The Challenges and Opportunities for Integrated Disasters and Risk Management with Particular Reference to Policy, Legislation and Regulations in Kenya

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Key words: Disaster, Constitution of Kenya 2010, policy, legislation, regulations, prevention, preparedness, response, recovery, contingency, insurance, awareness and sensitization, mitigation, re-contruction, rehabilitation, devolution

SUMMARY

The Challenges and Opportunities for Integrated Disasters and Risk Management in Kenya, with particular reference to Policy, Legislation and Regulations By Wafula NABUTOLA, M.Sc. Chair of FIG Commission 8 As challenges go, Kenya has had a fair share of disasters. Some have been natural like floods, famine, drought, hurricanes while others have been man-made, like the terrorist bombings that have become commonplace in our society, of late, the Sinai tragedy where 100 people died; the Sachanguan Petrol Tanker tragedy in which over 300 died, more recently 8 girls in Primary Boarding School died in a dormitory; that same week more than 50 perished when a neighbouring community in Tana River Delta invaded another. These bombings can be traced to the decision last year to invade Somalia, with the aim of flashing out the al shabbab gangsters. This was as a result of frequent incursions into our country by the Al Shabbab militia, and their abducting and subsequent murdering of tourists and Kenyans alike. It was a direct threat to the tourism industry. Hotel bookings got cancelled and foreign governments issued advisory notes to their citizens not to venture into Kenya. To my mind I see a dichotomy of two clear distinctions of disasters; the one in which we can anticipate, plan for and prevent, or if they happen; we are so prepared that they cause minimum disruption. The other class of disasters occur and we have to deal with them, in a reactive manner. Objectives. The aims of my discussions on disasters are many and I just enumerate a few here: Raise awareness among Kenyans in general and authorities and the private sector in particular. This might lead to a concerted effort in designing and developing policies relating to disasters and risks, and hopefully craft legislation and regulations that give disaster prevention and preparedness a top priority in the scheme of public affairs and national life as a whole, knowing that they affect the economic fabric of society and tear apart its social structures Sensitise people on the need to pool resources and to deal with disasters in an orderly manner My main interest in disasters is not because I enjoy talking about them, but that happen so often in our country and have actually become commonplace, accepted as normal events, where politicians get a platform to say a few heroic things and then life continues, until the next ones. Results, the outcome should be a concept note and a position paper that, will inform the national disaster and risk management policy making process and drive it to logical conclusion, in the manner of transforming wishful thinking to implementable policy. This has been the sad state of affairs

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where Kenya Red Cross has been ever present, in all occurrences, and saving grace for our nation, which otherwise stands helplessly and watches hopelessly and events unfold visiting great hardships to our people. Most of these are preventable Conclusions; There are some efforts towards the policy making process, by the NDOC (National Disaster and Operations Centre). This has centred on collecting data and statistics over, what has happened where and attaching the losses incurred. To me this is excellent but not good enough, given the disruption to normal life that disasters create in our national psyches. The significance of my work is the need to drum up actionable interest (beyond curiosity) and support from within Kenyan and without so that ultimately something is done in a way of budgeting for it and ensuring that, as a country, we do not remain helpless and hopeless when disasters happen; but that we work on being proactive and fully alert to the extent where research and development will lead to the setting up of Disaster Response Centres in all the 47 Counties of Kenya. Within the counties, we can have smaller cells, at village level, of youth trained in emergency response, and who keep busy with Income Generating Activities. This would not only see more youth gainfully engaged in nation-building through income generating activities, like creating tree seedlings nurseries, as their entrepreneurial spirit moves them, but they will be ready, willing and ready to deal with emergencies as well.
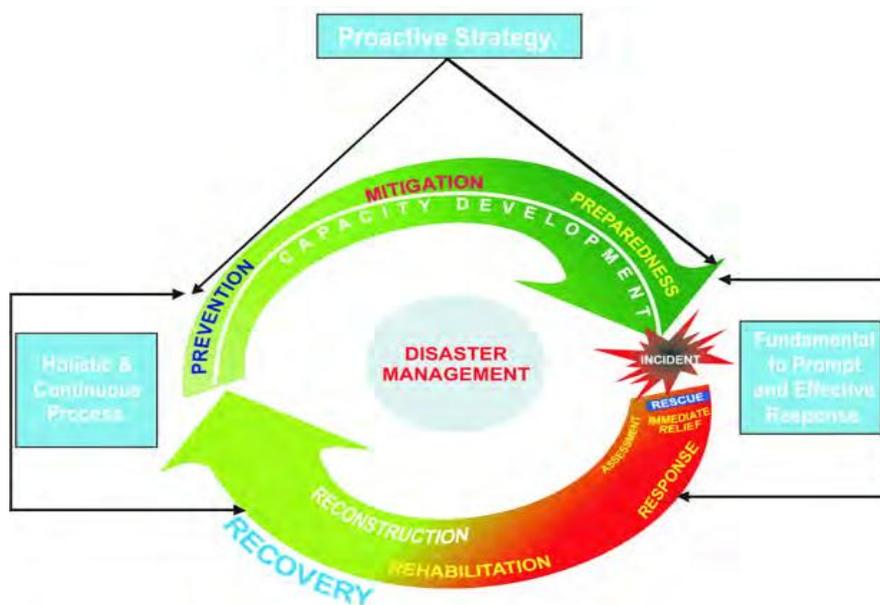
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1.0 INTRODUCTION AND BACKGROUND

In the last two decades, Kenya has faced a rising degree of vulnerability to Disaster risk. Risk is the probability of a hazard turning into a disaster, with households or communities being affected in such a manner that their lives and livelihoods are seriously disrupted beyond their capacity to cope or withstand using their own resources, with the result that affected populations suffer serious widespread human, material, economic or environmental losses.
Communities are predisposed to disasters by a combination of factors such as poverty, aridity, settlement in areas prone to perennial flooding or areas with poor infrastructure and services such as the informal urban settlements or even living in poorly constructed buildings. In the recent past in Kenya these hazards have increased in number, frequency and complexity.

