND PROGRAMMES

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Ministry of State for Special Programmes

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EXECUTIVE SUMMARY

Kenya Disaster Risk Reduction (DRR)

The major disasters that Kenya faces include: drought, floods, landslides, and fires. The 2000 drought emergency affected the Central, Eastern, Rift Valley, Coast and North Eastern Provinces, with 4.4 million people requiring food and non food assistance. The 2006 drought hit 37 out of 78 districts leaving a population of 3.5 million people in need of relief.

National Policy and Legislation

A draft National Disaster Management Policy / Strategy for Kenya and a draft Arid and Semi-Arid Lands (ASAL) Development Policy have been formulated and are in final stages towards review / adoption by the National Assembly / Parliament. Its objective is to lay a firm foundation to sustain community resilience to disasters event that are adversely affecting development gains in the country. It sets a foundation for an integrated, multi-hazard, all inclusive approach to address vulnerability, risk assessment, disaster risk reduction and management. It is also aimed at giving guidance on mainstreaming disaster risk reduction in development planning and project implementation.

Disaster Risk Reduction Institutions

The National Disaster Management Platform, Kenya Food Security Group (KFSG), Kenya Food Security Meeting (KFSM) and ASALRM Project:

- Coordinates participatory and interactive processes in promoting; early warning systems, creating public awareness.
- Obtains commitment from national leadership on Disaster Risk Reduction and implementation of related programmes.
- Liaises with UN/ISDR and other agencies in promoting disaster risk management culture in all sectors and cross border collaboration.

Sectoral Ministries involved include (Health, Education, Water, Agriculture, Livestock development and Emergency Relief Coordination, Infrastructure, Environment and Local Authorities). Ministries are directly involved in disaster management at all levels where their expertise is required to programme planning. They are required to mainstream Disaster Risk Management in all their development programmes.

Drought Risk Reduction Policy Framework and Programmes

DDR was not included in the PRSP or in the subsequent ERS except for the ASALRMP which received priority attention. Drought has not been viewed as a development concern but rather as a humanitarian issue. There era drought management related policies, plans and programmes under implementation in the country. However, the concept of Drought Risk Reduction and particularly the related aspects of drought preparedness, resilience enhancement, sustainable food security, and livelihood diversification and strengthening have not been given the necessary priority as key elements in enhancing resilience against drought risk. Although there are draft policies on disaster management, they have not given drought the necessary attention that it deserves in order to facilitate

community to have capacity to prepare and mitigate the effects of drought.

SWOT analysis was undertaken on drought policies, plans and programs in Kenya. The SWOT reviewed the following:

- √ Drought risk reduction for the country; ,
- √ Institutional structures for National Disaster Management Policy;
- √ Coordination for disaster/drought risk reduction initiatives;
- √ Funding/Budgeting;
- √ Human resources capacities;
- √ Legal framework for disaster/drought risk reduction and management;
- √ Political economy of drought.

The salient findings of the SWOT include:

- Lack of DRR policy and public awareness of DRR;
- Inadequate budgetary allocations to the key sectors;
- Weak coordination of drought management initiatives due to lack of National Platform for Drought Risk Reduction;
- Lack of DRR capacity at the local level to implement programmes;
- Lack of insurance for disasters generally and drought in particular.

Best practices on drought risk reduction initiatives include community based approach in natural resources management and drought management; food security projects; livestock health and marketing; demand driven extension for improved agricultural and livestock productivity; community based sustainable land management and income generating activities among others. Lessons learned range from drought prevention, preparedness to traditional drought coping mechanisms and the key roles of women and youth in drought management.

Among key recommendations made include:

- 🚧 Finalization/adoption of Drought Risk Reduction policies;
- 🚧 Establishment of institutional framework for drought management;
- 🚧 Peace building and conflict management;
- 🚧 Mainstreaming gender in policies, plans and programs;
- 🚧 Resource mobilization and allocation,
- 🚧 Setting strategies for enhancing communities resilience to drought
- 🚧 Improvement of coordination for implementation of drought programs
- 🚧 Putting in place a program for enhancing capacity building for the human resources
- 🚧 Setting drought preparedness and contingency planning mechanisms
- 🚧 Balancing long term emergency response and short-term development programs

List of Acronyms/Abbreviations

AU	- African Union
BCPR	- Bureau for Crisis Prevention and Recovery
CAHW	-Community Animal Health Worker
CAP	- Community Action Plan
CCA	- Common Country Assessment
CSO	- Civil Society Organization
DDC	- Dry land Development Centre
DDPR	- Department of Disaster Preparedness and Refugees
DEAP	- District Environment Action Plan
DNA	- Designated National Authority
DRR&M	- Disaster Risk Reduction & Management
EU	- European Union
FAO	- Food and Agriculture Organization
GEF	- Global Environmental Facility
HFA	- Hyogo Framework for Action
HPG	- Humanitarian Policy Group
IDDP	- Integrated Dry land Development Programme
IGAD	- Inter-Governmental Authority on Development
LVEMP	- Lake Victoria Environment Management Project
MOA	- Ministry of Agriculture
MDG	- Millennium Development Goal
MOF	- Ministry of Finance (Treasury)
MWE	- Ministry of Water and Irrigation
NAP	- National Action Plan
NAPA	- National Adaptation Programmes of Action
NCCS	- National Climate Change Secretariat
NCCSC	- National Climate Change Steering Committee
NDP	- National Development Plan
NDRRM	- National Disaster Risk Reduction and Management
NEMA	- National Environmental Management Authority
NGO	- Non-Governmental Organization
NPDRM	- The National Platform for Disaster Risk Reduction and Management
OCHA	- Organization for Coordination of Humanitarian Assistance
OFDA	- Office of U.S. Foreign Disaster Assistance

OP	- Office of the President
PEAP	- Poverty Eradication Action Plan
SWOT	- Strengths, Weaknesses, Opportunities and Threats
UNCCD	- United Nations Convention on Combating Desertification
UNDAF	- United Nations Development Assistance Framework
UNDP	- United Nations Development Programme
UNEP	- United Nations Environmental Programme
UNICEF	- United Nations Children's Fund
UNISDR	- United Nations International Strategy for Disaster Reduction
WFP	- World Food Programme
WHO	- World Health Organization

1.0 INTRODUCTION

1.1 RATIONALE FOR REVIEW AND ANALYSIS OF DROUGHT POLICIES FOR KENYA

1.1.1 Drought Policy Study Context

This study has entailed review and analysis of existing national level Disaster Risk Reduction policies and programmes including those of the Kenya government, bilateral and multi-lateral agencies as well as non-governmental organizations. The key outputs are the specific analyses on policies and programmes on Disaster Risk Reduction and outlines of intervention options to accommodate current climate / drought trends and institutional settings made to the relevant authorities within the country. The outputs are crucial for the timely and efficient implementation of strategic technical activities for Kenya's programmes on Drought Risk Reduction.

The report will advise on the development of Concept Note on Drought Risk Reduction policy framework for the Horn of Africa under the auspices of the Inter-Governmental Authority on Development (IGAD). The major output for the Drought Risk Reduction policy and programme review and analysis are recommendations and outline on opportunities for interventions aimed at enhancing communities' preparedness and mitigation capacities and reducing their vulnerability to drought. This would be reflected in communities' fuller awareness on drought risks; enhancement of political commitment and development of drought policy; designing, planning, funding and implementation of short, medium and long-term drought programmes.

1.1.2 Relating Drought Risk Reduction to the ISDR and HFA

The study has taken into account the fact that drought is one of the natural hazards that are being considered in the implementation of the International Strategy for Disaster Reduction (ISDR) and the Hyogo Framework for Action (HFA). While drought has historically been treated as an emergency or disaster, recent experience has strongly suggested that intensified focus and investment in national institutional Drought Risk Reduction frameworks using longer term drought-related programmes would be more effective than short term drought emergency response. In this regard, the review and analysis of Kenya's National Drought Policy has addressed the complex impacts caused by drought disasters in the country (UNISDR/NDP-DDC/UNDP-BCPR, 2006).

This study has also taken into account the provisions of the proposed policy guideline on Drought Risk Reduction drawn from the Hyogo Framework for Action (HFA) which is aimed at promoting

coordinated efforts to build resilience to drought in the drought prone countries (UNISDR, 2007), forms the basis for this study on the Review and Analysis of Existing Drought Policies and Programmes in Kenya. The study is also aimed at supporting the process of strengthening coordination mechanisms and harmonizing policies on Drought Risk Reduction in the country, and is focused on the highlights by Ministerial Delegations based on recommendations made at the 1st African Platform (UNISDR, 2007) and the 1st Global Platform on Disaster Reduction (UNISDR, 2007) emphasizing the need to accelerate support for addressing risk arising from hazards of particular significance to Africa (including Kenya). Such hazards include droughts which are projected to increase as a result of global climate change.

1.1.3 Assessing Progress on Development of Supportive Drought Policies

The study has been designed to ensure that the effects of drought are effectively incorporated in the broader progress in the socio-economic and political development for Kenya, and that drought is included among the natural hazards to be considered in implementing the International Strategy for Disaster Reduction (ISDR) and the Hyogo Framework for Action (HFA) to which Kenya is affiliated (UNISDR/UNDP-DDC/UNDP-BCPR (2006). In this regard, the review and analysis of Kenya's National Drought Policy is required to address the complex impacts caused by drought disasters in the country. Notably, it has been deemed imperative to address the possible gaps on drought policy; lack of adequate policy frameworks, or failure to implement drought policies which may in effect restrict development of the major sectors that are usually adversely affected by drought (these include agriculture, health, education and environment among others). There is also urgent need for establishing the links between Drought policy and other development policies which support food security, environmental protection, land use and land tenure that may alleviate resource based conflicts and reduced productivity.

1.1.4 Linking Drought Policy to Development in Kenya

Comprehensive development policies, which support food security, environmental protection, land use and land tenure, are missing or inadequate in the region, including Kenya. There is urgent need for putting drought near the centre of sustainable development and risk reduction priorities in order to increase resilience to the impacts of drought, whilst advancing other development objectives aimed at improving and sustaining the welfare of the vulnerable and the wider community (Trench, et al; 2007). The goal for enhancing the capacity of the local community in efficiently and effectively dealing with drought disasters is to increase its coping capacity during drought when the resources are scarce and also during the times of plenty in order to exploit the available opportunities for livelihood

improvement. This will lead to greater resilience and a reduced need for the unsustainable interventions by the government, donors and other stakeholder in the form of drought disaster assistance.

1.1.5 Linking Drought Risk Reduction Interventions to Development Activities

The Government of Kenya has recognized that drought risk reduction interventions are development activities and that the country's development strategies and programmes need to be disaster risk sensitive to avoid or minimize the negative impacts of natural and man-made hazards on its citizens' livelihoods (Owor, 2005). The country also recognizes the fact that given the destruction and losses disasters (including drought) can cause and the high costs of helping out people to recover, sustainable development cannot be achieved without addressing issues of disaster risk reduction in a comprehensive manner. This also tallies with the observed need for putting drought near the centre of sustainable development and risk reduction priorities in order to increase resilience to the impacts of drought, whilst advancing other development objectives aimed at improving and sustaining the welfare of the vulnerable and the wider community (Trench, et al; 2007).

1.1.6 Building Communities' Capacity and Resilience to Drought Hazards

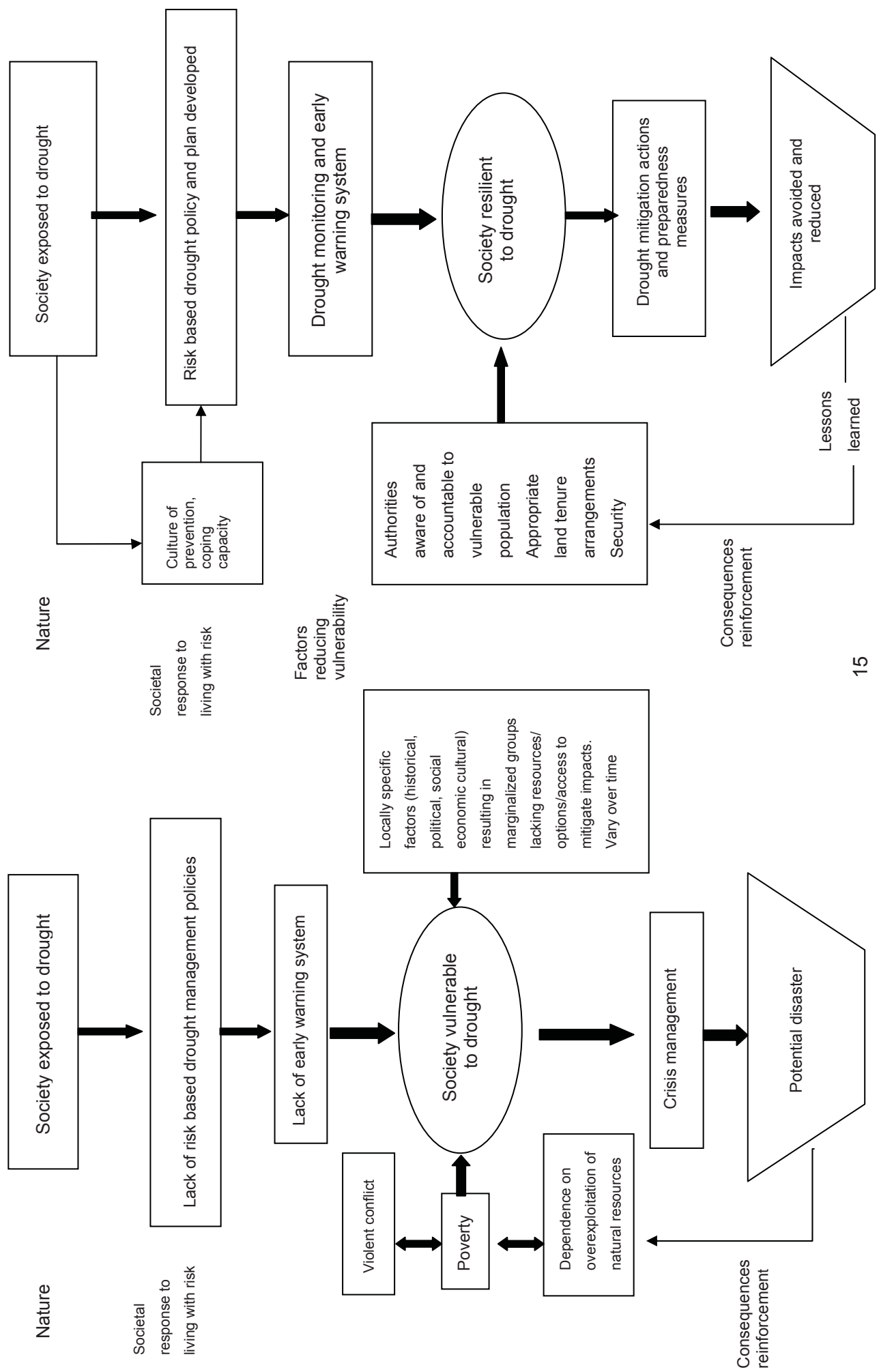
The goal for enhancing the capacity of the local community in efficiently and effectively dealing with drought hazards, and to increase its coping capacity particularly during drought when the resources are scarce is one of the major challenges that call for policy guideline. This would lead to greater resilience and reduced need for the unsustainable interventions by the government, donors and other stakeholders in the form of drought disaster assistance. In this regard, the Kenya Government and other stakeholders have deemed it essential to pay greater attention on the need for a country policy that is directed at Drought Risk Reduction, and to guide the efforts for building of institutional capacity at national and local levels, with a view to facilitating effective drought preparedness and mitigation programmes. The reviewed policies and programmes are those intended to address the key challenges facing Kenya in the context of Drought Risk Reduction and the country's social economic development. This report serves the purpose for informing on the key emerging issues from the Review and Analysis of Drought Risk Reduction Policies and Programmes for Kenya.

1.1.7 Moving from Drought Disaster Response to Drought Risk Reduction

The ISDR Africa Office (in consultation with the Kenya Government and other stakeholders) has acknowledged the need for a country policy that is directed at Drought Risk Reduction, and to guide

the efforts for building of institutional capacity at national and local levels, with a view to enabling effective drought preparedness and mitigation programmes among societies that are highly vulnerable to drought and other natural disasters (see also Figure 1 below). The reviewed policies and programmes are those intended to address the key challenges facing Kenya in the context of Drought Risk Reduction with focus on the country's social and economic development. In view of the increase in drought vulnerability in Kenya and the challenges posed by drought to the development agenda for the country, Disaster Risk Reduction and Management is being adopted as the way forward in combating the potential adverse effects of drought and other disasters.

