

Disaster reduction in  
**AFRICA**  
UNISDR INFORMS



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United Nations  
International Strategy for Disaster Reduction  
Regional Office for Africa

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Special Issue on  
Drought 2012

Disaster Reduction in Africa  
ISDR Informs

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# Acronyms

ACMAD	African Centre of Meteorological Application for Development
ACTED	Agency for Technical Cooperation and Development
AMCEN	Africa Ministerial Conference on the Environment
AUC	African Union Commission
AWG	Africa Working Group on Disaster Risk Reduction
CMDRR	Community Managed Disaster Risk Reduction
CORDAID	Catholic Organisation for Relief and Development Aid
CSCDRR	Civil Society Coalition on Disaster Risk Reduction
COP15	15th Session of the Conference of the Parties
DRMFSS	Disaster Management and Food Security Sector
DRR	Disaster Risk Reduction
EAC	East African Community
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of Western African States
ECHO	European Commission Humanitarian Aid Department
EWS	Early Warning Systems
FAO	Food and Agriculture Organization
HOA	Horn of Africa
HFA	Hyogo Framework for Action
ICPAC	IGAD Climate Prediction and Applications Centre
IGAD	Intergovernmental Authority on Development
IOC	Indian Ocean Commission
IPCC	International panel on climate change
IRIN	Integrated Regional Information Networks
MDG	Millennium Development Goal
NAPA	National Adaptation Programmes of Action
NASRDA	National Space Research and Development Agency
NDMA	National Disaster Management Agency
NDMC	National Disaster Management Council
NEPAD NPCA	The New Partnership for Africa's Development Planning and Coordinating Agency
NMHS	National Meteorological and Hydrological Services
PRSP	Poverty Reduction Strategy Paper
RECs	Regional Economic Communities
REGLAP	Regional Livelihoods Advocacy Project
RCM	Regional Coordination Mechanism
SADC	Southern African Development Community
UN	United Nations
UNCD	United Nations Convention to Combat Desertification
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNDP BCPR	United Nations Development Programme Crisis Prevention and Recovery
DDC	Drylands Developments Center
UNEP	United Nations Environment Programme
UNFC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
UNISDR	United Nations International Strategy for Disaster Reduction
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
WB GFDRR	World Bank Global Facility for Disaster Reduction and Recovery
WDR	World Disasters Report
WFP	World Food Programme
WHO	World Health Organization
WMO	World Meteorological Organization

# Foreword

The 2010/2011 drought, which affected the Horn of Africa, in particular the pastoralist communities in Kenya, Ethiopia and Somalia, and caused migration across the borders, immense loss of livestock as well as human losses, with more than 13 million people affected<sup>1</sup>, was not un-expected. Indications of the drought conditions were received as early as September 2010; nevertheless few coordinated preventive measures were undertaken to respond to the predictions. Although possible drought mitigation measures are known by many actors who are working in drought prone areas in the region, it was only when “The CNN Effect” trickled in, when pictures of starving children, dying livestock and dried out waterholes were shown on TV, that international aid agencies and the government started to act.

This is not only to the despair of affected communities, who feel left alone until lives and livelihoods have already been lost, but also to the frustration of both development and humanitarian actors as they have stressed in numerous discussions which took place in the Horn of Africa.

The question posed over and over again is: Why was there no early action following the early warning? There are many conflicting professional opinions circling around answering this question.

The fourth Africa Drought Adaptation Forum, organized by UNISDR Regional Office for Africa and the UNDP DDC Office in Nairobi in October 2011 discussed key gaps affecting the long-term drought adaptation and mitigation efforts in the Horn of Africa with experts, government officials and community members from the African continent as well as from Asia and Europe.

One challenge, which calls for improvement of the existing early warning systems in the Horn of Africa, is the slow dissemination of warnings which do not reach the local level in some cases. If they do, sometimes they are not understood by end users, and if understood, capacity to actually act on them is weak.