As challenges go, Kenya has had a fair share of disasters. Some have been natural like floods, famine, drought, hurricanes while others have been man-made, like the terrorist bombings that have become commonplace in our society, of late, the Sinai tragedy where 100 people died; the Sachanguan Petrol Tanker tragedy in which over 300 died, more recently 8 girls in Primary Boarding School died in a dormitory; that same week more than 50 perished when a neighbouring community in Tana River Delta invaded another.

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To my mind I see a dichotomy of two clear distinctions of disasters; the one in which we can anticipate, plan for and prevent, or if they happen; we are so prepared that they cause minimum disruption. The other class of disasters occur and we have to deal with them, in a reactive manner.

Kenya's disaster profile is dominated by droughts, fire, floods, terrorism, technological accidents, diseases and epidemics that disrupt people's livelihoods, destroy the infrastructure, divert planned use of resources, interrupt economic activities and retard development. Despite the many important disaster management initiatives undertaken in Kenya over the past two decades, an adequate level of preparedness required to address its significant risk profile has not

been achieved. Initiatives have been undertaken in an inconsistent, unharmonious, reactive and uncoordinated manner due to lack of a unified policy framework. In view of the experiences gained and lessons learnt during the management of various hazards and disasters, the Government of Kenya formulated a draft National Disaster Management Policy to emphasize proactive and preventive strategies in addressing disaster situations, but this has not yet been finalized and yet it still needs revision to reflect the requirements of the Constitution of Kenya 2010 (CoK 2010).

Laws on risk prevention and, in the unfortunate event of occurring, reduction and on the organization and facilitation of relief activities can help to reduce the human impact of disasters and health emergencies,. They can also be critical to empowering communities and the society as a whole, to do the work they need to do to address the most urgent situations of vulnerability. Moreover, they can go further to guard against discrimination in the design and implementation of disaster management programmes.

2.0 CURRENT DISASTER SITUATION IN KENYA
Currently the country is still grappling with recurrent natural disasters that aggravate the suffering of vulnerable populations in marginal areas. Systems for disaster and risk management are still centralized and tall neck beauracracies which have not been devolved to the counties.
Although Kenya's economy and by extension its population could be classified as highly vulnerable to natural and man-made disaster risks, the country does not have a comprehensive disaster management framework and strategies guided by appropriate policy and legislative provisions. The country is fortunate to have been able to sort of manage from one emergency to another, without an effective disaster management system, albeit with a very high level of support from the international community, at great expense and diversion of resources from much needed social and economic development work.
The frameworks and legislations to facilitate the coordination of disaster management activites from the central level to local level have not been institutionalized. However, the development of the framework and bills should be guided by the nature of disasters occurring in the country. Citing the new constitutional dispensation which is implementing devolved governance, the systems should seek to delegate authority to the least centralized level, such as the village, that has the capacity to respond to needs.

2.1 DISASTER TRENDS IN KENYA
2.1.1 Increasing Trend of Disasters in Urban Areas
In the recent past, there has been a steady increase of disasters in the Kenyan urban areas especially in Nairobi. These urban disasters again are distinct in many ways and the intensity of damage is usually very high, warranting effective Disaster Management plans e.g. the Mukuru kwa Njenga fire that claimed over 100 lives;. Of late, there has been an alarming increase in such types of disasters such as fires, collapsing buildings, terrorist bombings and motor accidents. Search and rescue efforts in the urban areas also require specialised training. Action plans for

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checking unplanned urbanization and ensuring safer human habitat against all forms of disasters are recognised as priority areas. Local Authorities and County governments (when formed) concerned should accord priority for improving urban drainage systems with special focus on non-obstruction of drainage systems. Urban mapping of infrastructure of spatial resolution can be taken up for development of Decision Support System (DSS) for management of urban risks as unique area.

2.1.2 CLIMATE CHANGE INSTIGATED DISASTERS

More than 70 percent of natural disasters in Kenya are related to extreme climate events that are key causal factors for some emergencies that lead to disasters.

Climate change is impacting on water balance, agriculture, forestry, coastal ecology, bio-diversity and human and animal health. There are definite indications that climate change would increase the frequency and intensity of natural disasters like floods and droughts in the coming years. In order to meet these challenges in a sustained and effective manner, synergies in our approach and strategies for climate change adaptation and disaster risk reduction ought to be encouraged and promoted.

Kenya disaster Map:

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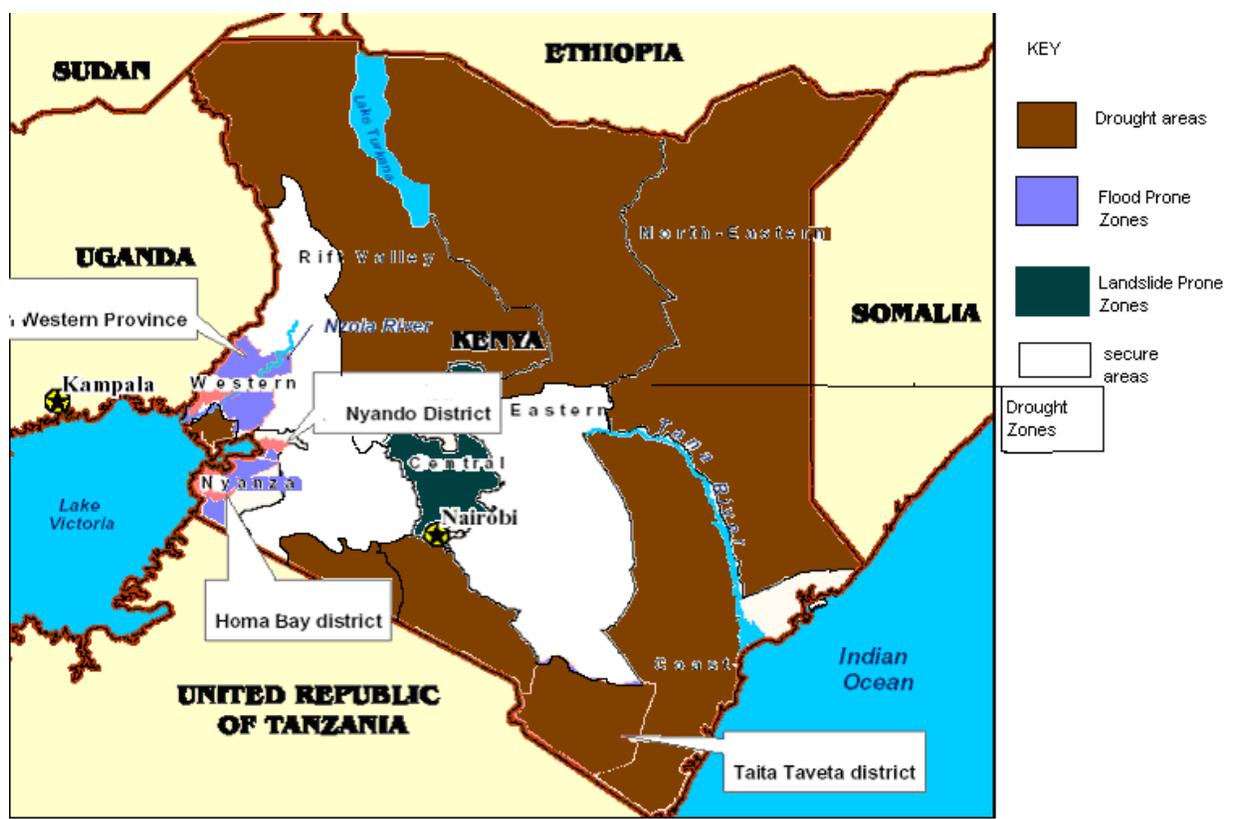
2.2 PAST AND RECENT MAJOR DISASTERS AND THEIR COSTS

Quantifying exact damages is difficult - some disasters impact far beyond the occurrence and restoration phase. However, the estimates below show some of the results of recent disasters:

NO	TYPE OF DISASTER	Vulnerable Population		PAST INCIDENCES	Effects
Population affected			**Socio-Economic impacts**		
1.	Drought	North Eastern Province, Eastern Province, Part of Rift valley Province, Coast Province	1971- Widespread 1983/4 Widespread 1991/2 1995/6 1999-2000 2004-2006 2008-	150,000 200,000 1.5m 1.41m 4.4m 11m 900,000	6.7 Billion (Food) 33.8 Billion

2.	Fire	All Urban Areas	1982-Nairobi 1990-Lamu 2004-Nairobi 2005-Kyanguli	10,000 20 Death 67 Death	Lives and property lost worth Billions of shillings.
3.	Floods	Nyanza, Coast, North Eastern, Western Provinces	1982-Nyanza 1985-Nyanza 1997/8-wide spread 2002-2003 – Nyanza, Western and NEP	4,000 10,000 1.5 M 24000- Displaced	Lives and property lost worth Billions of shillings.
4.	Train Accident	Along Railway line	1992-Mtito Andei	31-Death 207 -Injured	Lives and property lost worth Billions of shillings.
5.	Terrorist Bomb	Urban Areas and Strategic Areas	1998-Nairobi	250 Death 5,000-Injured	Lives and property lost worth Billions of shillings.
6.	Ferry Accident	Indian Ocean and lake Victoria	1994-Mtongwe Mombasa	270 -Death	Lives and property lost worth Billions of shillings.
7.	Road Accident	All Major Highways	Wide spread	Wide spread	Lives and property lost worth Billions of shillings.
8.	HIV/AIDS	All	1984-2008- Widespread	2.2m dead so far and 700 die daily	Current Prevalence rate of 7.8 %.
11.	Earthquake	Major Towns	July 2007 Earth tremors	Nairobi, Mombassa, Nakuru	Public scare.
12.	Locust Invasion	Wide spread	Late 2007	Mandera,Wajir and Moyale	Wide spread loss of pasture and crops.
13	Livestock diseases Outbreak	NEP, Rift-Valley, Eastern, Central and Nairobi provinces	2006 2008	RVF outbreak PPR	Millions of Shillings of property lost.

14.	Air Accidents	All	1992 - Nairobi 2003 - Busia 2006 - Marsabit 2007– Cameroon 2008 - Narok 2012 - Ngong	52 dead 3 dead 9 dead 149 dead 4 dead 6 Dead	Lives and property lost worth Billions of shillings. Two ministers Two Ministers
15.	Human Conflict	Rift Valley, N/Eastern, Urban areas and parts of Eastern	2007 – Post election violence, inter communal conflict and cattle rustling	1139 dead and over 200,000 displaced	Lives and property lost worth Billions of shillings.

2.2 The effects of disasters

In Kenya, disasters have resulted in the following:
- Migration of people from rural areas to urban centres to enhance their survival chances. This movement is primarily as a result of agricultural employment losses, due to drought. In many instances, this movement is also due to limited employment opportunities in smaller towns and the belief that there is a greater possibility of becoming gainfully employed in major urban centres.
- Uncontrolled urbanization on vacant land that is unsuitable for safe housing. In addition, the informal settlements have been subjected to the rapid spread of fires and flash floods. (Mukuru Kwa Njenga and Mathare slums in Nairobi are typical examples.)
- Loss of life that occurred. Examples of these are Mukuru (300 lives lost in 2011 due to fire), Ramogi (17 lives lost in 2012) and Bundalangi floods (13 lives lost in 2010). The examples quoted could have been avoided through better planning and control measures, early warning systems and community preparedness.
- Environmental degradation and increased poverty - Several areas near rivers are occupied by informal settlements without any or with only minimal protection of the water body

3.0 Disaster Management policy in Kenya

In 1993 the Government created a Relief and Rehabilitation unit and an Emergency Drought Recovery Project to address the consequences of frequent droughts in the country. The Drought Recovery Project was phased out in 1996 and in its place Arid Lands Resource Management Project I was put in place to carry out drought monitoring and management activities in 10 arid districts in Northern Kenya. The Project (ALRMP II) was expanded in the year 2003 to cover 22 Arid and Semi-Arid districts. Another 6 districts have since been added to this project.