Figure 1: Characteristics of Drought Vulnerable and Drought Resilient Societies (Source: UN/ISDR Secretariat, 2007)



2.0 BACKGROUND INFORMATION

2.1 Horn of Africa Region and Kenya Country Drought Situation.

2.1.1 *Drought in Africa Regional Context*

During the last forty years, the two natural disasters that posed the greatest threat to people's livelihoods and socio-economic development in Africa were droughts and floods. The incidence of drought during the period 1970–2006 accounted for 20% of the natural disasters that hit the continent and affected over 80% of the population that was afflicted by the calamities (UNISDR *ibid*). Prolonged drought in African countries has severely affected their economic development and contributed to wide spread malnutrition, famine, loss of life, migration and social conflicts. For instance the 2006 incidence of drought in the Horn of Africa was particularly damaging with 18.0 million people in five (5) countries suffering food shortages in Ethiopia, Eritrea, Djibouti, Somalia and northern / eastern Kenya. The drought induced social conflicts, displacement of communities and cross border movement of people has continued to plague these countries and their neighbours including northern Uganda and the Sudan.

In order to mitigate the threat of drought and other natural disasters, there are international, regional and national initiatives that have been formulated and adopted by Kenya among other countries. Key among these initiatives is the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification (UNCCD), which Kenya adopted in 1992 and 1997 respectively. The parties to the UN conventions committed to close cooperation in responding to drought, desertification and flooding disasters by formulating and adopting national action programmes (NAPs). The NAP outlines the measures to be taken by the country towards adapting to the impacts of climate change as well as conducting systematic observation of related natural disasters such as drought.

As part of its commitment to implementing the NAP, Kenya was enjoined with other governments in adopting the Hyogo Framework for Action (HFA) 2005-15 during the 2005 World Conference on Disaster Reduction in Kobe Japan. The HFA contains the collective commitment of governments and the United Nations to work towards reducing societal vulnerability to disasters generally and to drought in particular. It has been used to promote drought resilient nations and communities around the world on the basis of five priority areas;

1. Governance: organizational, legal and policy framework,
2. Risk identification, assessment, monitoring and early warning,
3. Knowledge management and education,
4. Reducing underlying risk factors, and
5. Preparedness for effective response and recovery.

In Kenya the ASALRMP and the draft NPSDASAL policy document constitute the government's activities aimed at deepening the implementation of the recommendations of the UNFCCC and the UNCCD. In spite of the expressed support to the above conventions and the HFA, the country is yet to formally adopt an official policy on drought risk reduction and the management of natural disasters. Despite the recurrence of droughts and their devastating effects on her poor communities and the economy, Kenya does not have a comprehensive drought management policy.

2.1.2 Kenya Country Background

Kenya borders Tanzania to the south, Uganda to the west, Sudan and Ethiopia to the north and Somalia to the east. It has a long coastline defined by the Indian Ocean to the south-east. It has a national population of over 32 million people living in an area of 584,000 square kilometers of which 80% is arid or semi-arid and therefore not suitable for agriculture. About 70% of the population lives in rural areas where majority of the households are dependent on agriculture which accounts for nearly 30% of the GDP. The population density varies widely from high in the central and western highlands (200-300 people per square kilometer) to very low in the arid areas to the north, east and south (less than 10 people per square kilometer). It has nearly all the ecological zones from tropical coastal plains, expansive wildlife supporting savannah, crop rich highlands, desert conditions and mountainous alpine zones with snow capped mountains.

The country has an elaborate manufacturing sector which exports much of the products to the East Africa region and the Horn of Africa. It is the seat of the United Nations in Africa and hosts many international humanitarian organizations which operate from the capital and serve the whole region that is affected by conflicts including Somalia, Ethiopia, Eritrea, Sudan, Uganda, Congo DRC, Rwanda and Burundi. It leads the region in policy reform in nearly all areas including agriculture, tourism, rangeland and drought management. It plays a key role in regional integration within the East African Community, COMESA and IGAD with the possibility of information on Kenyan policy best practices being shared with countries in the Horn of Africa region.

Nearly 10.0 million of its population live in the Arid and Semi-Arid Lands (ASAL) areas with permanent threat of drought and famine. Thirty six (36) out of its 74 districts are within the ASAL zones where more than 60% of households live below the poverty line. The high poverty incidence is accentuated by climatic shocks, environmental degradation, insecurity and diseases which affect human welfare and animal health. The ASAL zone which is most vulnerable to drought runs along the borders with Somalia, Ethiopia and Uganda. The social economic problems posed by drought have cross border dimension as these areas are mainly inhabited by pastoralist communities that practice traditional livestock keeping. Pastoral way of life involves regular movement of people and livestock in search of pasture and water within and across national borders (ASAL Policy 2004).

In spite of its vulnerability to drought and widespread poverty, the ASAL zone has potential for contributing to economic development of the country. It is said to have over 70% of the livestock population and over 90% of the wildlife in the country which supports the tourism sector (ASAL Vision and Strategy 2005). The livestock in the zone was estimated to have a value of 60.0 billion shillings whose annual trade was also estimated to be worth 6.0 billion shillings a year (Livestock Off Take Handbook For ASAL areas 2005). With off-take rates of 6-14% for cattle, 4-10% for goats / sheep and 1-3% for camels, the value of animals slaughtered in the zone each year was estimated at 1.6 billion shillings in 2004/ 05 surveys.

Table 1: Livestock Population In Kenya (Millions)

Livestock	ASAL	Other areas	Total	Off-take p.a %
Dairy / Beef Cattle	4.0	8.0	12.0	6-14
Goats / Sheep	10.0	10.0	20.0	4-10
Camels / Donkeys	1.0	-	1.0	1-3
Total	15.0	18.0	33.0	

Source: Poverty Reduction Strategy Paper (PRSP 2001), ASAL Policy 2004.

2.2 Kenya: Country Disaster / Drought Profile

Kenya experiences a number of natural hazards, the most common being weather related, including droughts, floods, landslides, lightning/thunderstorms, wild fires, and strong winds. The response to hazards in the country as facilitated by the Government and other stakeholders has inherently been characterized by reactive rather than proactive management strategies, resulting in poor coping

capacity of communities, reduced capacity for rehabilitating and improving the lives of Kenyans in the areas prone to harsh weather conditions and other disasters. The impact of the experienced natural hazards has been compounded by poverty and lack of adequate resources to develop the affected areas rendering the populations more vulnerable.

The incidence of drought alternates with floods in the vulnerable areas making it a twin disaster for the people in these areas. The cycle has increased in frequency from 5-7 to 2-3 years making planning for their mitigation a matter of urgent concern. The vulnerable areas have increased and now cover five (5) provinces mainly in districts that are experiencing the highest level of poverty in the country. The intensity of drought has become more devastating in terms of the affected population as shown in the table below.

2.2.1 Drought Risk and Vulnerability

The framework for drought risk reduction policy is broadly embedded within two recent policy formulation initiatives that have been under preparation during the last six years but are yet to be adopted¹. There is broad recognition that pervasive drought is now a major hindrance to economic development and planning for its onset in the country as it recurs every three years. Recent incidence of drought has alternated with flooding in the vulnerable areas of the country making it difficult for the people in these areas to recover sufficiently from the effects of one before the onset of the other.

The drought – flood cycle has increased in frequency from 10-12 years during the 1970s to less than 5 years during the 1990s making planning for its mitigation a matter of urgent concern. The vulnerable areas have increased and now cover five provinces and 36 districts that experience the highest level of poverty in the country (PRSP 2001). The country has experienced regular droughts over the last two decades affecting about 20 million people. Eight (8) separate droughts have occurred since 1992 and the cycle of drought appears to have speeded up, giving the vulnerable communities less time to recover from one drought to the next (Echo, 2007).

The most severe drought in recent years affected the Central, Eastern, Rift Valley, Coast and North Eastern provinces, when 4.4 million people required emergency food and non-food assistance in 1999 - 2000. The more recent incidence of drought affected 37 out of 78 districts when 3.5 million people were in dire need of emergency food relief during 2004 – 06 (ASAL 2005). The drought and the

¹ The August 2004 Draft National Disaster Management Policy and the February 2005 Draft National Policy for the Sustainable Development of Arid and Semi-Arid Lands (ASAL) of Kenya.

cumulative effect of successive years of inadequate rains, threatened the livelihoods of a large proportion of the population in ASAL areas, including pastoralists who depend on livestock as their way of life. Unlike in developed countries where drought results in economic losses, drought in Africa and Kenya in particular has come to be associated with loss of human life, livestock, physical assets, livelihoods, famine and malnutrition (ISDR 2007).

Table 2: Incidence of Drought / Floods, Location and Impact on Population

Year	Type of Disaster	Area Coverage	No. of People Affected
2006	Floods	Coast, Western provinces	Over 100 families displaced
2004 - 06	Drought	Widespread	Over 4.5 people affected
2002	Floods	Nyanza, Western, Tana River Basin	150,000 people affected
1999 - 00	Drought	Widespread	4.4 million people affected
1997 - 98	El Nino floods	Widespread	1.5 million people affected
1995 - 96	Drought	Widespread	1.41 million people affected
1991 - 92	Drought	Widespread in ASAL Districts	1.5 million people affected
1985	Floods	Nyanza/Western	10,000 people affected
1983 - 84	Drought	Widespread	200,000 people affected
1980	Drought	Widespread	40,000 people affected
1977	Drought	Drought	20,000 people affected
1975	Drought	Garissa District	16,000 people affected
1971	Drought	Widespread	

Source: Ministry of Special Programmes, Office of the President, 2006.

Drought management activities of Government in Kenya have been more aggressive as a result of the experience in dealing with the negative impact of the 2004-06 droughts. As in other countries in the Horn of Africa, the 2004-06 droughts triggered renewed concern over the failure to address the long-term causes of food insecurity and food poverty in many parts of Kenya.

The drought cycle has become more frequent over the past decade, while the efficacy of local coping

mechanisms by different communities has deteriorated. Resilience to drought and other natural disasters has become more elusive for a large part of the population. The factors contributing to the severity of droughts in Kenya include:

- Inadequate capacity for storing flood water for use during periods of shortage particularly during prolonged droughts.
- Lack of local guidelines for water catchment and storage at household level and inadequate capacity for community's water resource management.
- Lack of communities' capacity for containing resource based conflicts, with the resultant insecurity restricting livestock movement in search of pasture and water.
- Over-utilization and degradation of pasture and water resources in pastoral safe havens and buffer zones.
- Infrastructural challenges posing constraints to livestock marketing during periods immediately prior to the onset of drought.
- Widespread poverty and destitution curtailing the communities' capacity for self-reliance in coping with droughts.

3.0 Key Concepts and Definitions

3.1.1 Climate Change

The change in climate refers to direct and indirect attributes of human activities that alter the composition of global atmosphere and which in addition are attributed to natural variability observed over comparable time periods.

3.1.2 Natural Disasters

A natural disaster is a serious disruption of society causing widespread human, material or environmental losses that exceed the capacity of the affected society to cope unaided. A disaster is triggered by a hazard and the magnitude of its effect depends on the society's coping capacity and vulnerability. Slow-onset disasters, such as drought, are cyclical in nature and affect large numbers of people; their effects can often be predicted, controlled and prevented. Kenya has witnessed various naturally triggered and human induced disasters examples of which include earthquakes, landslides, floods, construction accidents, fires, drought and pests. The sites prone to natural hazards in Kenya include mountain and hill slopes, rift valley areas, lake shores, river banks and the expansive arid / semi- arid areas of the country mainly in the northern and north – eastern regions.

3.2 *Disaster Risk Reduction*

Disaster Risk Reduction is the conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.

3.3 *Disaster Risk Management*

Disaster risk management is organized analysis, planning, decision making, and assignment of available resources to mitigate, prepare for, respond to, and recover from the effects of disasters.

3.4 *Drought Risk and Vulnerability*

Drought by itself does not trigger an emergency; whether it becomes an emergency or not depends

on its effect on local people, communities or the wider society and their vulnerability to the stress of the drought (ISDR, 2007). The target groups' vulnerability is also dependent on their ability to cope with the drought. In the harsh climate in the predominantly arid and semi-arid regions of country which are characterized by generally low rainfall and highly variable rainfall patterns that are frequently exacerbated by drought, the latter phenomenon has been identified as a major variable affecting crop and livestock production (FAO, 2004). Drought has in effect increased the vulnerability of the local community in Kenya.

3.6 Drought Risk Typologies

Drought is a key part of the climate prevailing in a region and it is invariably viewed as a condition of inadequate rainfall that persists for an extended period of time usually a season or more resulting in water shortage for the main social / economic activities² (UNISDR 2007:5). In Kenya as in most of Africa drought is viewed as more severe than aridity, an almost normal condition of low rainfall which affects more than 75% of the land mass of the country³. The failure of rains over 2-3 consecutive seasons in Kenya results in drought conditions with severe consequences for water supply, food security, hydro-electricity generation, livestock production, wildlife and tourism since much of agriculture is dependent on a regular rainfall pattern of one or two seasons.

Drought is defined in terms of rainfall or precipitation deficiency below the average threshold measured in volume and time duration. It is generally classified in the four categories of meteorological, agricultural, hydrological and socio-economic as elaborated below;

- Meteorological (precipitation deficiency 50% below normal over 6 months or more),
- Agricultural (available water is not adequate to support growth of crops or foliage over a specified period),
- Hydrological (deficient water level in streams, lakes, reservoirs and aquifers over several seasons),
- Socio-economic (available water supply is not adequate to meet the demand for electricity, animal fodder or pasture for wildlife).

² Drought Risk Reduction Framework and Practices: Contributing to the Implementation of the Hyogo Framework for Action, UNISDR 2007.

³ National Policy for Sustainable Development of Arid and Semi - Arid Lands of Kenya (NPSDASAL 2005 Draft).

4.0 COUNTRY DISASTER / DROUGHT RISK REDUCTION SITUATION ANALYSIS

4.1 The Effects / Impacts of Drought

4.1.1 Impact of Drought on Balance of Payment

Drought in Kenya is a hazard that affects communities leaving memories of human suffering that is etched in folk tales and stories told in the different cultures. Drought would result in severe food shortage and periods of famine that would be given names describing unusual events to enable people remember and prepare for the worst. For instance during one famine cassava was the only readily available food in central Kenya and there is a period of famine referred to as the “cassava famine”. The other drought related events that are well documented include the invasion of some parts of the land by termites and locusts which provided the names of the periods and age groups of the famines that occurred during those times.

Over the past 25 years, Kenya experienced major droughts which caused food / nutrition crisis in most of the vulnerable districts thus making it necessary for emergency food aid interventions to be implemented. The droughts led to the loss of human lives, livestock, crops and ground cover and also precipitated both human to human as well as human to wildlife conflicts in the vulnerable areas. Local level institutions such as rural local authorities especially in the ASAL areas have practically no capacity to deal with drought related emergency while their resource base is severely weakened by drought.

The impacts of drought on various aspects of the Kenyan society and economy are outlined in the paragraphs that follow below in regard to the national budget, community health and nutrition, agriculture and livestock production, poverty, social welfare and food security, wildlife and biodiversity, as well as over all policy development.

4.1.2 Impact on the National Budget

The team that carried out the EU financed study for establishment of the National Drought Contingency Fund (NDCF) noted that accurate data on the economic costs of drought does not exist. They however estimated that the Government of Kenya spent seven (7) billion shillings⁴ on relief food distribution during the 1996-7 drought. They also estimated that the financial costs of the 1999-01

⁴ Office of the President, 1998 Food Procurement and Distribution Reports.

drought was USD 340 million⁵ (equivalent to 22.5 billion shillings) which included emergency relief, livestock losses, and the cost of operating the Early Warning System (EWS) by the ALRMP. This is a large investment which would have had a significant impact on ensuring the security of local livelihoods if it had been directed towards long-term development to as opposed to humanitarian assistance (NDCF *ibid*). The net effect of drought has been to draw away development resources from planned programmes to emergency food aid assistance and therefore led to slow down in economic activity for the whole country.

4.1.3 Impact on Community Health and Nutrition

The negative effects of drought have been felt more in the arid areas but drought has also had adverse effects among the poor and other vulnerable communities living in the high rainfall areas as well. Farming communities have experienced more frequent crop failure, reduced yields and low calorie intake resulting in declining level of nutrition in the community. Its impact is compounded by widespread poverty and disruption of traditional coping mechanisms. After a severe drought, heavy rains tend to follow with intensity leading to flooding, spread of malaria and other water borne diseases.

4.1.4 Impact on Agriculture and Livestock Development.

The rate of economic growth for a significant proportion of the country's population has also been affected by drought. For instance, during the 1999-2001 drought, over 2.3 million sheep / goats, 900,000 cattle and 14,000 camels valued at about US\$ 77.3 million were lost. An assessment carried out by Oxfam following the 2005 drought in northern Kenya, revealed that over 70% of the livestock had been lost (Wekesa et al 2006).

4.1.5 Impact on Wildlife and Biodiversity

Drought reduces the availability of pasture for domestic animals and for wildlife as well. With declining pasture wildlife numbers tend to decrease due to animal migration and casualties that arise from lack of water. Prolonged drought also reduces the ground cover thereby undermining the growth of other species and biodiversity. The excellent performance of tourism during the 2000s is closely linked to the sound performance of wildlife. So if the latter performs poorly, there is a good chance that tourism will also be negatively affected.