Some partners indicate that although there are dedicated development funds as well as there are dedicated humanitarian funds, there is a time gap between the two. While development funding is very slow in process and it cannot ad hoc be applied for, humanitarian funding is faster to access but is granted only once a humanitarian crisis has already unfolded. The critical period in which climate and meteorological forecasts indicate the high probability of a drought condition to materialize but in which no expert can give indications which are 100 per cent sure to happen, neither of the two funding streams are available. This is unfortunate though the period which decides the intensity of the impact of the drought on lives and livelihoods, and this is the period in which drought risk reduction measures have the highest chance of success.

Equally slim are budgetary provisions from government side since there is hardly allocation for disaster risk reduction or mitigation funds, although some governments do have emergency funds established, which like the humanitarian funding can be accessed for response and relief activities, but only when the time window for drought risk reduction activities has already closed.

Another challenge for early response is the adequate planning which is often lacking. While there are development plans as well as contingency plans, which are highly response focused, there are no plans which can be triggered by the early indications of the crisis, and which can be applied when it is still early enough for drought risk reduction measures to be carried out. This shows again the need for bridging the gap between development and humanitarian action.

Finally it is evident, that drought prone areas in the Horn of Africa do not have access to basic services. Apart from water and food, which come to mind immediately, access to education and health services is either reduced or almost non-existent especially for pastoralist communities which are dependent on fodder for their livestock. There is no access to markets which means that in case of drought, pastoralists cannot destock locally, but need to travel very far to sell their livestock; by the time they reach the big markets in the big cities the condition of the animals has often deteriorated so much, that only a small percentage of their economic value can be recovered.

In this Special Issue on Drought of the UNISDR Africa Informs Magazine, which has been possible through the financial contribution of ECHO, we are looking at drought risk reduction through the lens of the Hyogo Framework of Action (HFA), the global framework for disaster risk reduction. We would like to feature the excellent work which is being done throughout the African region, by putting it into perspective as a holistic approach is necessary to achieve better resilience to drought in the future.

*By Pedro Basabe,  
Head, UNISDR Regional Office for Africa*

<sup>1</sup> “A Dangerous Delay”, Save the Children/OXFAM, January 2012





*Photo/IRIN News*

# Institutionalization of Drought Risk Reduction, legislation, policy and planning

## Disaster Risk Reduction: Looking into the Future Disaster Resilience East African Community (EAC)

A special date with the EAC Deputy Secretary General in charge of Productive and Social Sectors (DSG,PSS), Mr. Jean Claude Nsengiyumva

**Interviewer:** What is your perception of Disaster Risk Reduction and its applicability to EAC planning?

**EAC DSG:** According to UNISDR, Disaster Risk Reduction is defined as the concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of the people and property, wise management of land and environment, and improved preparedness for adverse events.

Two key words appear immediately one looks at this definition; concept and practice. 'Concept' refers to ideological perception of a phenomenon or an occurrence. It is the first impression or conceptualization of an event. If the concept is weak, the outcome of the process will have little or no impact. The other word 'practice' refers to rehearsal or the exercise that you repeatedly do to perfect your performance.

The definition goes further to inform that, to reduce disaster risks, we need to analyze and manage. Analyze refers to inspection or an evaluation of what is existing with a view of taking stock of what you own and possess. Finally to manage would refer to the accomplishment of an undertaking or bring to fruition what you have initiated.

A good disaster risk reduction set-up will call for a simple concept which is suitable for implementation and community friendly with simple practices, focused analytic thinking and good management principles. This will guarantee a very high impact on disaster risk reduction philosophy. This is the thinking that EAC wants to advance as we move forward to integration of DRR into our development programmes. Remember that the majority of our communities are poor and we need to be innovative to move ahead with them as we improve on their livelihoods through improved resilience to disasters.