The Government of Kenya also established the National Disaster Operations Centre in early 1998 at the height of El-Nino induced floods. The Centre was tasked with monitoring the floods

and coordinating logistics to assist the communities in the flood areas. The Centre has been retained to monitor disaster incidents on a 24-hourr basis and to mobilize responses to the areas affected disaster.

Other stakeholders have also pursued a wide range of strategies and programmes to respond to disasters in the country. All these initiatives, while well-meaning, have been undertaken in a relatively reactive and poorly coordinated manner without a coherent policy framework.

A draft policy has been prepared to address this deficiency and has been developed through consultations with various key actors in the field of disaster management. The policy has been formulated taking into consideration the lessons learnt during the management of various disasters in the past.

The thrust of the Policy is to institutionalize disaster management and mainstream disaster risk reduction in the country's development initiatives. This focus is in keeping with International and Regional initiatives as contained in the Yokohama Strategy and Plan of Action for a Safer World (1994), the Johannesburg Plan of Implementation issued at the World Summit on Sustainable Development (2002) and the targets set to achieve the Millennium Development Goals and finally the Hyogo Declaration and Hyogo Framework of Action 2005—2015; Building Resilience of Nations and Communities to Disasters as agreed upon during the World Conference on Disaster Reduction held in Kobe, Japan, January 2005.

The policy seeks to establish the guiding principles and architecture for disaster management in Kenya, by presenting the institutional structures, roles, responsibilities, authorities and key processes required to achieve a coordinated, coherent and consistent approach. The policy is in its final draft awaiting approval and implementation framework.

3.1 Primary Actors in Disaster Management

Many existing institutions deal with disaster management but their activities are mostly uncoordinated, reactive and sectoral. In the Office of the President there is the National Disaster Operations Centre, Arid Lands Resource Management Project, Relief and Rehabilitation unit, National Food Security Office and National Aids Control Council. There are also envisaged specialized organizations and departments which have roles in search, rescue, anti-terrorism, evacuation, planning and management, enforcement of crowd control, conflict resolution and fire fighting. These include the Kenya Police, the Ministry of State for Defence, National Youth Service, Local Authorities' Fire Brigade, hospitals, St. John's Ambulance Service, Kenya Red Cross Society, Occupational Health and Safety Services, the Kenya Wildlife Service and the National Environment Management Agency, the Communications Commission of Kenya among others.

It is also acknowledged that the Ministries responsible for Agriculture, Regional Development, Environment and Natural Resources, Trade and Industry, Health, Roads and Public Works, Transport, Information and Communication, Tourism and Wildlife, Energy, Finance, Planning and National Development, Local Government, Lands and Housing, Education, Science and Technology are all involved in disaster management.

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In the context of Kenya, before the advent of Natural Disaster Relief Act (NDRA), 2007 there was no well structured disaster policy. Prior to 2007 relief and rescue work was carried out either on the basis of power base or as the social work. Thus, realizing the need of an Act, the Natural Disaster relief Act, 1982 was formulated which has already been amended twice in 1989, and 1992 .

However, National Disaster Relief Regulations (NDRR) could not yet be formulated which is very essential, due to which the Act could not be fully effective. Duties and responsibilities of various other disaster management agencies have to be reflected in NDRR as each and everything could not be stipulated in the Act. NDRA, 1982 does not describe the duties and responsibilities of all the disaster management related agencies other than the Ministry of Home Affairs. Furthermore, the provision of a Relief and Treatment Sub-Committee, Supply, Shelter and Rehabilitation Sub-Committee, Regional Natural Disaster Relief Committees and Local Natural Disaster Relief Committees have been made in the NDRA, 1982, but they could not be made active enough. They are like dormant agencies. Therefore, all the four committees should be made active. At present, only CNDRC and DNDRC are very active. Besides, the NDRA, 1982 does not describe the functions and duties of all district disaster management related agencies, the problem of cooperation, coordination and mutual understanding between various district management related agencies. Consequently, sometimes, disaster victims do not get immediate, efficient and effective rescue and relief services. Delayed relief works often brings very serious and unpleasant results. And, sometimes, duplication of relief works have also been experienced, mainly due to the absence of dialogue and mutual understanding among disaster management related agencies. In addition, some of the district management related agencies try to shift their responsibilities to the others as there is no clear cut job description in the Act. Thus, immediate formulation of NDRR is very necessary where clear cut job description of all the disaster management related agencies should be made.

FIGURE 1 – CONCEPTUAL VIEW OF POLICY IN CONTEXT

3. INSTITUTIONAL FRAMEWORK (WHO?)
Tools to facilitate implementation:
Risk mapping, hazard and vulnerability analysis and research
Standard Operating Procedures
Public Communications Plans
Handbooks
Emergency Personnel Rosters
Training and Training of Trainers
Drills and Exercises
Supply Chain, stock procurement,

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distribution arrangements

☐☐Partnership and mutual assistance agreements

The institutional framework established by this policy articulates who the primary actors are within the

3.2 ORGANIZATIONAL CHART OF THE NATIONAL DISASTER MANAGEMENT

National Disaster Management Council

Central Operations Group (National Coordinator & Technical Team)

National Disaster Management Organization

National/Regional/District Technical Committees

Regional/Municipal/City Council Disaster Management Committees

District Disaster Management Committees

Village Development Committees

4.0 WEAKNESSES, CONSTRAINTS IN CURRENT DISASTER MANAGEMENT

4.1 Weaknesses at the policy, planning and legislative level

Disasters in the past were seen in the context of emergency responses and not part of the long-term planning and development programmes of government. Therefore in times of disaster the response was one directed at the provision of emergency needs; rescue and evacuation and also attending to the recovery phase. In the absence of a clear policy framework, Kenya's disaster management lacks a definitive planning structure or approach. This is reflected both in the lack of legislation and in the setting of priorities in government expenditure allocations.