⁵ M. Wekesa et al Drought, Livestock & Livelihoods: Lessons from the 1999-01 emergency response in Kenya, 2002.

4.1.6 Impact on Social Welfare and Food Security

Prolonged droughts have resulted in food insecurity and poverty, both of which have affected communities' participation in social economic and political processes and denied life choices to poor pastoralists, and small-scale farmers in the arid and semi-arid lands of Kenya. Besides economic costs, drought also imposes social costs by undermining the social standing of pastoral households whose position of honour is reckoned through the size of their livestock herds. Drought disrupts local power relationships and damages the social safety networks that are built around lending and borrowing of livestock thus promoting equitable ownership of the only means of livelihood. Drought also increases household vulnerability in event of future climatic shocks and food insecurity. It has this tendency of pushing pastoralists out of their production systems, forcing them to move to urban centers where food distribution, health, sanitation and water supply may be more reliably available.

4.1.7 Impact on Land Management and Desertification

Drought reduces the ability of the soil to hold together with the result that the ground often gives way to soil erosion. The loss of vegetation cover leads to severe erosion of soil thus accentuating the damaging effects of drought. Overgrazing is a common occurrence among Kenyan pastoralists who do not diversify from animal husbandry due to cultural beliefs.

4.1.8 Impact on Poverty Alleviation Programme

The shift of resources from development to relief activities is done mainly at the expense of funding for poverty reduction efforts in a resource poor country like Kenya. The funding of drought related emergencies is expensive in development terms. The social / economic cost of drought can be substantially reduced through careful contingency planning since drought is now a regular feature of the planning environment in Kenya and the IGAD region. The factors that have made the country vulnerable to drought are the root causes of individual and societal vulnerability and they include;

- Endemic rural poverty,
- Rapid and high population growth,
- Scarcity of natural resources to support livelihoods,
- Increased soil erosion and environmental degradation,
- Lack of a coherent drought management policy framework.

4.1.9 Impact on Policy Development

The increase in the incidence of droughts and floods, poses serious threat to rural livelihoods of a large part of the Kenyans population. When drought sets in, it compels a country to reallocate funds

from development programmes and poverty reduction in order to finance emergency relief and humanitarian activities. In order to avoid the compulsive diversion of budgetary resources to address the challenges of drought each time it occurs, the country needs a policy framework to facilitate resources mobilization and capacity building for preparedness and response to the adverse effects of drought. The search for such a policy has been on for nearly a decade and Kenya is getting closer to adopting a drought / disaster management policy.

4.2 Progress towards Implementing of Hyogo Framework for Action (HFA)

Kenya's commitment to implementing the NAP, was also reflected in her contribution to the adoption of the Hyogo Framework for Action (HFA) 2005-15 during the 2005 World Conference on Disaster Reduction in Kobe Japan. The HFA contained the collective commitment of Governments and the United Nations to work towards reducing societal vulnerability to disasters generally and to drought in particular. It has been used to promote drought resilient nations and communities around the world on the basis of five priority areas;

- Governance: organizational, legal and policy framework,
- Risk identification, assessment, monitoring and early warning,
- Knowledge management and education,
- Reducing underlying risk factors, and
- Preparedness for effective response and recovery.

The adoption of the HFA was built upon the 1999 legislative enactment of the Environmental Management Coordination Act (EMCA) together with the Environment and Development Policy. EMCA established the institutional mechanism for implementing drought mitigation measures among other functions of the National Environment Management Authority (NEMA). The country also prepared and adopted the NAP in 2002. The NAP contained the Government commitment to combating desertification⁶ and spelt out the following measures among others towards this end:

- To adopt policies, laws and institutions to enable stakeholders take part in programmes for combating desertification,
- To adopt strategies to enable local level communities to understand and play their role in projects implementation,
- To ensure provision of sustained financial resources and mechanisms to complete projects aimed at combating desertification, and
- To build adequate capacity in all stakeholders and their institutions to enable them implement the above projects.

⁶ National Action Programme: A Framework for Combating Desertification in Kenya, Ministry of Environment and Natural Resources 2002.

The Government also initiated ASALRMP a programme in 1979 to address endemic poverty, human vulnerability and the long term effects of drought on the population living in the ASAL areas (ERS 2003). The ASAL development programme has embodied the state response to the incidence of drought and the attempt to mitigate the devastating effects of prolonged shortage of rainfall in areas where pastoralism is the predominant means of livelihood. The ASALRMP and the draft NPSDASAL policy document constitute the government's activities aimed at deepening the implementation of the recommendations of the UNFCCC, UNCCD and the HFA.

5.0 ANALYSIS OF DROUGHT RISK REDUCTION POLICIES AND PROGRAMMES

5.1 Drought Risk Reduction Framework and Practices

5.1.1 *Overview of DRR Policies and Governance System*

Kenya has made significant efforts towards developing drought management related policies within the main sectors of agriculture, livestock development, water, environment, land and infrastructure development (ERS 2003). The ASALRM project has provided the organizational framework around which policy development has taken place during the last six years. The more relevant policies that have been formulated up to draft stage include; ASAL Development Policy (NPSDASAL), ASAL Vision and Strategy (ASALVS), Disaster Management Policy (DMP), National Action Programme for Combating Drought and Desertification (NAPDD) and the National Drought Contingency Fund (NDCF) and Contingency planning.

Each of the draft policies is assessed for adequacy in covering drought, consistency with the need to ensure that they offer solutions that are relevant to local communities, efficient in absorbing scarce resources, having the desired impact on poverty alleviation / livelihoods and sustainable in the ability to continue beyond external funding support (EU: DAG Criteria 2000). The basic concern among the stakeholders that were interviewed in the course of this study is that the draft policies are of high quality but little progress appears to have been made towards moving them closer to the status of Sessional Paper or to the point of legislation by the National Assembly / Parliament.

5.1.2 Policies and Governance for Drought Risk Reduction

Kenya has made significant efforts towards developing drought management related policies within the main sectors of agriculture, livestock development, water, environment, land and infrastructure development (ERS 2003). The more relevant policies that have been formulated up to draft stage include; ASAL Development Policy (NPSDASAL), ASAL Vision and Strategy (ASALVS), Disaster Management Policy (DMP), National Action Programme for Combating Drought and Desertification

(NAPDD) and the National Drought Contingency Fund (NDCF) and Contingency planning. These draft policies are of high quality, but little progress appears to have been made towards moving them closer to the status of Sessional Paper or to the point of legislation by the National Assembly / Parliament.

3.2 Components of DRR Policies at Local Level

At local level the incidence and severity of drought is often a localized concern that can best be understood at the community level. The response to it is best led by those who have real experience of its effects. One of the main weaknesses of the current drought management system that was frequently cited during interviews is that it is centralized to the national level and responds too late with little impact on securing livelihoods.

At the local level it lacks ownership, resources, and technology to preempt or minimize the magnitude of the losses that often follow the onset of drought. NGOs and CBOs that operate in the drought prone areas are often the most informed of its likely occurrence but their linkage with local authorities is poor. The drought management system is not connected to the local authority system and it is therefore not able to claim allocation of local funds e.g. LATF or CDF. Headquarter based resources are only mobilized when the drought crisis is well underway which may be too late to save lives or livelihoods.

During the 1999- 01 drought in Wajir district it took Oxfam the local based NGO two months to implement mitigation measures after the EWS had clearly indicated that drought was imminent. Other agencies took up to nine (9) months to start work on implement their relief activities in spite of the district having had drought contingency plans (Acacia 2004:49).

5.1.3 Indications for Political Commitment on Drought Risk Reduction

During the interviews that were conducted in the course of the study, stakeholders indicated that there was apparently inadequate engagement and consultation with politicians in the policy formulation process which has led to inadequate political support for the adoption of the very sound policy proposals. The fact that the responsible minister works from within the Office of the President has given the issues of drought the necessary high profile but this has not translated into priority action by Cabinet or the rest of government. The rather slow pace of reviewing and adopting the different draft policies is indication that drought has not been accorded high priority. Unlike drought, more powerful

ministerial dockets like Agriculture and Energy have experienced ready support of the Treasury in terms of consistently high allocation of budgetary resources and they are better able to plan their programmes with confidence. During 2007 fiscal year, drought was lucky to have substantial allocation of budgetary resources as a result of representations by the top policy makers in the Ministry of Finance (Treasury).

The traditional view is that drought cannot be predicted and because the budget has many competing claims funds can only be allocated when the actual incidence of drought is clearly manifest. This view appears to be changing rather rapidly as shown by the central place that drought issues occupied in the manifestos of the main parties that were involved in the 2007 general elections. In their competition for voters support in the ASAL areas, the main political parties outlined measures that they would take to improve the living conditions of communities in these areas. The measures outlined included the development of road infrastructure to ease cross border communication and marketing of livestock, intensification of water supply and storage facilities, and introduction of livestock insurance schemes to reduce losses in the event of severe drought, and enhanced mechanisms for timely provision of food aid and cash assistance to affected households.

The country has also developed major national strategic plans that are intended to address issues of drought, these include:

- Economic Recovery Strategy (ERS)
- Strategy for Revitalizing Agriculture (SRA);
- Draft ASAL Development Policy (NPSDASAL);
- Draft ASAL Vision and Strategy (ASALVS);
- Draft Disaster Management Policy (DMP);
- Draft National Action Programme for Combating Drought and Desertification (NAPDD);
- Draft National Drought Contingency Fund (NDCF) and Contingency Planning.

5.1.4 Technical and Institutional Capacity Development

Kenya has demonstrated that it has a growing capacity for assessing and managing climate related risks, although much remains to be done especially at the community level (UNEP-GEF, 2007). Government agencies and academic institutions are engaged in forecasting climatic conditions at different spatial scales. They are also involved in collecting, analyzing and disseminating drought information. The main institutions include:

- Office of the President; Kenya Food Security Meeting (KFSM) and National Disasters Operations Centre (NOC) which are involved in drought monitoring and early warning;


- IGAD Climate Predictions and Applications Centre (ICPAC) and the Kenya Meteorological Department (KMD) which are involved in the provision of seasonal weather forecasts and climatic changes;
- ICPAC (using regional staff and University of Nairobi) monitors and analyses regional impacts of climate change within IGAD member countries.
- International and local NGOs specializing in humanitarian assistance.
- Communities using traditional coping systems and indigenous disaster management knowledge

5.1.5 Drought related Policies and Plans for Kenya

5.1.5.1 Kenya Vision 2030

The Vision will be implemented through five year medium-term rolling plans with the first one covering the period 2008-2012 (*Government of Kenya 2007*⁷). It is a vehicle for facilitating accelerated transformation of the country into a rapidly industrializing middle-income nation by the year 2030. Kenya is affected by disasters of climate change and desertification as over 70% of natural disasters that affect the country are weather related, and the economy is heavily dependent on climate-sensitive sectors, and the means to cope with climate hazards is inadequate. It has been noted that the in the recent past the frequency, magnitude and severity of disasters has been increasing with resulting negative impacts including loss of life and property and destruction of infrastructure. The approaches to disaster management are currently disaster response as opposed to disaster risk reduction. The institutional capacity to collect data on land use for environmental analysis and policy making is weak, and hence assessment and monitoring of strategic environmental resources remain a challenge. Therefore there is need of building data bases and analytical capacity for resource use and management.

The environmental sector's vision is "a people living in a clean, secure and sustainable environment." This vision will be realized through four strategic thrusts namely: conservation, pollution and waste management, ASALs and high-risk disaster zones, and environmental planning and governance. The goals for specific thrust include:

-  Conservation: increase forest cover by 50%; fully protect all wildlife ecosystems and develop environmentally-friendly mining policy.

⁷ Government of the Republic of Kenya, 2007. Ministry of Planning and National Development and the National Economic and Social Council (NESC), Office of the President.

- ✚ Pollution and waste management: reducing hazards related to an unhealthy environment.
- ✚ ASALs and high-risk zones: substantially reduce losses due to floods and drought; establish national trends and impacts of climate change on sensitive sectors; and pilot five adaptation programmes on climate change and desertification.
- ✚ Environmental planning and governance: Increase coverage of spatial data on land use and land cover; enforce all environmental regulations and standards; and attract a least five projects per year on Clean Development Mechanisms.

To achieve the strategic thrust goals, there are specific strategies that will be implemented as follows:

1. Conservation strategies:

- ✚ Rehabilitation of degraded water catchments areas while promoting on-farm forestry;
- ✚ Implementation of compensation for environmental services to include carbon markets;
- ✚ Promote use of biotechnology in forest conservation;
- ✚ Secure wildlife corridors and migratory routes and reverse wildlife loss;
- ✚ Brand premium parks in line with the tourism sector;
- ✚ Intensify conservation of coastal, mangrove and marine wildlife resources; and
- ✚ Develop a sustainable land use policy for common grazing areas.

2. Pollution and waste management strategies:

- ✚ Development and enforcement of mechanisms targeting pollution and solid waste management regulations; and
- ✚ Establish a national air quality monitoring system; and
- ✚ Apply market-oriented instruments to regulate the use of plastic bags.

3. ASALs and high-risk zones strategies:

- ✚ Shift policy from disaster response to disaster- risk education;
- ✚ Intensify research on impact of climatic changes in Kenya and development of appropriate policy responses for each geographic zone;
- ✚ Aggressively promote adaptation activities in high- risk disaster zones; and
- ✚ Formulate a national disaster strategy for seismic events and pestilences affecting human and animal habitation; and
- ✚ Undertake measures to integrate climate change into development planning.

3. Environmental planning and governance strategies:

- ✚ Upgrade the capacity of institutions for enhanced environmental data and information coverage and application;
- ✚ Develop a policy framework to harmonise environment-al related laws and institutions, and promote the capacity for collective enforcement of environmental standards;
- ✚ Strengthen institutional capacities of multi-sectoral planning and strengthen linkages between institutions of planning and environmental management;
- ✚ Establish a baseline on the state of the environment for future environmental planning; and
- ✚ Strengthening negotiating on capabilities through top talent development and compliance with consistency in Multi-lateral Environment Agreements (MEAs).

The strategies will be operationalized through the following flagship projects:

- 🌱 Water catchment management;
- 🌱 Secure wildlife corridors and migratory routes;
- 🌱 Develop a national waste management system;
- 🌱 Land cover and land use mapping;

The flagship projects will be implemented through the following initiatives:

1. Farmland and dryland tree-planting;
2. Carbon offset schemes;
3. Prosopis species management;
4. Disaster preparedness;
5. Capacity for environmental and natural resources information management;
6. Use of market-based environmental instruments;
7. Development of sustainable development indicators;
8. Exploration of natural resources;
9. Nairobi River basin management.

5.1.5.2 Strategy for Revitalizing Agriculture (SRA)

Agriculture has been the leading sector of the Kenyan economy contributing 26% of the GDP supporting the livelihoods of 87% of low income rural households (SRA 2004:1). The economy suffered steady decline during 1980-2000 with economic growth averaging below 2.0% per annum. Except for the sub-sectors of tea and horticulture whose performance was impressive, agriculture also declined leading to over 50% of the country's population experiencing food insecurity. The formulation of the ERS in 2003 led the MOA to embark on putting the sector back on track. Towards this end, the MOA formulated and published the Strategy for Revitalizing Agriculture (SRA) in 2004.

The SRA had the goal of reversing the declining trends in agricultural production by introducing new approaches that would lead to the attainment of a "green revolution" type of outcome for Kenya. It sought to stimulate an average sector growth rate of 3.1% per annum during 2003-07 and 5.0% thereafter (SRA *ibid*). The SRA was adopted as the sectors choice route to the attainment of the MDG targets in reducing absolute poverty from 56% in 2000 to 26% and food poverty from 50% in 2000 to 25% by 2015 respectively.

The SRA's overall objective was to raise household incomes, create employment and ensure food and nutrition security for the Kenyan population. Its specific objectives included the following;

- Raising productivity through enhanced research and extension services, budgetary allocations, and improved rural infrastructure services.
- Increasing the land under irrigation.
- Commercializing sector activities and expanding the scope for private sector participation.
- Promote diversification into non traditional commodities and niche products.

- Review / modernize the sector's legislative / institutional framework, build capacity and raise performance standards.
- Improving the governance structures for sector institutions and membership based organizations.
- Promote regional cooperation in the management of cross border programmes.

The SRA has specific focus on ASAL areas in recognition of the fact that they have lagged behind in development due to low productivity, poor infrastructure for marketing livestock and provision of services, high prevalence of animal diseases and chronic shortage of food and water. It targets these drought prone areas with the following policy measures;

1. Enhanced private sector participation in disease control vide vaccine distribution and vaccination programmes.
2. Expansion of non traditional livestock species and operation of wildlife sanctuaries.
3. Adopt participatory approaches to the provision of extension services that are more responsive to the needs of pastoralists.
4. Promote efficient means of water management e.g. harvesting, storage and utilization.
5. Collaborate in developing suitable mechanisms for preventing and resolving resource use conflicts.
6. Support the promotion of ASAL based rural livelihood programmes.