**Interviewer:** Could you briefly highlight what exists at the EAC in terms of DRR application?

**EAC DSG:** At the conceptual level, EAC has already drawn its disaster risk management framework which has been adopted for implementation by the meeting of the Council of Ministers in charge of Environment and Natural Resources. The framework starts with critical analysis of what exists in the region in terms of DRR capacities. What is available at each Partner States level? Which disasters are of priorities and what are root causes of community vulnerabilities?

At the practical level, the EAC intends to involve the communities themselves at all levels to map out their disaster and risks in a participatory manner. This will enhance ownership, trust and commitment by the communities. However, this practice will also be supported and supplemented by modern technology to further ascertain the accuracy. The advancement of space technology via Remote Sensing and Geographic Information System (GIS) will be applied for accuracy and supplement community initiatives.

**Interviewer:** What do you think are the major disaster risk challenges facing the EAC region?

**EAC DSG:** The challenge of managing disasters is one of the most complex development issues in our region today with droughts, floods, and other climate-related hazards constituting a critical part of these challenges that, if unchecked, are likely to slow down growth and the integration process in the region. Disasters in East Africa are having a lot of impact in terms of both human and economic loss because of the high vulnerability of the region's people and institutions. Climate change and variability have compounded the challenges to the extent that available indigenous knowledge can no longer provide solutions to address new challenges. It has resulted into more severe disasters in the region particularly resulting from flood and droughts.

Emerging small scale hazards such as flash floods, landslides, frost, hail and lightning has gone unnoticed at the national level but have serious impacts at the local level. The frequency of these has also increased due to climate change. Changing rainfall patterns has resulted

into shifting of disaster hot spots to new areas making the community very vulnerable because they are not used to such disasters. For instance, wealth of local knowledge on flood coping mechanisms in new drought areas cannot be applied by local communities which are mesmerized by such occurrences. In another example, highland malaria cases being reported in areas where they have never been before catches the community unaware resulting in loss of life. There is need therefore, to mobilize resources to prepare for unusual events and emerging new disaster patterns.

**Interviewer:** In view of those challenges you have highlighted, what are the key initiatives that EAC is undertaking to address them?

**EAC DSG:** The EAC has developed various tools to address disaster risk management and climate change adaptation challenges. The EAC Climate Change Policy emphasizes on DRR as a tool for climate change adaptation. The fourth EAC Development Strategy also emphasizes on the implementation of the Hyogo Framework for Action and the African DRR Strategy. A Climate Change Strategy and a Climate Change Master Plan to implement the Policy have been development.

The DRR framework linked to the above will also culminate into an EAC disaster risk management strategy and guidelines for its implementation. The question we are asking ourselves is whether these tools are adequate and robust enough to deal with these new and emerging dimensions of the changing environment? The EAC would like to take an orientation where plans are put on paper today and they are put into practice tomorrow. Strategies and policies on paper alone will not suffice, but if backed up with practical solutions, innovative approaches and community based programming, then and only then will our presence be relevant and appreciated by the communities whom we are privileged to serve.

**Interviewer:** Could you elaborate on the approaches that you intend to apply in addressing DRM issues in the region?

**EAC DSG:** Without reinventing the wheel, at both the regional and national levels, the EAC will carry out the implementation of its DRM framework but focusing more on disaster risk reduction interventions across a broad spectrum that will ensure substantial reduction of disaster risks; promotion of preparedness for risks; development of risk transfer undertakings; managing of residual risks; and

coping with current climate impacts and adapting to future changes. What do I mean by this?

The EAC while developing its capacity for DRR will tap on existing capacities and institutional set-up. The risk identification will be carried out nationally and regionally to inform the development of hazard early warning systems and disaster preparedness in general. We shall request and convince the partner states to set aside some minimum budget in their development planning for disaster risk reduction and climate change adaptation. We will urge partner states to initiate risk financing arrangements to alleviate macro and micro economic losses due to disasters. This can be based on well-known good risk transfer models like the weather indexing model which has paid off in Malawi and other regions.