- The current draft policy and strategy does not take into account the need for adequate personnel at the national, county, location, sub-location and village levels.
- The past misconception of disasters as events over which people have no control led to a low priority being given to the civil protection function until such an event occurred.
- Although it is now understood that people can do much to prevent or mitigate against disasters, the low prioritization still remains.
- Many authorities are reluctant to move away from the Civil Protection-mode, until new directives and legislation materialize.
- The absence of or limited available guidelines to public and private sectors at national and county levels, on what their roles are in disaster management needs to be addressed.
- Contingency plans are an important element involving both public and private sectors. In some cases there is an absence of such planning and in other cases the plans are designed without reference to preventative and mitigation measures that are already underway.
- Criteria for state intervention are based on the magnitude of the event instead of the needs of the communities affected by the events.

4.2 WEAKNESSES AT THE LEVEL OF PREPAREDNESS AND RESPONSE

The criteria for declaring a disaster or a disaster area are not clearly defined. In the past, each case has been judged on its own merits rather than according to a clearly defined set of criteria. It is also clear from recent and past experiences that the population at large is ill-prepared to cope with disaster situations. For instance, public awareness campaigns have tended to be launched only after commencement of disaster measures. The most vulnerable sectors of our community like pastoralists and small-scale farmers are ill informed or do not have easy access to information, due to language and other barriers. There is therefore a need for greater public education, preparedness, awareness and participation.

 In many cases, disasters have also highlighted a lack of data and knowledge related to disaster management and impacts. Information on vulnerability for example, in terms of nutrition and poverty during drought periods is lacking. This creates difficulties when trying to identify and target those who need relief, especially amongst the urban and rural poor. The lack of coordinated early-warning systems for several potential disasters in Kenya is disappointing and surprising, considering how frequently some of these disasters reoccur.

4.3 WEAKNESSES IN THE INSTITUTIONAL LEVEL

The lack of clear coordination at the national and departmental level has led to ineffective systems of management. This is often reflected in the poor responsiveness to dealing with disasters, and mixed signals from sources of expert information.

Past experience has shown that there is a need for some kind of permanent risk reduction focus and disaster (emergency) management or coordination capability at national, county and local levels. This is necessary to ensure that planning, data collection, mobilization of expertise and setting up of disaster management structures can be done rapidly rather than in a reactive manner. In particular, there is a need for national and County departments of public works, water, health and agriculture to develop integrated proposals for relief at a local level throughout the country whenever there is a major loss of livelihoods (e.g., through drought, floods, fires, terrorism). The formation of forty seven counties and local government bodies may pose a number of challenges in terms of creating a coherent mechanism for disaster management and ensuring that roles and functions are clearly defined.

The ability of government to deal with disasters is based on the idea that there is adequate institutional capacity. However, the biggest weakness in institutional capacity lies at the County and local levels. In some cases local government structures lack resources and are often not functional or have little or no planning in place should disasters occur.
 Budgetary constraints often result in departments (both those who have a primary role and those

who have a secondary or support role) having limited capacity to respond effectively with minimum resources.

In cases of emergency the release of funds often takes a long time due to complex government procedures, like tendering rules under the Procurement Legislations. This makes it difficult to mobilize additional resources outside of the state in time to allow adequate relief measures to be taken.

COORDINATION & FUNDING MECHANISMS

Coordination in Disaster Management involves bringing together the different elements of complex activities or organizations into a harmonious and efficient relationship and to negotiate with others in order to work together effectively for the benefit of those affected by the event. Currently Disaster Management coordination is lacking resulting in gaps and duplications, inappropriate assistance, inefficient use of resources, bottlenecks and impediments, slow reaction to changing conditions, frustration of providers, officials, survivors, poor information transfer to the public and other organizations resulting in a loss or lack of confidence.

4.4. LEGISLATIVE FRAMEWORK: LEGISLATION IS CURRENTLY IN PLACE?

The National Disaster Relief Act, 1982, and the local government Act. Are the two pieces of legislation which currently deal with disasters . However, these two Acts do not provide an adequate or comprehensive legislative framework for dealing with disasters in a holistic and proactive manner. One of the main shortcomings of current legislation is that it refers only to disaster response issues. It places great emphasis on dealing with the consequences of disasters (a reactive approach) and disregards the approach required for disaster management, which includes the proactive, or risk reduction approach.

A legislative framework is often a critical factor for any Government Intervention undertaking. This is certainly true for the disaster management approach. Legislation needs to create an enabling environment, in particular at local government levels, which are institutions at the forefront and on the ground of disaster management.

4.4.1 WHAT THE CURRENT LEGISLATION PROVIDES FOR:
Natural Disaster relief Act, 1982 and the Local Government Act (LGA) Chapter 265, in the Laws of Kenya have provisions that give local authorities the mandate to provide disaster mitigation, although they do not mention disaster management in the main Act. Sections 154 (d), 160c, 160K, 179, 166 give provisions for disaster management. Other pieces of legislation include Environment Management Act of 1999, Kenya Red Cross society Act (Cap 256), the Water Act (Cap 372)

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In terms of the National disaster Relief Act:
If the disaster is at the local level, the prime responsibility for handling the problem rests with the specific local authority. When the severity of the event is greater than the local government can handle, it must inform the province and request appropriate kinds of assistance. The Minister of State for Special Programmes has the power to declare a "state of disaster". In terms of the Act, there is no provision for funding from national government.