5.1.5.3 ASAL Development Policy

The 2005 draft National Policy for the Sustainable Development of Arid and Semi-Arid Lands in Kenya (NPSDASAL) was formulated by the ASAL project to spearhead improvement in the living standards of the communities in the 36 districts where the programme has been under implementation. It seeks to integrate the development of ASAL in the mainstream national economic planning and to promote social development in the communities living in the drought prone areas of the country.

The ASAL policy can be viewed as a development strategy for the drought prone areas of the country which has three main components;

1. Policy blue print for integrating the ASAL into the national economy,
2. Medium term plan and sector development priorities over 3-5 years,
3. Long term development strategy over 15 year horizon and beyond.

The broad objective of the ASAL Policy is to improve the standards of living for the local population by integrating the areas into the mainstream national economy and supporting social development in an environmentally sustainable manner. The specific objectives of the policy include the following;

- Providing a coherent framework for promoting ASAL development in Kenya.
- Enhancing a better appreciation by stakeholders of the different livelihood systems of pastoral communities in ASAL areas.
- Providing the platform for attacking the causes of poverty in the ASAL regions and contributing to attaining the MDGs in respect of hunger.
- Articulating sector priorities for intervention towards creating wealth and employment (jobs) while reducing poverty and vulnerability to drought among other natural disasters.

The NPSDASAL seeks to promote reforms of existing sectoral policy constraints in relation to land tenure, community land practices, water and pasture information mapping, emergency / contingency planning, drought contingency trust fund mechanisms, suitable financial products e.g. pastoralist insurance against hazards, alternative conflict resolution mechanisms and cross border collaboration. The draft policy recognizes the critical function of operating a clearing house for the different early warning systems (EWS) and the need to better disseminate information to communities and tap their input to the systems to improve relevance of information generated and enhance preparedness.

The draft policy focus on drought risk reduction, targets to reduce “the vulnerability of poor people to climatic shocks particularly to droughts and floods and strengthening their capacities to respond to the effects of climate change” (NPSDASAL 2005:4). The policy acknowledges that the draft National Disaster Management Policy (NDMP) contains proposals for an institutional framework that is suitable for drought management and related risk reduction. It has contributed to making the ASAL programme more attractive the current administration which has accorded high priority to ASAL development. It has also attracted increased funding by multilateral and bilateral development partners.

The main setback for the adoption of the draft policy is possibly the widely held perception that it is the work of a donor funded project outfit which may not necessarily be enjoying the support of state institutions. The draft is however consistent with the ERS and the Vision 2030 in its emphasis on ensuring security for poor / vulnerable groups, increased resources allocation to human capital development and enhanced attention to employment / wealth creation and food security (NPSDASAL 2005:25).

5.1.5.4 ASAL Vision and Strategy

The draft National ASAL Vision and Strategy 2005-15 (NASALVS) was formulated to outline the framework for implementing the 2005 NPSDASAL Policy. It seeks to show how the country can achieve sustainable development through proper utilization of the natural resources that are found in ASAL areas. It seizes the opportunity provided in the ERS 2003 where political commitment of the new administration to mainstream ASAL regions in to the national economy is communicated. It aims at securing livelihoods through sustainable natural resource management. It lays emphasis on community capacity building, participatory planning and integration of pastoralism in to the development of the target regions.

The NASALVS seeks to introduce a programme approach to the development of ASALs with the first 10 year programme 2005-15 estimated to require Ksh.65.0 billion. It seeks to allocate more 90% of the resources to district level components. It sets out seven key result areas that will guide the process of transforming the regions;

1. Effective coordination of ASAL development.
2. Enhanced community capacity to withstand climatic shocks.
3. Mainstreaming the ASAL into the national development agenda.
4. Sustainable utilization of the natural resources found in ASAL.
5. Effective partnerships for social economic development.
6. Improved local self governance.
7. Linkages between ASAL and non ASAL economies.

Its focus on improving the coordination of programme implementation has helped to clarify the proposed institutional arrangements for ASAL development. It has a proposal to establish a National ASAL Development Authority (NADA) as an alternative mechanism for achieving effective coordination of programme implementation. The proposal augments the ASAL Policy 2004 in this respect and seeks to improve the linkages between national and community levels as shown in Figure 1, below.

The proposal includes improved linkages between NADA and the national Treasury for effective allocation of funds and interaction with an Inter Agency ASAL Development Forum (IAASALDF) where government, private sector, civil society and development partners would meet to harmonize their support to programme implementation. The NASALVS has helped to elaborate the framework for policy and programme implementation but it does not help to move the policy closer to adoption by

the relevant authorities. This is mainly due to the perception that it is the activity of a donor funded project which lacks the necessary political support and leadership of the state.

Figure 2: ASAL Proposed Organizational Structure.

<p>National ASAL Development Authority (NADA)</p>
<p>District ASAL Steering Groups (DASALSG)</p>
<p>Divisional ASAL Implementation Committees (DASALIC)</p>
<p>Location / Sub location ASAL Implementation Committees (LASALIC)</p>

5.1.5.5 National Disaster Management Policy (NDMP)

The draft 2004 National Disaster Management Policy (NDMP) was formulated by the ASAL programme. It lays emphasis on preparedness on the part of the Government, communities and other stakeholders in disaster risk reduction activities. It aims at establishing and strengthening the institutional framework for disaster management, forging partnerships with like minded institutions, networking / main streaming disaster risk reduction in the development process so as to build the resilience of vulnerable groups to cope with potential disasters.

It proposes the establishment of a national level agency to own and drive the implementation of the policy including the management of drought in the country with provincial, district and community level committees (NDMP 2004:28). The proposed National Disaster Management Authority (NADIMA) is modeled around the Indian system which has proved reasonably effective in dealing with the calamities arising from monsoon rains, typhoons and sudden changes in the sea level. The NDMP anticipated that contingency planning would be a key function of the proposed NADIMA⁸. The agency would formulate and implement a national disaster management plan. The plan would include a drought contingency plan to guide the process of anticipation, preparedness and facilitate restoration of victims to normal function conditions after the drought. It would also facilitate coordinated action and efficient use of available resources (NDMP 2004:19).

⁸ The proposal to create the agency is possibly one of the issues that may have led to lack of consensus regarding the adoption of the draft NDMP.

The stakeholders in the NDMP have also proposed a Disaster Risk Reduction policy (DRRP) which has been approved by the Cabinet sub-committee on social and humanitarian affairs and is awaiting full Cabinet approval. The draft policy aims at guiding the mainstreaming of DRR in development planning and project implementation. The key provisions of these policies have a bias towards the creation of institutional structures with almost no coverage of drought policy concerns. The proposals for the institutional arrangements have shifted the focus of stakeholders from articulation of policy to flexing of muscle with a view to gaining control of the proposed agency. This has eclipsed the need to move the draft policy closer to adoption and enactment of the enabling legislation. The proposed institutional arrangements would however meet the implementation requirements of a drought risk reduction policy even if it were to be formulated separately or as a stand alone policy initiative.

5.1.5.6 Drought Contingency Planning (DCP)

A drought contingency plan (DCP) attempts to answer the question, what should happen when drought hits? It constitutes pre-emptive or mitigation actions determined in advance of a drought, and defines the procedure to follow and actions to be taken in the likely event that the expected drought actually occurs. Ideally it should target interventions at local community, district and national levels and be based on experience of previous droughts. It should have realistic cost estimates that can be used to seek budgetary resources allocation. The budgets for implementing contingency plans should be approved within the budget cycle of the state or the specialized agency that is responsible for national drought management. Availability of financial resources should be guaranteed, and the money held in a contingency fund mechanism that is operational at the community, district and national levels (NDCF *ibid*).

The justification for contingency planning lies in the fact that droughts in the ASAL districts impose economic and social costs arising mainly from lost production and disruption of economic activities besides impoverishing local communities. A nation-wide drought of the magnitude that would be expected to occur in Kenya every 5-10 years can inflict agricultural and livestock losses equal to about 15% of GDP (NDCF *ibid*). The occurrence of drought in future is almost certain going by the trends since the 1990s, but contingency planning can greatly reduce their negative impact on rural livelihoods.

The experience gained in the operation of district and community based EWS makes prediction of drought to be pretty accurate. The data that is generated by the EWS is critical to contingency planning. The district drought management system should therefore not only make use of early warning of a drought, but should also plan in advance the measures needed to stop it from

deteriorating into a famine (NDCF Report 2006:15). There are plans to replicate the experience gained by ASALRMP in piloting contingency planning in Turkana and Isiolo districts to other areas so as to deepen the use of this vital tool for drought management (ASALRP 2006).

5.1.5.7 National Action Plan to Combat Desertification & Drought (NAP)

The parties to the 1994 United Nations Convention on Desertification and Drought (UNCDD) convention committed to close cooperation in responding to drought, desertification and flooding disasters by formulating and adopting national action programmes (NAPs). The NAP outlines the measures to be taken by the country towards adapting to the impacts of climate change as well as conducting research / systematic observation of related natural disasters.

Kenya ratified the UNCDD convention in 1996 and thereafter embarked on preparing the NAP which was adopted in 2002. The NAP contained the Government commitment to combating desertification⁹ and spelt out the following measures among others;

- To adopt policies, laws and institutions to enable stakeholders take part in programmes for combating desertification,
- To adopt strategies to enable local level communities to understand and lay their role in projects implementation,
- To ensure provision of sustained financial resources and mechanisms to complete projects and programmes aimed at combating desertification, and
- To build adequate capacity in all stakeholders and their institutions to enable them implement the above programmes.

In order to facilitate the implementation of the convention, the GOK established a national Climate Change Activities Coordinating Subcommittee (NCCACSC) in the Ministry of Environment and Natural Resources which hosted a conference on Climate Change in 1999. The Ministry also embarked on preparing to implement the conference recommendation on the creation of the National Anti Desertification Trust Fund (NADTF). It also prepared a comprehensive programme for capacity building in environmental management and planning known as the “Kendelevu Programme”. The programme helped to integrate environmental concerns into planning and decision making and prioritized natural resource management in the national policy framework (PRSP 2001).

⁹ National Action Programme: A Framework for Combating Desertification in Kenya, Ministry of Environment and Natural Resources 2002.

5.1.5.7 Other Drought Risk Reduction Relevant Sector Policies

a) Range Management Policy

The Ministry of Livestock Development (MLSD) has developed a draft Range Management Policy (RMP) which addresses drought related issues such as the particularly low and erratic rainfall regimes leading to frequent and severe droughts; the effects of fragile soils with weak structures which render the soils easily eroded; and on how to address factors that contribute to land degradation and desertification. The RMP also addresses drought, overgrazing, deforestation, poor farming practices, soil erosion and land tenure in Pastoralist areas. Other areas of focus for the policy include: -

- Attitudes of pastoralists who resist adjustment of livestock population to the rangeland resources carrying capacity;
- Inadequate water supply and water sources;
- Insufficient infrastructure and livestock market facilities;
- Insufficient investment in extension and research;
- Poor pasture management and insufficient disease control;
- Lack of institutional support to poor households.

b) Forest Policy

Noting that deforestation has been rampant in Kenya, and has threatened continued access by the poor to forest products used in coping strategies; and has increased the degradation of water catchments also reduces the reliability of springs, the government has developed a new Forest Policy which is aimed at turning this trend around. The adopted overall strategy entails encouraging development and sustainable management of natural forests on private land, encouraging tree growing on farms, and developing innovative mechanisms for the delivery of forestry extension and advisory services.

c) National Environment Management Policy

The National Environment Management Policy is the umbrella framework that recognizes the importance of conservation and restoration of ecosystems, biodiversity and ecological process and of enhancing public awareness and local participation in environmental actions (NEMA 2000). Linkages between poverty and environment and inter-sectoral actions are implemented through the National Poverty and Environment Action Plan (PEAP) and the individual District Environment Action Plans (DEAP). The 2006 draft National Land Policy (NLP) aims to fill a gap in integrated, harmonized land administration and management in urban and rural areas and the adoption of users/ stakeholders led institutions for land administration. Other policy measures relating to land use planning are aimed at

maintaining productivity of land /agro-ecosystems and a regulated urban development regime that supports preservation of the public interest while giving incentives to private developers.

d) National Livestock Development Policy

The current National Livestock Development Policy was developed in 1980 with the objectives: to address poverty; enhance foreign exchange earnings; food security; emphasize on sustainable use of environment; and provide raw materials for processing and manufacturing industry. The policy is outdated and is under review to develop a New National Livestock Development Policy¹⁰ with the following objectives: to achieve appropriate livestock management systems for sustainable development of the livestock industry; improve and conserve available animal genetic resources effectively; achieve effective control of animal diseases and pests in line with relevant international codes and standards; focus research efforts in livestock sub-sector on resolving current and emerging problems; ensure quality standards and quality assurance at all levels of production and marketing chain for increased competitiveness of the livestock industry; and address cross-cutting issues that impact on livestock industry, such as, land, water, environment, infrastructure, security, livestock-wildlife interactions, JHIV/AIDS and other diseases, gender and capacity building.

The policy notes that the range environment is fragile and is inappropriately used leading to its degradation and reduction of its capacity to support livestock. Thus there is need to develop strategies to protect the environment and support livestock sustainably; and efforts will be made to institutionalize community's involvement in the planning, development of range and pasture rehabilitation packages. Initiatives will also be made to facilitate monitoring and control of range and grazing areas, shrinkage through range degradation, urban expansion, settlements, cultivation and other kinds of encroachment on the livestock zones, and to make effort to ensure conservation of trees.

To minimize animal losses during drought and to facilitate community socio-economic recovery after drought, the government in liaison with all relevant stakeholders will develop initiatives for drought preparedness to take care of human and animals, and recovery programmes for mitigation and poverty alleviation in all regions; and will also put in place cost-effective measures that ensure that livestock mortality rates during prolonged droughts remain more or less the same as non-drought years by promoting sound range management practices, effective disease control and appropriate livestock market infrastructure.

Drought results in loss of livestock, collapse of local livestock markets and famine. To minimize these losses, the government will set up measures to institutionalize drought Early Warning System in the country that will be strengthened through adoption of the necessary mitigation interventions including

¹⁰ Republic of Kenya, Ministry of Livestock and Fisheries Development, 2006. Draft National Livestock Policy, Technical Working Group Report.

development of medium term and long term plans for emergency preparedness. Further, the government will also establish and institutionalize mechanisms for emergency livestock off- take and establishment of a revolving fund for recovery after drought. Also in collaboration with ASAL communities, the government will *promote peace building initiatives and establish conflict early warning systems in an effort to thwart their on-set.*

Increased industrial activities, the growth of agro-chemicals use, and domestic waste disposal continue to have a significant negative impact on the environment; thus, adversely affecting livestock and honey production. In seeking a solution to these problems, the government will set appropriate policies on optimal land sizes and use. Mechanisms for promoting efficient management of water resources will be set up in liaison with relevant experts in range dynamics to enhance the provision of good quality water, for both livestock and humans. To ameliorate negative environmental impacts, the government will liaise with relevant authorities to enforce adherence to environmental management assessment guidelines, standards and the relevant provisions and encourage appropriate use and disposal of acaricides and other pesticides.

The communities living in areas with wildlife will be encouraged to combine livestock keeping with ecotourism practices in order to gain from both and thereby increase their incomes. To address the human-wildlife conflict the government will devise and institute a benefit-sharing mechanism and also a more appropriate compensation scheme for the loss of human and livestock

The Government in collaboration with other public and private sector institutions will develop special gender sensitive programmes for women and youth empowerment to enable them access facilities like credit, land, technology and market information. Further gender issues will be incorporated in all livestock extension messages through participatory approaches.

On pastoralism, Government, in partnership with other stakeholders, will continue to support pastoralism and agro-pastoralism as viable production systems while encouraging diversification of the pastoral economy to hedge pastoral livelihoods against vulnerability to drought, floods and civil conflicts.

The policy also proposes development and review of legal and institutional framework of the livestock sub-sector to facilitate the development of a competitive livestock industry in the country and also institutionalizing pro-active information management and sharing system for effective participatory monitoring and evaluation.

Livestock trading has inherently been the domain of the private sector, but in recent years, donors and policy makers have begun to focus on investments in livestock marketing systems that will increase the pastoralists marketing responsiveness to variation in climatic and rangeland conditions and the scope for investing in livestock trade as an alternative livelihood (Barret, et al, 2004¹¹). There is also high potential for livestock export trade, but its exploitation is limited by market accessibility and shortfalls in livestock disease control (ALRMP, 2008¹²).

¹¹ Barret, Christopher B., Marc F. Bellemare and Sharon M. Osterloh, 2004. Household Level Livestock Marketing Behaviour among the Northern Kenya and Southern Ethiopia Pastoralists; Department of Applied Economics and Management, Cornell University.