The EAC is cognizant of the fact that, disasters can never be fully controlled. As such, in order to mitigate risks, the Secretariat will develop and recommend to partner states minimum operating procedures for improving emergency response and risk reduction in recovery. Finally, we cannot run away from the impacts of the changing climate. We will work with partner states on adaptation to climate change programmes to help communities cope with current climate variability while mitigating the impacts of future changes.

**Interviewer:** Could you comment on the existing DRM structure in the EAC Secretariat?

**EAC DSG:** Currently, disaster risk management is under the Department of Environment and Natural Resources. The Disaster Risk management framework that the EAC will be implementing, has recommended the creation of Disaster Risk Management Unit under the direct supervision control of the Secretary General's office. The EAC Secretariat is currently undertaking an institutional review with the objective of streamlining operations, harmonizing activities, maximizing productivity and effective resource utilization. The DRM structure will be considered alongside other proposals but will be created in due course.

Thank you very much Deputy Secretary General

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## Overview of Drought Risk Reduction in the IGAD Region

By Adan Bika, DRR Advisor to the IGAD Secretariat



*In a number of countries the DRR systems do not address the full range of the twin hazards of conflict and drought, although the two affect each other. (Photo/IRIN News)*

Drought is the single most important challenge in the Greater Horn of Africa. Disasters induced by drought account for about ninety percent of all disasters in the Region. Drought sets off a vicious cycle of socioeconomic impacts beginning with crop-yield failure, unemployment, erosion of assets, decrease in income, worsening of living conditions, poor nutrition, and, subsequently, decreased coping capacity, and thus increasing vulnerability of the poor to another drought and other shocks as well as the risk of political instability and, in some cases, conflict. The situation is compounded by the long-term trends related to population growth, urbanization and environmental degradation, coupled with other natural hazards. The combination of all of these factors turns shocks such as droughts and other type of hazards into catastrophic losses for the most vulnerable groups.

A recent assessment undertaken in Horn of Africa countries by Ministries of Finance and the Global Facility for Disaster Reduction and Recovery (GFDRR) has clearly demonstrated the colossal losses and damages to the overall national economies in the region. Drought is a slow-onset hazard, which provides time to consider and address its complex root causes, such as people's vulnerabilities and unsafe conditions related to poverty, fragile local economy, livelihoods at risk, lack of strategies and plans, limited institutional capacities and resources.

Understanding the root causes should allow government authorities to undertake effective drought mitigation and preparedness measures. The understanding that drought is a major threat to lives and livelihood is almost universal especially in light of the recent crisis in the Greater Horn of Africa. The question remains why are there delays in implementation?

On one hand drought risk management or disaster risk management in general is often entrusted to institutions that have their traditional strength in emergency response. These institutions are slow in adapting a more proactive drought risk reduction and preparedness approach and as this requires the cooperation of other productive and social sectors, adjustments could not be made on time.

On the other hand drought has become more frequent and often does not allow time for recovery and rehabilitation of livelihoods before the next crisis hits. Another challenge is that the scale and severity of the crisis of 2011 were not fully appreciated. And lastly, other competing national priorities limited the focus on the crisis, and conflict in parts of the region restricted access to vulnerable populations.

This is in no way an excuse for the lack of early response, even as early warning indications pointed towards a developing humanitarian crisis, but explains additional factors which contributed to it. The major explanation for the late action can be found in what happened prior to the crisis.

### History of Disaster Management Institutions in the IGAD

To their credit, the IGAD member states have designated institutions that handle humanitarian issues. These institutions are housed in various line ministries and have made attempts to develop various policies. With the exception of Uganda most states have their disaster management policies in draft stage and are in a situation in which they use draft policies as a guide to handle the crisis but lack full legal implementation basis. The lack of policy approval clearly creates a gap that leads to weaknesses that impacts effective drought management negatively. Without the policy anchorage and subsequent legal framework, slow-onset hazards do not compete effectively for attention with issues that develop more rapidly.