In terms of the Local government Act:
If persons, organizations, or bodies suffered damage as a result of a disaster, the local government concerned can, according to this Act, request the provincial administration to approach the Ministry of State for Special Programmes to take necessary steps to declare the event to be a disaster. The Ministry of State for Special Programmes will advise the President who can declare an event to be a National Disaster. Financial assistance can be given from the disaster relief fund to victims of a disaster on an ex gratia basis for damages or losses.

The main problems with the legislation
The present legislative framework can be a source of confusion as it introduces many levels, where decisions could be taken. It does not provide a clear-cut delineation of authority and process for the declaration of a "state of disaster". In other words there are no clear criteria for when the state should intervene. For instance, the National disaster Relief Act gives the Minister of State for Special Programmes the power to declare a state of disaster, but no further powers to instruct other line Ministries which actions need to be taken by them.

A further weakness is that in the event of a disaster, fund-raising and the provision of financial disaster relief to victims cannot be undertaken within the framework of "National disaster Relief" legislation but is addressed under a separate Act - the Agriculture Act, the Livestock Act etc

5.0 Paradigm Shift in Disaster Management

A National Disaster Risk Reduction Strategy was developed in 2009 to ensure that disaster reduction measures are mainstreamed in all development activities in the country to spearhead and adopt a holistic and integrated approach to Disaster Management. This will ensure a paradigm shift, from the erstwhile relief-centric response to a proactive prevention, mitigation and preparedness-driven approach for conserving developmental gains and to minimize loss of life, livelihood and property.

The policy talks of people centred early warning system for preparedness and response but what we see missing here is the empowerment of the people in order for them to prepare to response suitably.

The policy looks into ways of involving and enlisting cooperation from all stakeholders in order to bring a paradigm shift from the relief-based approach to covering prevention, preparedness

and mitigation. Efforts would be made to mainstream prevention and mitigation measures into the developmental plans and programmes. Again the policy seeks to harmonize the activities of the many institutions dealing with Disaster Management, which currently are uncoordinated, reactive and sectoral . .

5.1. Laws and Regulation

Presuming that the overall objective of disaster management is progressively to minimize the impact of disasters on populations, vulnerability to disasters can only be decreased if the factors that contribute to it are tackled. Although in the recent past a policy on disaster management has been developed, the main challenges for the Kenyan government is to is to promote a culture of prevention, preparedness and resilience at all levels through knowledge, innovation and education, encouraging mitigation measures based on technology, traditional wisdom and environmental sustainability, mainstreaming disaster management into the developmental planning process, establishing institutional and technological frameworks to create an enabling regulatory environment and compliance, ensuring efficient mechanism or identification, assessment and monitoring of disaster risks, developing contemporary forecasting and early warning systems backed by responsive and fail-safe communication with information technology support.

• Ensuring efficient response and relief with a caring approach towards the needs of the vulnerable sections of the society.

• Undertaking reconstruction as an opportunity to build disaster resilient structures and habitats for ensuring safer living.

• Promoting a productive and proactive partnership with the media and the private sector for disaster management.

The National Disaster Management Authority is mandated to deal with all types of disasters; natural or man-made. However, such other emergencies including those requiring close involvement of the security forces and/or intelligence agencies such as terrorism (counter-insurgency), law and order situations, serial bomb blasts, hijacking, air accidents, port and harbour emergencies, forest fires are on the increase and have not been clearly addressed in the current policy. When they occur, they are only handled by the extant mechanism i.e., National Crisis Management Committee (NCMC) has to be set up to deal with the specific occurrence. This is both wasteful and expensive. Instead there ought to be an anticipatory mechanism to facilitate preparation.

5.2 Risk Reduction and Response: Opportunities to be considered

Some financial practices such as disaster risk insurance, micro-finance and micro-insurance, warranty on newly constructed houses and structures and linking safe construction with home loans ought to be considered for adoption.

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6. Expectations and Conclusion

It is clear that in some cases where disasters are recurrent, the level of disaster planning and management is more advanced. In areas where there is thought to be no risk, the level of preparedness or the taking of preventative measures may not be well established, enforced or revisited.

The management of disasters by government departments at various spheres of engagement is almost entirely reactive in nature. It is also clear that the full continuum necessary for disaster management, such as prevention, mitigation, preparedness, response and rehabilitation is not an integral component of current disaster management systems. Rather, each disaster is treated as a crisis, and preparations are conducted to deal only with emergency situations.

There is a clear distinction between disasters that occur spontaneously, and those that are a result of cumulative effects. Such distinctions require different kinds of planning and management of risk. How do we deal with issues such as Aids, violence, and road traffic accidents? These are not seen as disasters but as individual incidents. However, statistically and cumulatively they impact significantly on our population growth and affect our Gross Domestic Product (the country's total productive output). Should not these be considered to be areas of risk and so form part of a new disaster management system? While the current disaster management system may suffer from a lack of new thinking and clear vision, there are other practical problems that the current system is faced with. Some of the main areas of concern are:

- The lack of coordination and integration of plans, strategies and resources at the national, county and local level.
- Lack of capacity, and knowledge of how to deal with disaster management, in particular with implementing preventative and mitigation measures.
- There no integration of disaster management into development planning.
- Disaster management also requires a shift of thinking away from the use of only physical and technological measures in dealing with disasters. It must also incorporate and creatively explore the use of sociological and other human science approaches to dealing with disasters as part of long-term strategies.

7.0 Way forward

It is recognized that, to mobilize the community in responding to disasters, there is need to have institutionalized frameworks and laws to facilitate the coordination of disaster management activities from the central level to local level."