¹² ALRMP, 2008. Comparative Analysis of Veterinary Drugs Delivery Mechanisms in the Arid Lands of Kenya;

e) National Agricultural Sector Extension Policy (NASEP)

The Agricultural Sector Ministries (ASMs) have since June 2005 engaged key stakeholders in the country to review the National Agricultural Extension Policy (NAEP), which was formulated in 2001 to come up with a more sector-wide policy as spelt out in the National Agricultural Sector Extension Policy (NASEP) of December 2005¹³. The revised policy vision is that Kenyan agricultural extension clientele will demand and access appropriate quality extension services from the best providers and attain higher productivity, increased incomes and improved standard of living by 2015. The key objective is to empower the extension clientele through sharing and imparting of knowledge, skills and change of attitudes so that they efficiently manage their resources for improved quality of livelihoods. The new policy draws lessons from previous experiences and addresses challenges precipitated by economic liberalization, rapid changes in extension clientele expectations, and reduced public financing of extension services. The new policy spells out modalities for effective agricultural extension management and organisation in a pluralistic system where both public and private service providers are active participants. It also provides a point of reference for service providers and other stakeholders on matters of standards, ethics and approaches and guides all players on how to strengthen coordination, partnership and collaboration.

This Implementation Framework for NASEP was prepared in order to provide guidance to all stakeholders involved in agricultural extension so that there is a harmonized approach in its implementation and it is also possible to monitor and evaluate the progress over time. The success in the implementation of this policy is predicated on the commitment of all sector players: public and private sector service providers, farmers, fisher folk, pastoralists, ranchers and development partners. Successful implementation of the policy will contribute towards improved transfer of technology and management for higher agricultural sector productivity, a key prerequisite to poverty reduction and enhanced food and nutrition security.

e) Eco-tourism and Wildlife Conservation Policy

The lack of policy framework that supports community participation in wildlife conservation has

Arid Lands Resources Management Programme; Ministry of State for Special Programmes; Office of the President, Republic of Kenya.

¹³ Republic of Kenya, Ministry of Agriculture, Ministry of Livestock and Fisheries Development, Ministry of Cooperative Development and Marketing, 2006. National Agricultural Sector Extension Policy, Implementation Framework. Zero Draft, July 2006. Agricultural Sector Coordination Unit.

caused them to perceive wildlife as competitors over the scarce resources. In order to alleviate this problem, the government and other actors within the sector have sensitized rural communities and launched eco-tourism and community wildlife management schemes, both of which are relatively new concepts focused on harmonized coexistence and alleviation of human/wildlife conflicts (ACF, 2008).

The Kenya Wildlife Service supports community wildlife service has effectively guided the formation of community sanctuaries and cultural villages; this has reduced human/wildlife conflicts. But the community's fuller participation in this sector and achievement of their economic growth as benefit from wildlife conservation has been curtailed by lack of policy and institutional framework to facilitate their efficient and sustainable exploitation of the available natural resources.

f) Land Tenure and Land Use Policies

A major trend in the ASALs is the increased fragmentation of the Trust Land (held under county council mandate) due to migration of people who have fallen out of pastoralism, or those who are spilling into the ASAL areas due to population pressure from the high potential areas (Macharia, 2004¹⁴). More often this trend has resulted in land and environmental degradation.

The absence of clear policy to guide control for water and pasture poses major threats to the survival and security of the parties concerned. Such scenarios are evident along the riverine strips along the Tana River; these have impeded implementation of irrigation projects within the Ijara district borderlines close to the river.

g) Food Security Policy

In the ASALs of Kenya where the livelihoods and the overall economy are heavily inclined towards weather, the major cause for food insecurity is drought (UNDP, 2005¹⁵). The dependency syndrome emanating from food relief, and the low precipitation levels and recurrent droughts, the ASAL communities have hampered the communities' capacity to rid themselves of food insecurity. But if policy is developed to support better planning and adequate allocation of resources to the agriculture and livestock sectors, the inherent constraints can be alleviated and food security improved effectively (UNDP, 2008).

¹⁴ Macharia, Peter, 2004. Gateway to Land and Water Information: Kenya National Report. Kenya Soil Survey, 29th July 2004.

¹⁵ UNDP, 2008. Kenya National Disaster Profile. United Nations Development Programme, Enhanced Security

h) Water Policy

The strategies for water source development and management under the current policies have included the promotion of water resource users associations (WRUAs), and to a lesser extent the use of environmental management committees - EMCs (Sociolingo, 2007¹⁶), the operations of both institutions have not been adequately harmonized, often resulting in conflict of interest and inefficient operations.

Kenya has not invested adequately in infrastructure such as dams, boreholes, pipelines and rainwater harvesting in spite of the inherent water resource limitations and high dependence of the economy and social well being on water. The capacity for water harnessing of water for use in livestock production and irrigated farming (noting that Kenya has 660,000 ha of irrigable land – UNDP, 2008), has been low due to inadequate policy for investment in such schemes. The reality is that if the irrigable land is exploited and livestock production sustainably improved, then there is possibility of addressing the food-security situation and the overall development in the ASALs.

i) Gender Policy

The current policy on mainstreaming of gender in community technical training and capacity building curriculum (e.g. through inclusion of gender issues in the Focal Area Development Committees, and the female gender involved in sustaining farm-related commercial entities) is helping to alleviate cultural influences that are still a major impediment in the promotion of potential opportunities for the ASAL residents. But the shortage of female staff deployed by the ministries of Agriculture, Livestock and Fisheries Development in ASAL districts (including the crucial Department of Gender and Home Management) is a major impediment for the gender mainstreaming efforts.

5.1.5.8 Drought Management and Poverty Reduction Strategies (PRSP).

The Poverty Reduction Strategy Papers (PRSPs) have since 1999 explicitly dealt with drought risk within the overall framework of poverty reduction. The papers have recognized the linkage between drought risk and poverty, and the main hazards faced by the poor in drought prone areas such as food insecurity, famine, social and resource-based conflicts. The poor in these areas are particularly vulnerable to drought and other related disasters, and the PRSPs recognize these linkages very well indeed. Drought, poverty and human insecurity are connected in a circular manner as each of them leads to the other.

¹⁶ Sociolingo, 2007. Kenya: Communities come together to Protect Water Sources. Sociolingo, August, 16 2007.

The ERS 2003-07 recognized the threat posed by drought risk to poverty reduction efforts and economic recovery. Accordingly, the ERS gave high priority to the implementation of the ASALRMP as a special programme that has the potential to deliver comprehensive development to the areas of the country that are most prone to drought and drought induced poverty. The ASAL areas are the most vulnerable to drought and other climate hazards in the country and their poverty incidence at 65% is one of the highest in the country. The areas have the lowest per capita access to infrastructure and basic social services, and the lowest literacy levels in the country (ERS 2003:45). The increasing severity of drought, the rise in the frequency of the drought-floods cycle in the ASAL areas of Kenya has tended to coincide with the escalation of poverty and the general decline in the socio-economic well being of vulnerable groups.

The contribution of the PRSP / ERS to the development of drought risk reduction policies has been minimal due to the disconnect between setting of priorities in poverty reduction and the sector based process of allocating funds to relevant project interventions. While drought has contributed to increased level of poverty in the vulnerable areas, poverty reduction initiatives have not been harmonized with drought risk reduction initiatives. DRR has not been included in the Poverty Reduction Strategy Paper (PRSP) or in the Economic Recovery Strategy (ERS) with the kind of prominence it deserves. This is largely due to the fact that drought management has not been viewed as development concern but rather as a humanitarian issue (Office of the President - Kenya).

5.1.5.9 Drought Risk Reduction and Conflict Management

In Kenya, the areas that are most vulnerable to drought risk are also the hot spots of social tension and conflict generated by competition over scarce water and pasture among the pastoral nomadic communities. The business of drought management tends to go hand in hand with peace building work especially in the ASALs. The National Steering Committee (NSC) on conflict management and peace building initiatives has proposed a draft National Policy on Peace Building and Conflict Management (NPPBCM). The goal of the policy is to promote sustainable peace and development in the vulnerable areas of the country. The objectives of the draft policy address the need to:

- Establish an institutional framework for conflict management and peace building that fosters strong partnerships between the government, the market, civil society, regional agencies, donors, grass root communities and local authorities for sustainable national development;
- Develop sustainable conflict management and peace building guidelines that provide for conflict sensitive planning, implementation, monitoring and evaluation;
- Mainstream gender issues in conflict management with specific focus on the empowerment of women towards long-term conflict mitigation and peace making;
- Address root causes of all internal and cross-border conflicts and establish prevention

strategies;

- Propose options to strengthen relationships between actors in different sectors and levels of society for sustainable peace building;
- Propose options for sustainable resource mobilization and utilization strategies;
- Put in place mechanisms for regular review and monitoring of policy implementation.

However, the document has gaps in addressing the issue of conflict as a priority policy factor in itself, and the need for incorporation of community local knowledge, the indigenous systems of governance and natural resource management including environment management committees (EMCs) and water users associations (WUAs). There are operational challenges manifested in the continuing need to improve effectiveness and impact of ongoing peace building programs particularly the traditional justice systems.

5.2 DRR Identification, Impact Assessment and Early Warning

5.2.1 Risk Assessment and Early Warning

The framework for identifying, assessing and managing drought at the district and local community levels is provided by District Steering Group (DSGs). They are the focal point for coordinating local response to the onset of drought. The District Drought Management Unit (DDMU) manages the response of local stakeholders to the onset of drought. The collaboration of the District Disaster Management Teams (DDMTs) is sort in order to mobilize all agencies to deal with the evolving drought crisis as an emergency. The effort involves district heads of sector ministries; health, education, livestock, agriculture, water, roads, provincial administration, the army and the police.

5.2.2 Enhancing Capacity for Drought Monitoring and Early Warning

The arid lands resource management programme (ALRMP) has a drought management component, which coordinates the operations the various early warning systems (EWS) that have been installed in Kenya. The programme covers 28 districts and it empowers nomadic communities to harness its resources and capacity. It facilitates the training and preparation for communities to enable them to effectively cope with drought without straining the national economy when such adverse climatic conditions occur.

The key role of the EWS component is to co-ordinate assistance to the ASALs; provide the linkage with donors, through the operations of the Kenya Food Security Meeting (KFSM). Adequate and

timely information provided by the EWS project has enabled proper scheduling of drought relief and mitigation assistance. The capacity for early warning system and disaster preparedness is also being strengthened, including providing training and a mechanism for district based groups and voluntary service providers.

5.3 *Drought Awareness and Knowledge Management*

5.3.1 Preparedness and Contingency Planning

Knowledge about drought is generated using the combination of traditional and modern systems of gathering information using selected indicators. The data gathering system in Kenya is primarily community based. The community level monitors changes in the local indicators on a monthly basis, reviews data and observations with experts and community leaders on a quarterly basis to verify its reliability. Liaison with national / regional climate monitoring agencies such the Metrological Department and Universities is made for interpretation of findings and the issuing of advisories to stakeholders. The regular advisories are an important tool for disseminating drought information to user groups such as pastoralists and farmers.

Kenya's drought management system has evolved through experience in managing successive droughts in the northern part of the country over a period of more than twenty (20) years. The system combines government ministries, departments, programmes, United Nations agencies, Donor agencies, private sector agencies, non governmental organizations (NGOs), faith based organization (FBOs) and community based organizations (CBOs).

It operates at the national, provincial, district and community levels usually taking the form of forums representing the main stakeholders in drought management. It has not been integrated in the formal decision making structures of government and therefore cannot speak for or behalf of the government with authority. The past and present drought policy development initiative has been spearheaded by the Arid Lands Resource Management Project¹⁷ (ALRMP) in the Office of the President (OP) which is able to speak authoritatively on policy and programme issues. In spite of all the above efforts at policy formulation, Kenya still lacks a formal policy framework to facilitate implementation of drought mitigation programmes and help the country to reduce the risk of drought. This has hampered the development of capacity for resilience against drought among the most vulnerable communities and

¹⁷ The Arid Lands Resource Management Programme (ALRMP) has mandate over promoting sustainable rural development in 36 dry land districts in the country.

the flow of resources into a national drought management programme.

5.3.2 Education and Training on Drought Management

Strengthening and equipping the members of the district based drought committees and other local level stakeholder is critical to ensuring that the committees function properly. Where new committees are formed they need to be given orientation to the work so that they can function without. Training and exposing committee members to the work is aimed at building capacity for improved contingency planning for better management of localized drought. The capacity building programme is implemented in all the Units to help them come up with coordinated activities for effective drought risk reduction in their district.

5.4 Programmes Addressing Issues of Drought

5.4.1 ASAL Based Livestock and Rural Livelihoods Support Project (ALLPRO)

The project started in 2004 for a period of 6 years. The project operates in the 22 districts of the Arid and Semi-Arid Lands (ASALs) of Kenya under the Ministry of Livestock and Fisheries Development¹⁸. The project goal is “to contribute towards poverty reduction at the national and household level”, while the project purpose is “to improve sustainable rural livelihoods and food security through improved livestock productivity, marketing and support for drought management and food security initiatives in the ASALs”.

The project has five components that include:

- i. Livestock productivity improvement;
- ii. Animal health improvement;
- iii. Livestock marketing;
- iv. Drought management and food security initiatives
- v. Support for coordination and management and community initiatives.

Partners in the project include: communities, Community Based Organizations (CBOs) and produce

¹⁸ Ministry of Livestock and Fisheries Development and African Development Fund, 2005. ASAL Based Livestock and Rural Livelihoods Support Project, Official Launching Workshop, 2nd March 2005, Panafric Hotel – Nairobi.

associations; private sector; International Livestock Research Institute (ILRI); Kenya Agricultural Research Institute (KARI); Ewaso Ng'iro North Development Authority (ENNDA); Non-Governmental Organizations (NGOs) and other Development Agencies (DAs) based at the district/local level (e.g. ALRMP; OXFAM, AA; etc); and University of Nairobi.

Project benefits will include: empowerment of communities to come up with initiatives for solving own problems that can be funded by the project; livestock disease control; disease free and buffer zones to facilitate export of clean animals; sustainable provision of water for the pastoralist and their livestock in partnership with the Ministry of Water and Irrigation; better markets and improved producer prices; participation of women; increase in off take, production and sales of products; and promotion of local and international trade in animals. Social impacts will include: increased incomes; employment; community empowerment; and reduction of drought risks through early warning and drought mitigation measures.

The project outputs will include: improved livestock productivity; improved animal health; improved livestock marketing; improved drought management capabilities and support to project management and coordination. The beneficiaries include: pastoralists and agro-pastoralists; beekeepers; flayers of hides and skins; traders; butchers; private sector service providers; honey processors; and consumers.

5.4.2 Arid Lands Resources Management Project (ALRMP)

The World Bank supported Arid Lands Resources Management Project (ALRMP-II) started in 2003 as a seven year project and is to run up to 2009. It supports three sub-components aimed at addressing the problem of drought vulnerability and is enabling communities to move beyond survival and subsistence to sustainable development. ALRMP's three sub-components include:

- *Natural Resources and Drought Management*
This aims at promoting better understanding of the natural resources to reduce natural shocks by better management while drought management is to create a more effective drought cycle management with more responsive mitigation activities.
- *Community Driven Development*
This is aimed at fostering development of community capacity by empowering them to successfully identify, implement and sustain their development priorities.
- *Support to Local Development*
This is aimed at creating an enabling environment to move from survival to positive

development agenda. This is through policy support, advocacy and delivery of essential services.

Natural Resources Management (NRM) is expected to create a sense of shared responsibility and accountability, done through community meetings to create awareness and build institutions for management e.g. environmental management committees at all levels, range land users associations, water users associations, enterprise based associations (nurseries, bee-keeping, etc). Drought Management activities since 2003 have been promoted aggressively due to the 2004-2006 severe drought.

The approach to drought management in ALRMP differs from the traditional approach of giving famine relief to a mix of direct welfare and productivity enhancing transfers. ALRMP has sensitized communities and formed various groups (CIGs).

Community-Driven Development (CDD) is to empower communities to manage their own development sustainably, especially by targeting the disadvantaged and vulnerable groups. These include groups like the Watta in Moyale and Marsabit, the Munyayaya in Garissa, Lukono in Samburu and Gagabes of Wajir. Communities are categorized into basic and extended communities. Basic communities are those with no experience in micro-projects and are trained in implementing micro-projects to extended communities capable of fund-raising and implementing micro-projects on their own. Training for both include PICD, procurement, financial management, cross-cutting issues, leadership among others. Since ALRMP-II started, it has worked with 256 basic and 131 extended communities with 1037 micro-projects in 11 arid districts and hopes to reach 600 communities by 2009.

In order to develop exit strategies for sustainability, capacity building in resource mobilization, proposal generation, report writing and business skills is continuously done. Up to now 62,414 people have been trained (52.7% women).

Gender mainstreaming has been emphasized due to the recognized gender disparity where women are limited to domestic and manual activities. In PICD training as mentioned above, over 50% of participants are women. In promoting micro-projects, women are involved in all levels and out of 1037 micro-projects promoted with 643,892 beneficiaries, 322,066 are women (50%). They are also represented in all levels of community development committees (over 40% women) as well as creation of gender focal points in districts to incorporate gender issues in projects.