The current situation is rooted in the origin of the institutions, as many of them were put in place as a reaction to a particular crisis in the past and were retained to work on a longer-term basis later on. A good example is the existence of the Department of Refugees & Resettlement under the Ministry of Local Government and Department of Relief & Rehabilitation in the Ministry of Labor and Social Development, which were put up in Uganda to handle a refugee crisis. In 1999, the two were merged to form the Department of Disaster Preparedness and Refugees, due to the close relationship in their mandates. The new Department was placed under the Office of the Prime Minister to strengthen its political influence. Given main

function of coordinating all players in Disaster Management it remained largely under-staffed and response-oriented

In Ethiopia the 1973 famine took place against a background of a non-existent Disaster Management System and an ad-hoc response to the crisis resulted in massive fatalities, and led to the formation of the Relief & Rehabilitation Commission (RRC), which in 1995 evolved into the Disaster Prevention and Preparedness Commission (DPPC). Further evolution led in 2004 to the formation of Disaster Prevention and Preparedness Agency (DPPA), shifting the focus from crisis management to risk management in 2006-07. The Disaster Risk Management and Food Security Sector (DRMFSS) is the institution handling drought management in Ethiopia since 2008. The situation is similar in all other IGAD states and would require a complete evaluation of these institutions if there are were to take up new challenges like climate change.

## The Conflict Component to the Crisis

The effects of drought are multiplied by climate change and human vulnerability such as poverty, over exploitation of water resources, the poor maintenance of infrastructures of water supplies, insufficient restriction on water usage, overgrazing and deforestation. The effects of drought were very severe in Somalia where a large proportion of the population was affected. These were exacerbated by the unreliable rains and prolonged dry seasons. The recent drought indicates in many villages and towns in Somalia that it has gravely affected the general livelihood of rural people and their livestock. The environment in Somalia has been degraded by people who depend on charcoal for their survival. But wars and civil unrest have also become a serious cause of food insecurity in the region, disrupting food production and marketing activities. In a number of countries the disaster risk management systems do not address the full range of the twin hazards of conflict and drought, although the two affect each other. The concept of disaster risk management includes all parts of administrative and policy planning; it is a cross-cutting issue that affects every sector of society, but also should include man-made and natural disasters.

## Towards a Comprehensive Policy

Drought risk reduction policy development and implementation is not a standalone undertaking of the disaster management institutions, but needs other sectors to be closely involved. For example is increased food production in a climate-smart way one solution for

In relation to the policy element outlined in the drought risk reduction framework the following guiding principles are provided:

- 1 Political commitment, high-level engagement, strong institutional setting, clear responsibilities both at central and local levels and appropriate governance are essential for integrating drought risk issues into a sustainable development and disaster risk reduction process,
- 2 A bottom-up approach with effective decentralization and active community participation for drought risk management in planning, decision making and implementation, is essential to move from policy to practice,
- 3 Capacity building and knowledge development are usually required to help build political commitment, competent institutions and an informed constituency,
- 4 Drought risk reduction policies should establish a clear set of principles or operating guidelines to govern the management of drought and its impacts, including the development of a preparedness plan that lays out a strategy to achieve these objectives,
- 5 Drought-related policies and plans should emphasize risk reduction (prevention, mitigation and preparedness) rather than relying solely on drought (often turned into famine) relief,
- 6 Drought monitoring, risk assessment and other appropriate risk reduction measures are principal components of drought policies and plans,
- 7 Institutional mechanisms (policy, legislative and organizational) should be developed and enforced to ensure that drought risk reduction strategies are carried out, and
- 8 Sound development of long-term investment in risk reduction measures (prevention, Mitigation and preparedness) is essential to reduce the effects of drought.<sup>2</sup>

long term drought management, another is storage and stockpiling of food reserves.

Policies need to address different sectors such as agriculture, livestock, employment, energy, food processing, storage, and marketing, which all have an impact on effective drought management. Disaster risk reduction policies are one precondition to implement the first priority of the Hyogo Framework of Action, which has been acknowledged by a number of IGAD member states.