For Kenya to manage its Disaster risks, there is need to include a development-based set of activities aimed at reducing vulnerability within populations that are at risk to particular hazards. In most cases hazards such as floods, pests and droughts do not make a disaster on their own, It is the inability of a population to cope with hazards that transforms them into a disaster.

- **ICT and communication**

Communication and sharing of up-to-date information using state-of-the-art IT infrastructure remain at the heart of effective implementation of the disaster management strategy. Reliable, up-to-date and faster sharing of geo-spatial information acquired from the field or the affected areas is a pre-requisite for effective implementation of disaster management strategies, this is one of the challenges that Kenya faces .

There is need to look into ways of **mainstreaming Disaster Risk Information Through Education:** Preparedness and Risk Reduction information should be widely disseminated and integrated into the curricula in schools and professional training requirements including training for the policy, military and development professionals. School curricula should be updated to include basic information on risks and family/community preparedness practices.

In terms of this Paper the development of a new approach to disaster management calls for a two-pronged approach, viz:

A significantly strengthened capacity to track, collate, monitor and disseminate information on phenomena and activities known to trigger disastrous events, supported by institutional emergency preparedness and response capacity by both government and the private sector, communities and other non-governmental role-players.

An increased commitment to prevention and mitigation actions that will reduce the probability and severity of disastrous events by incorporating these actions into policies, plans and projects of both government and the private sector. To this end this Paper proposed seven key policy measures. These are:

- The urgent integration of risk reduction strategies into all development
- The development of a strategy to reduce the vulnerability of people, the poor especially and disadvantaged communities, to disasters.
- The establishment of a National Disaster Management Centre initiative. This ensures that an effective disaster management strategy is in place and implemented by all spheres of government and other disaster management role-players; - to co-ordinate disaster management in all spheres of government; and to promote and assist the implementation of disaster management measures in all sectors of society.
- The introduction of a new disaster management funding system which ensures that risk reduction initiatives are undertaken; - builds sufficient capacity to respond to disasters; and provides for adequate post-disaster recovery.
- This brings about a uniform approach to disaster management and seeks to eliminate confusion arising from current legislation; and - addresses legislative shortcomings.
- The establishment of a framework to enable communities to be informed, alerted and self-reliant and capable of supporting and co-operating with government in disaster prevention and mitigation.

- The establishment of a framework for coordinating and strengthening the current fragmented and inadequate training and community awareness initiatives.
- The introduction and implementation of new disaster management legislation that reflects the letter and spirit of Constitution of Kenya 2010. The Disaster Management Bill provides for integrated, coordinated and uniform approach to disaster management by all spheres of government. In order to achieve this, the Bill focuses on "disaster management" as a continuous and integrated multi-sectoral, multi-disciplinary process of planning, and implementation of measures, aimed at preventing and reducing the risk of disasters; - mitigating the severity or consequences of disasters; - emergency preparedness and a state of readiness to deal with impending or - a rapid and effective response to disasters aimed at restoring normality

5. The Bill defines a disaster as:
a) A progressive or sudden, widespread or localized, disease, damage to property, infrastructure or the environment or disruption of a community, and which is of a magnitude that exceeds the ability of those affected by the disaster to cope with the effects of the disaster using only their own resources.
b) Natural or human-caused occurrence which causes or threatens to cause death, injury or current disasters or effects of disasters; and conditions caused by disasters.

The Bill excludes from its application-

- Occurrences that are dealt with in terms of the State of Emergency Act, 1997;
- Incidents of a kind for which specific legislation has been enacted to deal with
- The consequences of such incidents.

IN SUMMARY THEN..

CHALLENGES
- Lack of a coherent Policy and failure to conclude National Disaster Management Policy, for so many years since it was first drafted
- Lacklustre Political will
- Low Budgeting allocations
- Old and unsuitable equipment, and sometimes lacking completely
- Low capacity amongst the citizenry to prepare and to respond
- Response time, quality is limited in cities, towns and especially in the country side e.g Kyanguli fire, Kitale Fire consumed itself down, Military Base is 80KM away and arrived late; the mudslide in Kakamega and in neighbouring Uganda where help arrived five days later.
- Designs and construction not up to standard Boarding schools -
- Drills never done in schools, factories etc

- Underwriting, if any, is low key, where it exists Insurance premiums not paid
- Sensitization and awareness

OPPORTUNITIES
- Investing in prevention
- Make policies and legislation that attracts and retains the private sector to invest in disasters.
- Awareness, Insurance e.g in the recent hurricane sandy (USA), people were prepared, they have FEMA, Kenya can have the equivalent
- Kenya Red Cross functions can be changed from Reactive to Proactive, or in fact have a different agency to look more into prevention
- National Operations Disaster Centre
- Establish county based outfit, capacity build
- Grassroot cells (village level) these can have different roles e.g civic education, training of trainers
- Start micro-enterprises as a way of sustenance
- Empower grassroot institutions socially, economically and politically
- Adopt the masai community model for transition into the next generation
- Disaster management does not make money but prevents losses
- Population strata – many youth and DM is a way of engaging the youth
- Life skills, leadership skills (this will be like an incubation period)
- There is no provision for retired people, this will be an opportunity to loop them in
- Demographic continuum which will help in planning for all groups
- Women are very key in response, logistic support
- Develop and enact policies i.e. learn from past mistakes

SOME MODELS

Project Life Cycle Phases	Disaster Management Phases	Time	Activities	Approach
Initiation	Prediction	Before	Mitigation	Pro-active
Planning			Preparedness	
Executing	Warning	During	Response	Reactive
	Emergency Releif			
	Rehabilitation (short-term)	After	Recovery	
Completing	Reconstruction (long-term)			

RISK MANAGEMENT

CRISIS MANAGEMENT

The disaster cycle or the disaster life cycle consists of the steps that Emergency Managers take in planning for and responding to disasters. Each step in the disaster cycle correlates to part of the ongoing cycle that is emergency management. This disaster cycle is used throughout the emergency management community, from the local to the national and international levels.