Micro-projects under CDD have included water, health, sanitation, agriculture, restocking, safety nets and IGAs. Projects in water have included construction of shallow wells, underground tanks, catchment tanks, hand tools for group pans, buying of donkeys for ferrying water, desalting water

pans/dams, equipping boreholes, repair and installation of hand pumps, building rock/roof catchments, protection of springs etc. In total, 177 micro-projects have been implemented at KShs. 68.3 million with communities raising KShs. 23.806 million (35% of cost). Education related micro-projects include construction of classrooms/dormitories, toilets, purchase of desks/chairs, provision of donkey carts, construction of adult literacy classes, renovation of classrooms/dining halls/kitchens/stores/administration blocks, provision of beds/mattresses, solar panels, energy saving *jikos* and generators, etc. About 255 micro-projects have been implemented at a cost of KSh125.2 million with communities raising KShs37.2 million (30%), benefiting 125,818 students (56% male and 44% female).

Agricultural related micro-projects in isolated pockets of pastoral districts and rain fed agriculture in semi-arid districts included purchase of pump sets and repair, purchase of oxen ploughs, support to micro-irrigation, purchase of farm inputs, extension of water harvesting infrastructure for crop-production, construction of canals, river bank protection and flood control among others. About 123 micro-projects have been implemented at a cost of KSh65.9 million with communities contributing KSh2.1 million (32%). Livestock related activities included provision of veterinary drug store in Turkana and repair of troughs at a cost of KShs 675,000 with the community contributing 29% of total cost. Restocking and provision of shelter for displaced communities was also done by restocking 2678 household with 14-30 shoat each, milking and loading camels.

Other provisions included shelter, donkey carts, loading camels, and wheel-barrows for petty traders; Torgenburg goats for the vulnerable households, sewing machines for destitute women, poultry units for women and youth groups. Based on these provisions, about 174 micro-projects were implemented at the cost of KShs. 88.3 million with communities contributing KShs. 26.35 million (30%) benefiting 32,492 people of which 48% were women.

Human health and sanitation micro-projects include: construction/rehabilitation of dispensaries; incinerators; maternity wards; laboratories and drug stores; provision of solar systems; and construction of VIP latrines and staff houses. About 103 human health and sanitation micro-projects have been implemented at a cost of KShs. 39.1 million with the communities contributing KShs. 11.4 million (29%). Environment-related micro-projects include: establishment of tree nurseries; protection of catchment areas; purchase of mules for environmental surveillance; construction of gabion check dams and tree planting to control soil erosion; and fencing of water pans and boreholes. About 33 environment-related micro-projects have been implemented at a cost of KShs. 6.35 million with the communities contributing KShs. 2.2 million (35%).

Income generating activities (IGAs) in ASAL areas have been promoted. These have included: support to self help women and youth groups with matching grants; supporting bee-keeping groups; purchase of donkey carts; construction of butcheries; camel meat cottage industry; saloon

equipments; sewing machines; eco-tourism in Samburu; cultural/curio shops market stalls; employments for tanneries; community bakery; community guest-houses; honey processing equipment; fish stores/racks; and fodder growing and baling. On IGAs, a total of 159 projects have been supported at KShs. 47.2 million with the community contributing KShs. 19.3 million (41%).

The analysis shows that ASAL communities, despite being comparatively poor, can be mobilized to prioritize their development needs. As shown, the communities approach improvements of livelihoods in a holistic manner and the community demand-driven micro-projects cover various sectors.

5.4.3 National Agricultural and Livestock Extension Programme (NALEP)

SIDA has been involved in agricultural extension since 1974 when it started the National Soil and Water Conservation Program (NSWCP). The goal of NSWCP was to contribute to increased and sustainable agricultural production with minimum effects on the environment. The program used a 'catchment area approach' with a catchment area being defined as an area with farming activities where farmers collectively agreed to conserve their individual parcels of land as well as communally utilized land. It used the following planning process: Collection of data on a participatory manner; Preparation of catchment maps/sketches; Development of a conservation plan; and Development of a catchment development plan. By the time it closed down in 1999, NSWCP had reached 1.7 million farmers. However, it has been criticized that it never built sustainable land management mechanisms for continuity.

NALEP has modified the "catchment approach" originally developed under the Government of Kenya/ Sida-supported National Soil and Water Conservation Programme (NSWCP) to the "focal area approach". Whereas NSWCP's micro-catchments were selected on the basis of: relief, NALEP's focal areas are identified on the basis of administrative boundaries. The extension activities undertaken under NALEP include: the establishment of focal area development committees (FADCs) and common interest groups (CIGs); carrying out of a needs assessment using the participatory rural appraisal (PRA) methodology; training of farmers in various aspects of land management; establishment of fruit tree nurseries; the construction of conservation structures; and the development of community action plans (CAPs) and resource maps.

NALEP supports the development of a pluralists and demand –driven extension, based on strong participatory planning by stakeholders and involvement of the private sector in implementation. The policy has been piloted through the NALEP with the aims of (i) creating strong farmer-extension linkages, (ii) socio-economic and environmental sustainability, (iii) enabling environment for private sector participation, (iv) empowering beneficiaries in controlling and financing extension, (v) addressing the needs of the resource poor and vulnerable farmers, (vi) support of value addition, (vii)

participatory approach and wider involvement of stakeholders, and (viii) accountability to beneficiaries.

NALEP-SIDA started in 2000 is the most important initiative within the NALEP-I. The first phase 2000/2005 operated in 43 districts in high and medium potential lands (HMPL). The second phase started in 2005/2006 supported an additional 10 districts mostly in semi-arid and arid lands.

The purpose of the NALEP-SIDA program was to develop “*A pluralistic efficient, effective and demand-driven extension system*”. To achieve this program purpose, five output areas have been identified namely:

- Institutional setting (program coordination, policy and legal framework for decentralization, staff mobility and office infrastructure, capacity building at all levels, functioning M&E);
- Extension approach (focal area approach promoted, methodologies targeting the poor);
- Technical packages (appropriate packages promoted which are gender responsive)
- collaboration and extension facilitating factors (collaboration with private sector, modalities for improved research-extension-farmer linkages, savings/credit mobilization); and
- Cross-cutting issues (gender mainstreaming, drug and alcohol abuse, advocacy/rights and governance and environmental issues)

NALEP-II Organizational Structure: NALEP is coordinated by the Ministry of Agriculture and Ministry of Livestock and Fisheries Development. Focal area development committees (FADCs) composed of farmers are established at the grassroots level. At the division, district and province levels are stakeholders’ fora composed of various stakeholders (public, private, and farmers).

At the headquarters are Technical and Program Steering Committees composed of officers from MoA and MoLFD. These committees are served by the Project Coordination Unit (PCU). The PCU has the following specialists: Project Coordinator; Extension Management Officer; Training Officer; Monitoring and Evaluation Officer; Gender Officer; Agribusiness Value Addition Officer; Support Services (Finance/Procurement) Officer; and Technical Adviser. The Project Coordination Unit (PCU) is a two ministry coordination unit formed when the two ministries were one but continues in the same set-up even after the split of the ministry. The project has steering committees at provincial, district and divisional levels for coordination of project implementation.

NALEP works through Community Interest Groups (CIGs) and promotes various packages to the groups. It is noted that among livestock technologies, the most common were bee-keeping, dairy cattle and goats production. These technologies are associated with improved pasture production and livestock related agro-forestry. Among crops, the most common are bananas, tomatoes, sweet potatoes and passion fruits. In relation to SLM, the only micro-projects promoted are apiculture, commercial seedling production, sericulture and commercial energy saving devices.





NALEP will be working in all districts in Kenya. It is strong in capacity of staff and beneficiaries at all levels and has developed many Common Interest Groups at grass-roots level.

5.4.4 Njaa Marufuku Kenya (NMK)

The Government of Kenya is a signatory to the Millennium Declaration made at the United Nations Millennium Summit in September 2000. World leaders at the Summit adopted the Millennium Development Goals (MDG), which set clear targets for reducing poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women by the year 2015.

Kenya is one of the four countries in Africa and seventh world-wide, selected by United Nations to pilot the fulfillment of the Millennium Development Goals (MDGs). Njaa Marufuku Kenya (NMK) programme was formulated by Agriculture Sector Ministries in collaboration with Development Partners to fast track the fulfillment of MDG-1 and thus reduce the number of poor and hungry Kenyans by half by 2015. NMK implementation started in March 2005 after launching in February 2005. At the start of the programme, the number of absolute poor and hungry Kenyans was estimated at 17 million people (56% of the population) residing mainly in rural and peri-urban areas.

The programme supports community driven, agricultural development initiatives targeting the extremely poor and vulnerable community members. Its interventions are geared towards increased productivity, generation of rural incomes, health and nutrition improvement and conservation of the natural resource base. The poor and vulnerable are empowered through capacity building and provision of sustainable resource support that enables them to fully participate in economic activities. The overall goal of the programme is to contribute to reduction of poverty, hunger and food insecurity among poor communities in Kenya. The strategic objectives of the programme include:

-  Increase food security initiatives through support to resource poor communities.
-  Support health and nutrition interventions that target the poor and vulnerable.
-  Strengthen and support private sector participation in food security and livelihood initiatives.
-  Establish and strengthen linkages and collaboration with stakeholders in food security and livelihood initiatives.

Njaa Marufuku Kenya is a collaborative initiative for fast tracking MDG-1 implemented by the Ministries of Agriculture, Livestock & Fisheries Development and Co-operative Development & Marketing in collaboration with Ministries of Education and Health and other partners. The Ministry of Agriculture is the focal point in NMK implementation. Structures put in place for coordination and

implementation of the programme includes National Secretariat, Provincial and District Coordinating Units and Divisional Implementation Teams. The fast track phase of the programme started in March 2005 in 57 pilot districts and ended in June 2006 while the national wide long-term phase began in July 2006. The programme is implemented in four strategic components, namely;

Component 1 – Support to Community Driven Food Security Improvement Initiatives:

The aim is to empower community groups through capacity building and provision of small grants for up scaling agricultural activities that focus on hunger, poverty reduction and income generation. Activities focus first on identification of needy groups by stakeholders and the District Coordinating Unit (DCU) in each district. The groups then write proposals which are submitted through DCUs. The proposals are then appraised by the secretariat after which grants are processed and disbursed to the benefiting groups. The groups' projects supported by NMK under this component include small scale irrigation and water harvesting technologies, production of high value crops, value addition and marketing, environmental conservation, draft animal technology, livestock enterprises, artificial insemination and animal health services.

Component 2: Support to Community Nutrition and School Meals Programme:

The aim of the component is to improve health and nutrition status of vulnerable people and school going children. It is a cross-sector linkage component that involves participation of Ministries of Agriculture, Education and Health. The component addresses issues of nutrition since poverty reduction must also include commensurate improvement on nutrition. Secondly, the component supports community based School Meals Programmes targeting pupils from poor homes with the aim of improving their nutrition, class attendance and performances. In addition, the community-based SMP serves as a safety net measure to create micro-markets for the poor.

Component 3 –Support to Private Sector Food Security Innovations:

The aim is to encourage private sector participation in poverty and hunger reduction initiatives. Under this component, NMK supports registered Private Sector and Civil Society Organizations to upscale hunger and poverty reduction innovations that have the potential to be replicated. The key areas of support include extension service delivery, water harvesting technology transfer, capacity building, crop and animal husbandry, small scale irrigation technology transfer, environmental conservation and soil improvement.

Component 4 - Project Management and Coordination:

The main aim is to strengthen the management and coordination of NMK and establish linkages and collaboration with stakeholders. Under this component technical, material and financial support is

provided to the Secretariat, Provincial and District Coordinating Units for effective project planning, coordination, implementation, monitoring and evaluation.

Major Achievements

- ✚ Development of training curriculum for Community Groups Facilitators;
- ✚ Capacity building of School Management Committees on implementation and management of School Meals Programme, leadership and financial management.
- ✚ Training Community Nutrition/Health volunteers in the nine Districts to spearhead awareness campaigns on community nutrition, carry out capacity building in the target communities and monitor the nutritional status of under-five children.
- ✚ Production of nutrition training materials for the target districts.
- ✚ Capacity building of Private Sector Organizations on financial management and procedures for implementation of the collaborative food security and livelihood activities.
- ✚ Development of a Participatory Monitoring and Evaluation System.
- ✚ Development of a brochure to enhance information dissemination and awareness creation on the programme.
- ✚ Development of district food security profiles supported by FAO. The Food Security Maps will help the programme to prioritize where to concentrate its interventions.

5.4.5 Enhancement of Food Security through Water Harvesting Project

Kenyan agriculture remains hugely dependent on rainfall. Any seasonal reductions in rainfall amounts or poor distribution have huge impacts on agricultural output, food security and incomes. The impact of these rainfall uncertainties is widespread crop failure and famine. The last four years have served to demonstrate this point. The Government is addressing this problem by implementing policies that increase the amount of water available to small-scale farmers especially in ASAL areas. The **Enhancement of Food Security through Water Harvesting** Project was therefore a response aimed at addressing this situation¹⁹. It was first financed in 2006/07 with a total budget 54 million.

The project objectives include: developing regional centres of excellence in sustainable agriculture; developing practical training facilities for farmers and extension workers; and collecting relevant data and using it for developing training materials such as pamphlets manuals and posters.

¹⁹ Mwangi T. Hai and Lincoln I. Mwarasomba, 2007. Project Field Report. Republic of Kenya, Ministry of Agriculture; Department of Land, Crop Development and Management; and Department of Policy and Agricultural Development Coordination, 2 May 2007.

The project is demonstrating water technologies through National Demonstration Centres. The demonstrations will facilitate accessing skills wherever they are around the country and addressing staff shortages for effective extension by permanently displaying technologies; integrated application of technologies and practical collaboration with other stakeholders in the agricultural sector. Technologies under demonstration by the project include water harvesting techniques; agro-forestry techniques and soil fertility management techniques.

The role of the community (farmers/pastoralists) include: development and maintenance of the demonstrations; group visits to the demonstration centres for learning and sharing experiences; and replication of technologies in their own farms/range areas. The role of the staff in the Ministry of Agriculture include: guidance in the development of the demonstrations; assist farmers/pastoralists in subsequent replication; data collection (rainfall, run-off, tools, equipments, crop performance, visitors, etc.); and testing of research products.

The project has challenges that include: inadequate staff training on technologies under demonstration; ambitious communities that are constructing structures outside the recommended sizes; some communities are waiting machinery to assist in the construction of the ponds which may make them miss the benefits of their projects due to delayed implementation; inadequate collaboration between stakeholders especially the NGOs who at times provide resources that divert communities attention from the project activities to other short term activities; and inadequate funding.

5.4.6 Kenya Agricultural Productivity Project (KAPP)

The Kenya Agricultural Productivity Project (KAPP) aims to contribute to sustainable increase of agricultural productivity and improvement of the citizens' livelihood through the improved performance of the agricultural technology supply and demand system. The project has the development objective to improve the overall agricultural system by supporting generation, dissemination, and adoption of agricultural technology. This objective will be achieved through a twelve-year program to be implemented in 3 phases. The program design hinges on the premise that separate and poorly linked systems of research and extension yield low returns and therefore the design envisages an integrated approach in order to synchronize research, extension and farmer empowerment initiatives. The development objective is to improve the overall system by supporting generation, dissemination and adoption of agricultural technology.

The project implementation is guided by four project components:

- i. Facilitation of Policy and Institutional Reforms: The objective is to support establishment of the institutional framework required increasing agricultural productivity in the country.
- ii. Support to Extension System Reform: The objective is to build on achievements made under the National Agricultural Extension Policy framework (NAEP) to establish a new system of national agricultural extension.
- iii. Support to Research System Reform: The objective is to reform the agricultural research sector so that it encompasses a plurality of actors and becomes more efficient and accountable.
- iv. Support to Farmer/Client Empowerment: The objective is to develop institutional and financial mechanisms that will give farmers control over extension and research services and increase their access to productivity enhancing products.

KAPP covers 20 districts in seven provinces in the country. The project is implemented by 3 agencies, ministry of Agriculture, the Ministry of Livestock and Fisheries Development and KARI. Overall coordination of the implementation is assumed by the KAPP Secretariat (KS). The KS is responsible for managing the consultative processes, as well as coordinating the monitoring, evaluation and analytical input into those processes, information communication and public relations associated with KAPP.

5.4.6 Lake Victoria Environmental Management Project (LVEMP)

This is a regional project covering Uganda, Kenya and Tanzania. The project aims to (a) Improve environmentally and socially sustainable economic development through spatial planning and promoting of local, regional and international investment in Lake Victoria Basin; (b) Develop the capacity of local governments, local individuals, communities and NGOs to participate in the spatial planning process and be strong advocates of their own interests in spatial development planning; and (c) Identify and promote “self funding” of government management activities, including biodiversity protection and community driven development in the Lake Basin, through incremental increase in revenue generated in the basin, improved revenue collection and revenue retention.