1 Drought Risk Reduction Framework and Practices: Contributing to the Implementation of the Hyogo Framework for Action Published by the United Nations secretariat of the International Strategy for Disaster Reduction (UNISDR), Geneva, Switzerland, in partnership With the National Drought Mitigation Center (NDMC), University of Nebraska-Lincoln, Lincoln, Nebraska, U.S.A. August 2009

2 Drought Risk Reduction Framework and Practices: Contributing to the Implementation of the Hyogo Framework for Action, page 19

In the UNISDR “Drought Risk reduction Framework and Practices”<sup>2</sup> publication the main elements of a drought risk reduction framework have been proposed in line with the five priorities of the Hyogo Framework for Action, as follows: i) Policies and governance for drought risk reduction, ii) Drought risk identification, impact assessment and early warning, iii) Drought awareness and knowledge management, iv) Reducing underlying factors of drought risk, and v) Effective drought mitigation and preparedness measures. Most elements of such a drought risk reduction framework are not yet fully in place in IGAD member states and governments should emphasize the establishment of the same.

## Coordination needs among IGAD Member States

Without doubt a lot of knowledge on drought is available in the IGAD region, it is important that information is shared among stakeholders to ensure mutual benefits are drawn from collective experience. Political commitment, high-level engagement, strong institutions and appropriate governance are essential for building and maintaining the necessary support to formulate and implement drought policies and to integrate drought risk reduction into a disaster risk reduction and sustainable development process.

The process of drought risk reduction and its mainstreaming into national development frameworks should be participatory, involving a wide range of stakeholders such as national and local governments, community-based and civil society organizations, regional and sub-regional organizations, multilateral and bilateral international bodies, the scientific community, the private sector and the media.

Drought risk reduction should therefore be integrated into the already existing national platforms for disaster risk reduction, which have been established in most IGAD countries and comprise of all stakeholders relevant to drought. Instead of developing a new mechanism sub-platforms on drought risk reduction should be established out of the wider platform for disaster risk reduction. IGAD has also recently established an IGAD sub-regional platform for DRR, which gathers all DRR national focal points to discuss trans-boundary concerns and supports a consolidated approach to disaster risk reduction, entailing drought risk reduction in the IGAD region. By strengthening coordination efforts, we will ultimately be able to address drought risk more efficiently and hopefully experience fewer losses due to drought which is not a sudden and unexpected phenomena but a reality we have to live with and we can live with in the Horn of Africa.

# Towards the implementation of the Uganda National Disaster Preparedness and Management Policy

By Samuel Akera, UNISDR DRR Advisor to Uganda

After nearly a decade of being revised, the Uganda National Disaster Preparedness and Management Policy has been approved by Cabinet in April 2011. This makes Uganda the only country in the Greater Horn of Africa with an approved Disaster Risk Reduction policy. It also further demonstrates a clear commitment of the Government of Uganda to implement the five priorities of the Hyogo Framework for Action (HFA), particularly priority 1 “Ensure that disaster risk reduction (DRR) is a national and local priority with a strong institutional basis for implementation”.

The Disaster Preparedness and Management Policy recognizes the vulnerability of Ugandans to at least 20 different hazards, including drought, floods and landslides. Available statistics demonstrate the challenges posed by both natural and human induced hazards to economic growth of Uganda. According to the Uganda Bureau of Statistics (UBOS), between the years 2000 to 2005, 65.7 per cent of households in Uganda experienced at least one type of disaster.

As additional evidence a preliminary analysis conducted in December 2011 from the recently created Uganda national disaster loss database reveals that more than 50 percent of the population in Uganda is affected by drought while 18 percent are affected by floods. The establishment of the national disaster loss database is an initiative of UNISDR to support the Uganda national platform for DRR. It is based on a methodology and software tool called “Disaster Inventory System” (in its Spanish original name DesInventar “Sistema de Inventario de Desastres”) and includes historical data on all hazards and their related losses, detailed by province and county, which have occurred in a given country over a time period of 20 to 30 years. In Uganda for example, the Mt. Elgon districts have over the years experienced landslide disasters of various magnitudes. The worst landslide was recorded in March 2010 in Bududa district when 365 people were killed instantly.