Preparedness

The first step of the disaster cycle is usually considered to be preparedness although one could start at any point in the cycle and return to that point before, during, or after a disaster. For the sake of understanding, we will start with preparedness. Prior to a disaster's occurrence, emergency manager will plan for various disasters which could strike within the area of responsibility. For instance, a typical city located along a river would need to plan for not only flooding but also hazardous material accidents, large fires, extreme weather (perhaps tornadoes, hurricanes, and/or snowstorms), geologic hazards (perhaps earthquakes, tsunamis, and/or volcanoes), and other applicable hazards. The emergency manager learns about past disasters and current potential hazards and then begins to collaborate with other officials to write a disaster plan for the jurisdiction with appendices for specific hazards or special types of response scenarios. Part of the planning process is the identification of human and material resources needed during a specific disaster and obtaining information about how to access those resources, whether public or private. If specific material resources are needed to have on hand prior to a disaster, those items (such as generators, cots, decontamination equipment, etc.) are obtained and stockpiled in appropriate geographic locations based on the plan.

Response

The second stage in the disaster cycle is response. Imminently prior to a disaster, warnings are issued and evacuations or sheltering in place occurs and necessary equipment is placed at the ready. Once a disaster occurs, first responders immediately respond and take action and assess the situation. The emergency or disaster plan is activated and in many cases, an emergency operations center is opened in order to coordinate the response to the disaster by allocating human and material resources, planning evacuations, assigning leadership, and preventing further damage. The response part of the disaster cycle is focused on the immediate needs such as the protection of life and property and includes firefighting, emergency medical response, flood fighting, evacuation and transportation, decontamination, and the provision of food and shelter to victims. The initial damage assessment often takes place during the response phase to help better plan the next phase of the disaster cycle, recovery.

Recovery

After the immediate response phase of the disaster cycle has been completed, the disaster turns toward recovery, focusing on the longer term response to the disaster. There is no specific time when the disaster transitions from response to recovery and the transition may occur at different times in different areas of the disaster. During the recovery phase of the disaster cycle, officials are interested in cleanup and rebuilding. Temporary housing (perhaps in temporary trailers) is established and utilities are restored. During the recovery phase, lessons learned are collected and shared within the emergency response community.

Mitigation

The mitigation phase of the disaster cycle is almost concurrent with the recovery phase. The goal of the mitigation phase is to prevent the same disaster-caused damages from occurring again. During mitigation, dams, levees, and flood walls are rebuilt and strengthened, buildings are rebuilt using better seismic safety and fire and life safety building codes. Hillsides are reseeded to prevent flooding and mudslides. Land Use Zoning is modified to prevent hazards from occurring. Perhaps buildings are even not rebuilt in extremely hazardous areas. Community disaster education is offered to help residents learn how to better prepare for the next disaster.

Starting the Disaster Cycle Again

Finally, using the lessons learned from the response, recovery, and mitigation phases of the disaster the emergency manager and government officials return to the preparedness phase and revise their plans and their understanding of the material and human resources needs for a particular disaster in their community.

MODELS FROM USA AND CANADA

Canadian

Emergency preparedness

Public Safety Canada works with provincial and territorial officials to ensure first responders and emergency management personnel are well-prepared through education, support and exercises.

Regional Offices serve as the primary point of contact between the provinces and territories and federal departments for emergencies requiring an integrated Government of Canada response.

- Canadian Emergency Management College:
  PS's focal point for emergency management training and learning, the College provides training courses and educational resources to Canada's emergency management community.
- Guides for businesses and first responders:
  Practical information about dealing with emergencies.
- :Joint Emergency Preparedness Prgramme
  From emergency planning and training to the purchase of specialized equipment, this program funds projects that enhance the national capacity to respond to all types of emergencies.
- National Exercise Programme: Government, first responders and military officials work together in exercises that simulate emergency scenarios such as natural disasters, health threats and terrorist attacks.
- National Public Alerting System: A public-private-partnership with the broadcasting sector to effectively warn Canadians of imminent threats to life or safety

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FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

The recent Hurricae Sandy on the Eastern coast of the USA caused a lot of damage and suffering but the whole nation was on hand to assist. .

Formed	June 19, 1978; 34 years ago
Employees	7,474 (October 8, 2011)
Annual budget	$5.8 billion (2008)

1. Community Right-to-Know Reporting Requirements Act
2. Disaster Survivors: Eligible Affected Individuals and Businesses can apply for assistance
3. Open shelters
4. Are you prepared? For hurricanes, heavy rains
5. Double check your emergency kit for food,plenty of water,batteries, flashlight, radio
6. Safety tips for fires, floods, power outages

7. Fill your phone with safety information
8. Get involved with your local Community Emergency Response Team
9. Disaster Recovery Centres
10. Volunteer and Donate Responsibly
11. FEMA Corps is a programme that combines the expertise of FEMA and AmeriCorps to equip groups ofyoung people to deploy into areas affected by disasters to assist the community recover
12. Predisaster mitigation programmes – National Floods Insurance Programmes
13. Response capabilities
14. National Disaster Medical System – Disaster Medical Assistance Teams
15. Urban Research and Rescue
16. Mobile Emergency Response Support
17. Prepareness for Nuclear Incidents
18. TRAINING AND AWARENESS
19. DONATION MANAGEMENT
20. CRITICISM – Fake press conferences?

Bibliography and References

1. Disster Management in Nepal Disaster Management Cycle: Corria Warfield
2. National Disaster Management Policy: Government of India
3. National Disaster Management Policy:Government of the Gambia
4. Republic of Kenya: Framework for National Policy on Disaster Management
5. Republic of Kenya: Draft Disaster Management Policy
6. UNDP: Kenya Disaster Risk Reduction Project Document

TS07A - Spatial Planning and DRM -–6401   24/25
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