6.0 SWOT ANALYSIS FOR DROUGHT POLICY, INSTITUTIONAL FRAMEWORK AND PROGRAMMES

6.1 Drought Risk Reduction Policy for Kenya

The Government together with development partners and other stakeholders has indicated willingness to commit to Drought Risk Reduction issues, and has developed a set of Drought related policies that have not been submitted to parliament for approval. The Policies are yet to be finalized but they have provision for greater attention on climate change, drought preparedness and advocacy for medium and longer term initiatives that will help to build the communities' resilience to drought

The process for reviewing and updating of DRR policies has not addressed all the priority issues that are essential for enhancing drought management policy. The major issues that have not been addressed include:

- Inadequacies in budgetary allocations for the key sectors involved in the implementation of the DRR component;
- Inadequate treatment of poverty reduction as part of DRR and insufficient integration of DRR in to the Poverty Reduction Strategy Paper (PRSP) and ERS;
- Inadequate meteorological data for use in awareness raising for drought risk emanating from the implications of climate change; also for validation of climate projections and for reducing uncertainties in the projections;
- Absence of a coherent national legislative framework for managing drought, acute food insecurity, and draft policy documents require legal enactment
- Peace building and conflict management draft policy has gaps in addressing conflict as a related policy factor,
- Policy / legal framework for management of such sub sectors as forestry, land and water have gaps that need harmonizing.

6.1.1 Institutional Structures

a) Implementation Structure for the National Disaster Management Policy (NDMP)

The National Disaster Management Policy (NDMP) provides for an implementation structure that caters for Drought Risk Reduction and contingency planning as well as immediate response to the need for humanitarian assistance. This structure will be coordinated by the Minister of State for Special Programmes, in the Office of the President (OP). An Institutional Framework is already in

place to facilitate implementation of the policy on Disaster Risk Reduction (UN/ISDR, 2007); it runs from the national level to the grassroots.

Table 3: SWOT Analysis for Drought Risk Reduction Policy for Kenya

Strength	Weakness
Kenya has a set of draft national policies and strategy which address disaster risk reduction including drought management	Inadequate attention to allocation, approval and disbursement of drought management funds.
Draft ASAL and DMP Policies are in place and have been reviewed and approved by Cabinet pending submission to Parliament for approval and legislation.	Lack of operational drought policy and supportive frameworks
There is complimentary linkages between disaster risk reduction and drought risk reduction	Inadequate coordination between government, development partners and local stakeholders.
There is a National Action Programme (NAP) to combat desertification and mitigate the effects of drought.	Inadequate involvement of local authorities in drought management and contingency planning.
There are other supporting policies, e.g. National Development Plan, Poverty Eradication Action Plan and Economic Recovery Strategy (NDP/PEAP/ERS).	
Opportunities	Threats
Adopting proactive approaches through the devolved decision-making to sub-national levels	Conservative attitude among the target groups
Establishment / improvement of infrastructure	Lack of follow-up on the developed drought management concepts and plans
Enhancement of stakeholder synergy and scope for shared responsibility between the state and citizens.	Increase in human and livestock population not matched by development at same level
Promotion of alternative livelihoods to enhance communities' coping capacity	Resource based conflicts at national and trans-boundary levels
Development of institutional framework to facilitate drought policy implementation	Impeded opportunistic use of resources and coping mechanisms due to conflicts
Establishment of regional and international mechanisms and cooperation (especially through IGAD) to address cross-border drought issues and resource based conflicts	Global climate change and spread of the desertification phenomenon

b) The National Platform for Disaster Risk Reduction

An Institutional Framework for Disaster Risk Reduction, namely the National Platform on Disaster Risk Reduction (NPDRR) is already in place to facilitate coordination of the inputs of different stakeholders towards mitigation of natural disasters and emergency situations. It operates at the national level and has linkages to the district and community grassroots level. It makes use of the District Disaster Management Committees at the District Level and the Location Disaster Management Committees at the local level. Sector working groups are in place to address specific

concerns regarding each sector.

The major challenges and lessons experienced during the implementation of Disaster Risk Reduction initiatives have included:

- There have been sectoral coordination and harmonization problems;
- Resources for Disaster Risk Reduction have been limited;
- Conservative perceptions regarding weather predictions and the related early warning messages by communities
- Poor flow of information and limited means for information dissemination;
- The Disaster Risk Reduction policy is still under review and is yet to be implemented; and ASAL Policy is yet to be ratified by parliament.

Table 4: SWOT Analysis of Institutional Structures for Drought Management

Strengths	Weaknesses
Existence of implementation structure that caters for both long term disaster/drought management	Weak institutional capacity (including poor set ups, lack of legislative backing)
National Platform serving as coordination structure for disaster and drought management	Inadequate human resources which constrain effectiveness of programme/project implementation
National Drought Policy having institutional framework component that enhances the coordination of drought management institutions	Inadequate cross-sectoral coordination and harmonization of adopted approaches
	Limited resources allocated to support Drought Risk Reduction institutional structures
Opportunities	Threats
The HFA sustaining the provision of technical institutional guidance to the Kenya NPDRR (including Drought Risk Reduction)	Conservative perceptions by community institutions regarding climate change and emerging trends
Allocation of financial and human resources to support Drought Risk Reduction-related institutions	Lack of consensus on modalities and guidelines for information sharing
Building on existing institutional set-ups and capacities especially local authorities.	Inadequate coordination and communication at the various institutional levels

6.1.2 Coordination for Disaster/Drought Risk Reduction Initiatives

The DMP policy recognizes the necessary link between disaster risk reduction and drought risk reduction as well as the need to enhance coordination between the two components. The ASAL programme is the only credible mechanism for effective coordination of Drought Risk Reduction programme activities at the national level. Combined handling of disaster / emergency issues with drought management and implementation strategies has often resulted in the loss of focus on drought management and risk reduction. This has led to poor integration of drought preparedness, mitigation and management plans into national development and budgetary frameworks. It is envisaged that the development of Drought Risk Reduction policy framework will cater for these issues pertaining to institutional collaboration.

Table 5: SWOT Analysis of Coordination for Disaster/Drought Risk Reduction Initiatives

Strengths	Weaknesses
Existence of the National Platform for Disaster Risk Reduction	Ineffective coordination of national Drought Risk Reduction initiatives.
Government recognizes the necessary link and need for coordination between disaster risk reduction and drought risk reduction	National Drought Policy which would specify and coordinate stakeholders roles in Drought Risk Management is yet to be finalized and implemented
The DMP policy has provision for facilitating the coordination of other policies and strategies	Coordination aspects of Disaster Risk Reduction having priority on the wider disaster aspects at the expense of Drought Risk Reduction
The ASAL policy specifies the roles for sectoral ministries, government agencies and other stakeholders involved in drought management	Inadequate flow of disaster/drought early warning information and limited means for dissemination in the more remote regions
Opportunities	Threats
Finalization of the process for adopting a National Drought Policy and launching of the policy implementation process	Inadequate budgetary framework and allocation to support linkages and networking among stakeholders
Integration of Drought Risk Reduction plans into national development and budgetary framework.	Non-achievement of inter-agency institutional collaboration due to stringent guideline principles
The National Platform for Disaster Risk Reduction catering for Drought Risk Reduction as	Support agencies adhering to own interests regarding issues and approaches related to

well.	drought management at the various levels
Adoption of a multi-sectoral systems approach to planning and implementation of drought risk reduction and sustainable management	

6.1.3 Funding Mechanisms / Budgeting for Drought Management

The financial and material resources allocated for Drought Risk Reduction programmes are very limited and much of what is allocated goes to drought emergency response. The bulk of the resources earmarked for Disaster Risk Reduction are allocated to emergency response (i.e. relief and rehabilitation), while the support so far given for Drought Risk Reduction is mainly in the form of personnel staff time. The support so far given to Drought Risk Reduction programmes is mainly in the form of technical personnel and administrative facilities, with inadequate other resources to facilitate the activities.

Table 6: SWOT Analysis on Budgeting for Disaster/Drought Risk Reduction

Strengths	Weaknesses
There is a budget line in the National Budget catering for Disaster Risk Reduction in the Presidents Office (OP).	Insufficient government funding/budgeting for Drought Risk Reduction
Access to funding for drought management activities through the Disaster Risk Reduction policy framework	Skewed focus on drought emergency response and less on drought preparedness and longer-term management
Technical personnel and administrative facilities have been availed to Drought Risk Reduction programmes	Priority not accorded to the drought prone regions of the country
Opportunities	Threats
Specific allocation of funds and material support to Drought Risk Reduction as a separate component	Budgetary allocations for development, management and implementation of processes for Drought Risk Reduction not based on local communities' priorities
Capacity building and financial support for staff facilitating and coordinating the Drought Risk Reduction programmes	Conflicts continuing to hamper the implemented activities for Drought Risk Reduction

6.1.4 Human Resource Capacities

Although development and donor agencies are committed to providing support to the government ministries and other governmental institutions in the implementation of the Drought Risk Reduction-related programmes (e.g. support of the Environment Programme by UNEP and the UNCCD programme facilitated under MAAIF), most of the programmes are faced with shortage of the human resource to contribute in the effective coordination and synergy of the planned initiatives.

Table 7: SWOT Analysis on Human Resource Capacities

Strengths	Weaknesses
Commitment by the government, donor and development agencies to support Drought Risk Reduction	Shortage of funds to facilitate staff capacity building and for enabling them to implement programmes efficiently
Government line ministries/departments and research institutions having human resource capacity for implementation of Drought Risk Reduction programmes	Shortage of human resource curtailing potential contributions in the effective coordination and synergy of the planned initiatives at the local level.
Support from community based resource persons who also double up as field focal point persons	Relatively low technical capacity of institutional services providers and community based resource persons
Opportunities	Threats
Backstopping from government, support agencies and other stakeholders	Possibility for down-sizing/retrenchment of government staff(technical and administrative)
Community contributions in furthering outreach services	Shortfalls in government financial/budgetary allocations to cater for deployment of the human resource

6.1.5 Legal Framework for Disaster/Drought Risk Reduction

The ASAL programme is the lead agency responsible for Disaster Risk Reduction and Management and coordinates risk reduction, prevention, preparedness, mitigation and response actions in the country in consultation with other line ministries, humanitarian and development partners, Local

Governments, CSOs, the private sector and the community. The Minister makes rules and regulations on the management of likely disasters and presents annual reports relating to Disaster Risk Reduction and Management to cabinet. The Minister also links the Office of the President to inter governmental organizations, the donor community and other regional frameworks.

Table 8: SWOT Analysis of the Legal Framework for Disaster/Drought Risk Reduction

Strength	Weakness
Draft NDMP and ASAL Policy are developed and in place	Focus on the relief and rehabilitation phases of disaster response, and paying less attention in addressing drought and climate change on the longer term
Government's is commitment in creating and promoting disaster risk reduction and management system	Delays in allocation, approval and disbursement of funds
Positive trends in the adoption of anticipatory proactive approach in managing disasters	The link between early warning information available and actions taken is currently weak
Existence of a National Action Programme (NAP) to combat desertification and mitigate the effects of drought	Inadequacy of weather and climate data collection infrastructure and manpower to collect, analyze and disseminate drought early warning information
There is complimentary link between disaster risk reduction and drought risk reduction	
Opportunities	Threats
Finalization and implementation of Drought Risk Reduction Policy	Existence of both human and naturally induced disasters, and conservative attitude among the target groups regarding the scope for alleviating their impact
Improvement of infrastructure and livelihoods (e.g. through farming/agro-pastoral/pastoral technology and practices	Lack of follow-up on the developed drought management concepts and plans
Establishment / improvement of infrastructure	Increase in human population (almost doubling every 10 years) and livestock population not marched by development at same level
Promotion of alternative livelihoods to enhance communities' coping capacity	Resource based conflicts at national and trans-boundary levels

Development of institutional framework to facilitate drought policy implementation	Global climate change and spread of the desertification phenomenon
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6.1.6 Political Economy of Drought

The country has elaborated a National Action Programme (NAP) that includes outlines on priority areas to address preparedness and mitigation for the effects of drought. However, there is little political commitment to addressing issues of drought management institutions, governance, risk and vulnerability identification, and local stakeholders' capacity (knowledge and technical skills). While there have been clear perceptions regarding the urgent need for drought relief and rehabilitation of the vulnerable communities, there has been notable lack of longer-term development plans established in the period between droughts to alleviate the vulnerability and apparent dependency among the target groups.

Political parties have advocated for emergency drought relief and rehabilitation initiatives, as well as for sustainable development of the drought prone areas. However, there has been minimal commitment on development aimed at reducing the inherent risks and building the vulnerable communities' resilience to drought.

Table 9: SWOT Analysis on Political Economy of Drought

Strengths	Weaknesses
Existence of the National Disaster Risk Reduction and Management Policy which caters for Drought Risk Reduction issues.	Disharmony in the adopted approaches and criteria for prioritization of issues, this emanating from interests of the individual organizations or agencies
Existence of a Draft National Drought Policy which could enhance the planning and implementation, and drawing of support for drought management initiatives	Lack of community education and awareness raising, and conservative attitude regarding Drought Risk Reduction (due to high illiteracy rates in the drought prone areas)
Country's economy and level of development steadily improving based on the abundant natural resources	Drought early warning not necessarily initiating timely preparedness and response, posing threat to sustainability of existing or alternative livelihoods

Government's commitment demonstrated in the establishment of institutions and mechanisms to reduce the country's vulnerability to drought and other disasters	Lack of national drought management plan to address drought impact particularly in the drought prone areas
Opportunities	Threats
Development of solid policy and strategies for the short, intermediate and longer-term Drought Risk Reduction	Increase in human and livestock population not marched by development at the same level
Designing Drought Risk Reduction initiatives that cater for the longer-term as opposed to the current 2 -3 years cycle	Unsuitable environment for development posed by resource based conflicts
Scope for having enhanced opportunistic and harmonized utilization of available resources	Intensification and spread of the effects of global warming and climate change
Adoption of longer-term vision and strategies on Drought Risk Reduction and related development initiatives	Delays in the finalization for legal enactment and implementation of National Drought Policy
Putting drought near the centre of sustainable development and risk reduction priorities in order to increase net resilience to the impacts of drought	

6.2 Best Practices/Lessons Learned

6.2.1 Overview on Best Practices Related to Drought Risk Reduction

The best practices related to Drought Risk Reduction in Kenya are linked to various government and stakeholders implemented programmes. These programmes contribute to the implementation of PRSP, ERS, and Millennium Development Goals (MDGs) among other national policies and plans addressing national development agenda/issues.

6.2.2 Arid Lands Resources Management Project (ALRMP)

The project has created awareness and built institutions for natural resources management ranging from environmental management committees, range land users associations, water users associations to enterprise based associations. Its drought management approach has a mix of direct welfare and productivity enhancing transfers. In developing exit strategies for sustainability, the project has built capacity in resource mobilization, project proposal generation, report writing and business skills. The project facilitates gender mainstreaming and has enabled women to participate in community development committees at various levels including creation of gender focal points in districts to incorporate gender issues in projects. The micro-projects supported by the project include water, health, sanitation, agriculture, livestock restocking, education, safety nets and income generating activities. The project has shown that ASAL communities, despite being comparatively poor can be mobilized to prioritize their development needs and effectively participate in the improvement of their livelihoods in a holistic approach.

6.2.3 ASAL Based Livestock and Rural Livelihoods Support Project (ALLPRO)

The project is implemented in partnership with local communities, CBOs, NGOs, government ministries/departments and relevant International Institutions. Its benefits include communities empowerment to facilitate prioritization and implementation of their development needs; implementation of early warning and drought mitigation measures. Other benefits include improved animal health and livestock marketing.

6.2.4 National Agricultural and Livestock Extension Programme (NALEP)

NALEP's focal areas are identified on the basis of administrative boundaries. The extension activities undertaken under NALEP include: the establishment of focal area development committees (FADCs)

and common interest groups (CIGs); carrying out of a needs assessment using the participatory rural appraisal (PRA) methodology; training of farmers in various aspects of land management; establishment of fruit tree nurseries; the construction of conservation structures; and the development of community action plans (CAPs) and resource maps. NALEP supports the development of a pluralists and demand –driven extension, based on strong participatory planning by stakeholders and involvement of the private sector in implementation.

NALEP works through Community Interest Groups (CIGs) and promotes various packages to the groups. Livestock technologies include bee-keeping, dairy cattle and goats production and are associated with improved pasture production and livestock related agro-forestry. Popular crop technologies include bananas, tomatoes, sweet potatoes and passion fruits production. The sustainable land management technologies include apiculture, commercial seedling production, sericulture and commercial energy saving devices.

6.2.5 Njaa Marufuku Kenya (NMK)

The programme supports community driven, agricultural development initiatives targeting the extremely poor and vulnerable community members. Its interventions are geared towards increased productivity, generation of rural incomes, health and nutrition improvement and conservation of the natural resource base. The poor and vulnerable are empowered through capacity building and provision of sustainable resource support that enables them to fully participate in economic activities.

The project empowers community groups through capacity building and provision of small grants for up scaling agricultural activities that focus on hunger, poverty reduction and income generation. The supported community projects include small scale irrigation and water harvesting technologies, production of high value crops, value addition and marketing, environmental conservation, draft animal technology, livestock enterprises, artificial insemination and animal health services. Other project activities include support to private sector food security innovations to upscale hunger and poverty reduction innovations that have the potential for replication.

The project has success in community capacity building; awareness creation on community nutrition; information dissemination on project activities and development of training curriculum for community groups' facilitators.

6.2.6 Lessons Learned

The lessons learned from the situational analysis of the Drought Risk Reduction policies, plans and programmes include:

- i. Drought prevention, preparedness, mitigation and development are complex issues that need an integrated approach to achieve meaningful and durable results in Drought Risk Reduction.
- ii. Drought Risk Reduction and development are complimentary concepts and hence combining sustainable drought preparedness and mitigation and basic development activities has proved to be effective in reducing vulnerability and building communities' resilience to drought.
- iii. Drought interventions should be designed through effective community participation.
- iv. The promotion of appropriate technology is effective in alleviating the country's vulnerability to droughts and their effects.
- v. Drought Risk Reduction interventions are more likely to succeed when initiatives are owned and driven by the affected communities, and are inclusive and involve all the affected stakeholders.
- vi. Timely and effective preparedness and mitigation interventions are essential in reducing communities' vulnerability to drought, and alleviating further escalation of the spread of the drought prone areas.
- vii. Drought Risk Reduction interventions can be hampered by lack of, or limited budgetary allocation by the government.
- viii. Traditional drought management and coping mechanisms have proven effective in managing community level; but there should be policy for strengthening them.
- ix. The role of women and youth as key actors is essential for the effective implementation of Drought Risk Reduction activities.

7.0 CONCLUSION AND RECOMMENDED OPTIONS FOR INTERVENTION

7.1 Major Findings and Conclusions

7.1.1 Impact of Drought and other Disasters

Drought, as a disaster affects a significant proportion of the Kenyan population. It has adverse impact on the people's livelihoods (including the causing of famine, starvation and loss of human life) and the country's socio-economic development. It is one of the major threats among natural hazards experienced in the country. Hence there is urgent need for intensified focus in addressing this hazard that is of national, regional and global concern.

7.1.2 Policy Status with Regard to Drought Management

Kenya does not have a Drought Risk Reduction Policy. There is urgency of strengthening the draft documents in order to facilitate development of a National Drought Risk Reduction Policy. There is also need for ensuring that policy issues that may appear remote from drought and therefore not accorded priority status, could possibly have significant influence on vulnerability to drought. In addition, despite the recurrence of droughts and their devastating effects on the vulnerable communities and the economy, Kenya is yet to develop a comprehensive drought policy and the related institutional and legal frameworks to enable effective preparedness and coordination of the various institutions involved in drought risk reduction and management.

7.1.3 Addressing of Drought Issues under the Disaster Management Policy

The provisions for drought issues under National Disaster Management Policy and programmes are inadequate due to the inclination towards reactive/emergency approaches. It is thus a priority for the government to initiate and/or strengthen drought preparedness, prevention, mitigation and management/institutional structures and programmes.

7.1.4 Devolution of the Institutional Framework for Drought Risk Reduction

The approach for devolution and integration of Drought Risk Reduction issues at the local level is crucial for ensuring community awareness, sense of ownership and effective participation at local levels. The approach for ensuring efficiency and effectiveness of community participation has been hampered by limitations in budgetary allocations, existing human capacity and infrastructure; and on awareness on potential contributions by communities.

7.1.5 Funding / Budgeting for Drought Management Investments

Although the government is committed to investing in programmes aimed at reducing the adverse effects and vulnerability of the local peoples' lives and livelihoods to drought, the efficiency in drought risk reduction has been limited due to the limited resources provided for drought risk reduction. There has been limited impact on the Drought Risk Reduction initiatives and in the achievement due to the minimal priority accorded to drought management initiatives that principally coincide with the overall development plans for the country. Similar impact has resulted from the allocation of more funds for disaster management at the expense of drought risk reduction.

7.1.6 The Major Challenges Experienced in Drought Risk Reduction

The key policy and institutional challenges and constraints that have hampered implementation of drought management programmes in Kenya include: shortfalls in the drought early warning system; limited community drought coping mechanisms; inadequate feedback and dissemination of drought preparedness and mitigation information to the local levels to enable risk reduction and building of long-term resilience to drought; and inadequate human resource for implementing and managing drought related programmes.

7.2 Recommendations and Opportunities for Intervention

7.2.1 Finalization / Adoption of Drought Risk Reduction Policies

The country is at an advanced stage in the process of developing policy and legislative framework on drought risk reduction and management. She needs to strengthen the draft documents, finalize, approve, adopt and implement them.

7.2.2 Institutional and legal framework

There is need to establish the institutional framework for drought management within the structures that are proposed in the DMP 2005 and the NAVS 2005. The devolved parts of the structure at the grassroots / community / local authority levels should be accorded priority in order to secure policy ownership and buy-in.

The ALRMP institutional structure should provide the framework for drought risk reduction with

emphasis on operations at local community levels to build drought resilience, facilitate the participation of local authorities / county councils, and integrate the practical experiences of communities in drought management. National level efforts should focus on capacity needs identification and supporting the local institutional structures. There is need for building the capacity of local authorities and communities to initiate and implement drought risk reduction programmes working in partnership with all the stakeholders involved in drought initiatives.

At the national level, a Permanent Secretariat should be established within the National Platform for Disaster Risk Reduction (NPDRR) in the Ministry of Special Programmes, Office of the President to coordinate Drought Risk Reduction programmes/activities and initiatives in the country. The establishment of the Permanent Secretariat is an administrative action that would be effected by the concerned Minister. To inform the Minister through the Permanent Secretary, on the status of Drought Risk Reduction programmes/activities and initiatives in the country, a Concept Note should be prepared by the Technical Staff in the Ministry including inputs from the UN/ISDR. The Concept Note should Endeavour to provide a synopsis of achievements, challenges and constraints faced by the NPDRR in the coordination and implementation of Drought/Disaster Risk Reduction programmes/activities and initiatives in the country. The Concept Note should also include detailed Terms of Reference (TOR) of the Permanent Secretariat and should be ready by Friday, 30th May 2008.

The basic outlines/elements of the institutional structures for effective coordination of a national Drought Risk Reduction programme and the minimum legislative measures needed to support sustainable development of dry lands in the country include:

1. Establishment of devolved structures up to community level with minimum bureaucracy
2. Inclusion of all stakeholders at all levels including Civil Society, academic institutions and research institutions and local/international Non-Governmental Organizations (NGOs)
3. Effective community participation through their representation at all levels
4. Legislation should take into consideration the need and importance of community participation
5. Protection of fragile ecosystems in ASAL

7.2.3 Participatory Approach to Analysis of Vulnerability

There is merit in focusing on capacity building and decentralizing responsibilities for implementing drought management policies. Community participation is essential for increasing community ownership and ability to replicate and sustain activities. There is need for policy to promote linkages between the community, the government, the private sector, civil society, faith based and grassroots based organizations, and research agencies.

7.2.4 Drought Contingency Planning and Financing Mechanism

The Kenya National Drought Contingency Fund should be established with a provision for funding of strategic and emergency livestock marketing to enable the recovery of communities groups after drought. Contingency plans should be the basis for assessing vulnerability, designing early responses and building capacity for drought management, planning and mitigation at community level.

The country is currently preparing the Medium Term Plan for the next five years (5 years) in line with Vision 2030. This will be the framework for government financing mechanisms for its development plan. As such, all government ministries, departments and parastatals must have their plans included in both the Medium Term Plan (MTP) and Vision 2030. To ensure that Drought/Disaster Risk Reduction concerns are factored in both the MTP and Vision 2030, the Technical staff in the Ministry of Special Programmes must prepare the necessary statements and forwards them to the Ministry of Planning and National Development (MOPND). The statements should endeavour to put a strong case such that a Drought/Disaster Risk Reduction Pillar can be established in Vision 2030. This should be done urgently as the government will be finalizing both MTP and Vision 2030 documents by 6th June 2008. Various stakeholders including UN/ISDR are willing to provide the necessary support to the Ministry of Special Programmes to prepare the statements.

7.2.5 Peace building and conflict management

The draft National Policy on Peace Building and Conflict Management should be adopted by the government of Kenya, donor agencies, local/international NGOs, civil society organizations (CSOs) and the local communities. There is need to develop mediation and conflict prevention capacities in the vulnerable/target communities.

7.2.6 Basic Ingredients of Drought Risk Reduction Programme in Agriculture, Rural Development and Economy

The basic ingredients of a Drought Risk Reduction programme as they relate to measures that should be implemented by agriculture and livestock in dry lands, water, forestry, and irrigation and environment sectors include:

- ✚ Strengthen the institutional framework for effective coordination purposes to facilitate implementation of Drought Risk Reduction programmes/activities;

- ✚ Sectoral preparedness is integrated into the National Platform for Disaster Risk Reduction (where single entry) is managed as a system;
- ✚ Aim to integrate efforts and measures from all stakeholders including Government, NGOs, civil society and community;
- ✚ Integrate and devolve Drought/Disaster Risk Reduction measures to all levels;
- ✚ Conduct regular/annual review and up scaling of available budgetary resources to ensure proper management of Drought/Disaster Risk Reduction programmes;
- ✚ On low political will, speed up formulation and adoption of national policies relating to natural resources management (NRM) and Drought Risk Reduction;
- ✚ Empowerment of communities and promotion of practical participation practices by mainstreaming Drought Risk Reduction into educational process and ensuring community participation as decision makers in planning, implementation, and periodic monitoring and evolution;
- ✚ Networking of all institutions concerned to work as a coordinated whole/unit;
- ✚ Sensitization of population on Drought Risk Reduction and to ensure their integration in any effort towards Drought Risk Reduction;
- ✚ Undertake a study to identify key hot spots on Drought Risk Reduction issues to facilitate prioritization of Drought Risk Reduction initiatives;
- ✚ Recognize the need and undertake a planned development reform to take into account available and potential resources in the country (learning from successful examples of Israel and Libya in their utilization of their natural resources for national development).

7.2.6 Drought Risk Reduction Policy and Financing Framework

The basic principles of the policy and financing framework for a national Drought Risk Reduction programme should include the following:

a) Policy Issues:

- The policy formulation process should be inclusive at all levels;
- Clear articulation on coordination and implementation;
- Provide clear institutional framework including linkages;
- Provide clear goal(s), objectives and guidelines;
- Stipulate clear implementation strategy/road map;
- Elaborate clear financing framework;
- Embrace all stages of drought cycle management (preparedness, early warning, mitigation, response);

- Advocacy, public awareness creation and inclusion of Indigenous Traditional Knowledge (ITK);
 - Ensure sustainability of programmes initiatives
 - Promote household food security (promotion of post harvest storage, drought resistant crop production, appropriate livestock production, etc);
 - Ensure sustainable environmental and natural resources management;
 - Facilitate community support to enhance their traditional drought coping mechanisms;
- b) Financing Framework Issues:
- Promote mobilization of resources from local sources and development partners;
 - Enhance Civil Contingency Fund (CCF) (e.g. to 10% of national revenue collection);
 - Establish Drought Contingency Fund at local level – Constituency level - and ensure contribution to the kitty from sources such as Constituency Development Fund (CDF), Local Authorities Transfer Fund (LATF) and others;
 - Support communities to enhance their traditional climatic shocks coping mechanisms;
 - Promote household food security.

7.2.7 Drought Risk Reduction Infrastructure Development

The main infrastructure components of a national Drought Risk Reduction programme with key focus on poverty reduction should include:

- i. National disaster management policy and strategy paper should be prepared which should include drought preparedness and mitigation plans;
- ii. Risk and vulnerability assessment, monitoring and early warning components;
 - Strengthening of capacity building in both the government and community;
 - Dynamic and flexible programme systems to facilitate accommodation of new challenges as the programmes are under implementation.

7.2.8 Basic Drought Risk Reduction Principles to be Adopted






The recommended basic Drought Risk Reduction (DRR) principles to guide the implementation of DRR projects and programmes should include:

- Integrating climate and weather information into all DRR activities;
- Strengthening and building partnerships and collaborations;
- Information dissemination;
- Increasing food production;
- Agro-processing and valued addition;
- Promote and enhance Community participation in DRR from planning up to M&E levels
- Capacity building for all stake holders (indigenous knowledge);
- By-laws on the following: bush burning; livestock movement; water and pasture management; and conservation of natural resources.
- Food production and storage;
- Conflict resolution;
- Afforestation;
- Livelihood diversification;
- Gender mainstreaming;
- Intellectual property rights in protection of drought information;
- All activities must be adequately funded, and the entailed financing mechanisms be clearly pointed out.

7.2.9 Incorporation of Basic Ingredients of Drought Risk Reduction Programmes

There should be consideration for incorporation of the basic ingredients of Drought Risk Reduction for the country that should include the following:

Weather and climate: -

-  Water harvesting technologies;
-  Effective monitoring of weather in the country;
-  Creating awareness about the impending risk;
-  Giving advisories;
-  Getting feedback from stake holders.

Crop Agriculture: -

- ✚ Provide information on drought tolerant, quick maturing and drought avoidance crops;
- ✚ Post harvest technology;
- ✚ Water harvesting technologies;
- ✚ Agro-processing;
- ✚ Food storage facilities.

Livestock Production: -

- ✚ Dry season feeding;
- ✚ Water harvesting technologies;
- ✚ Strategic stocking and de-stocking;
- ✚ Vaccinations;
- ✚ Commercial fodder production;
- ✚ Veterinary extension services;
- ✚ Processing of livestock products;
- ✚ Strategic rangeland development and utilization.

Forestry: -

- ✚ Alternative sources of fuel or wood lots;
- ✚ Afforestation and re-forestation;
- ✚ Agro-forestry;
- ✚ Energy conservation technologies;
- ✚ By-laws.

Irrigation: -

- ✚ Promoting small scale irrigation;
- ✚ Government providing required infrastructure;
- ✚ Capacity building for farmers and extension workers.

7.2.9.1 Addressing issues of gender in DRR

Mainstreaming of gender in DRR is crucial, as women and youth bear the brunt of drought by virtue of their role of providing food and other basic needs for the family. The youth will learn traditional drought coping mechanisms and how they can be enhanced with modern scientific data and information management. Hence the role of both women and youth will greatly enhance success in DRR implementation.

7.2.10 Knowledge Management & Education; and Promotion of Best Practices

The Drought Risk Reduction programmes initiated by the government, development partners and other stakeholders should right from the initial stages of programme development, incorporate activities aimed at establishment or enhancement of information/data collection systems for use in drought early warning; and development and application of benchmarks, indicators and methodologies for drought monitoring. The government, development partners and other stakeholders should adopt as immediate priority the intensification and improvement for knowledge management and education through strengthening of the formal and informal training system at national, local and community level. There should also be policy for development and promotion of appropriate technologies for combating drought. Such initiative should be a priority for the academic, scientific and technological institutions at the national level.

7.2.12 Ensuring Balance between Emergency Response and Long-term Development

There should be policy for ensuring proper balance between the short-term drought relief entailing routine food assistance during drought emergency; factoring the various aspects of contingency and preparedness into the development plans; and facilitation of longer-term livelihoods support and environmental conservation interventions.

7.2.13 Capacity Building for the Human Resource and DRR Institutions

The capacity building for the service providers/community resource persons and the wider community should be intensified to ensure that the beneficiaries are provided with means for acquiring starter materials (e.g. through cost sharing and access to micro-credit facilities) in order to ensure the putting into action and achieving the desired impact from the capacity building packages aimed at Drought Risk Reduction. Institutions involved in the planning and implementation of DRR projects and programmes should be facilitated to be able to process quality information which should be disseminated in timely manner

7.2.14 Approach for Effective Coordination of Drought Risk Reduction Programmes

The government should consolidate on going programmes on DRR for purposes of synergies. It should also intensify its role in building partnerships with both the public and private institutions and with the local community through capacity building, resource allocation and promotion of broad-based stakeholder representation and participatory approaches, and mechanisms for implementation of programmes for reducing the risks posed by drought and other disasters. Effective information structures, linkage/networking forums and operational systems should be put in place. Information should flow to designated focal points and feedback relayed back to the information coordination centres in a timely manner.

7.2.15 Addressing of the Identified Challenges in Disaster/Drought Risk Reduction

The government with support from development partners, the community and other stakeholders should address the identified major challenges in Disaster/Drought Risk Reduction including: cross-sectoral coordination and harmonization problems; shortfalls in resource allocation; areas of weakness in the drought early warning systems ; and public awareness on drought risk reduction and management of initiatives addressing drought.

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