With more than 200,000 Ugandans affected every year by disasters, it is now apparent that not only is disaster loss and damage on the rise, but also that disasters are increasingly becoming a major obstacle to sustainable development

and the achievement of the Millennium Development Goals (MDGs) in Uganda. With the impact of climate change, Uganda is already experiencing stronger impact of natural hazards, and the disaster patterns are increasing.

The mission of the disaster preparedness and management policy is therefore to create an effective framework through which disaster preparedness and management is entrenched in all aspects of development processes, focusing on saving lives, livelihoods and the country’s resources. The policy is centered around seven policy objectives which are directly in line with the five priorities of the Hyogo Framework for Action.

**Is Uganda the only country in the Greater Horn of Africa with an approved Disaster Risk Reduction policy. It demonstrates a clear commitment of the Government of Uganda to implement the five priorities of the Hyogo Framework for Action (HFA)**

The approval of the Disaster Preparedness and Management Policy is certainly a step in the right direction. However, there is now urgent need to translate the approved policy into tangible actions. In line with this view, the Department of Disaster Preparedness and Management in the Office of the Prime Minister, the lead Government institution for DRR in Uganda requested technical assistance from UNISDR Regional Office for Africa and UNDP to lead the National Platform for DRR in development of a strategic plan for implementing the approved policy.

The National DRR Advisor deployed by UNISDR and supported by funds from the European Union to work with the National Platform for DRR in Uganda, developed a roadmap for the development of a five-year strategic national action plan (2012-2016). The road map was presented to the national platform for DRR in September 2011. As Uganda wants to develop the strategic national action plan using a multi-stakeholder approach it was agreed that the process would be a bit more lengthy but highly inclusive.

The strategic national action plan will be a medium term tool to further strengthen the national platform for DRR by acting as a guide to designing, planning, financing, implementing, monitoring and evaluating of DRR activities in Uganda. In the long run, this will also contribute to efficient decentralization of disaster risk reduction and management to district disaster management committees which will hopefully enhance DRR capacities at local level.

# An innovative approach to drought management in Kenya: the establishment of the National Drought Management Authority and National Drought and Disaster Contingency Fund

By Vanessa Tilstone,<sup>1</sup> MEL Manager, REGLAP

The current crisis in Kenya has highlighted the need for new thinking on drought management in the ASALs, as well as an urgent need for increased co-ordination and coherence in long-term and short-term efforts to promote resilience. This article looks at the innovative approach being proposed by the Kenyan Government in creating the National Drought Management Authority (NDMA) and its associated National Drought and Disaster Contingency Fund (NDDCF). This approach views drought as very different from rapid onset disasters, the management of which has far more in common with sustainable development than with disaster response. The NDMA has just been approved and will need political will and the efforts of all stakeholders to make sure that it is established as quickly and effectively as possible, while ensuring it stays true to its original intention of bringing new thinking to tackling drought in the drylands. It also requires the urgent approval of the Sessional paper on the National Policy for the Sustainable Development of Northern Kenya and other Arid Lands to provide a complete policy framework for the NDMA. The article is structured around frequently asked questions on the NDMA.



*The NDMA is intended to bring new thinking to tackling drought in the drylands (Photo/Oxfam)*

## What is the policy framework behind the NDMA?

The draft Sessional Paper on the National Policy for the Sustainable Development of Northern Kenya and other Arid Lands envisages the establishment and operation of a National Drought Management Authority (NDMA) and National Drought and Disaster Contingency Fund (NDDCF) under chapter 6 (Institutional Framework for ASAL). The paper is currently in the Cabinet Office. Given the busy policy and legislative agenda, it was decided to seek approval for the NDMA through an Executive Order, signed by the President, while the policy awaits approval. Establishment of the NDMA is also buttressed by the following motion passed in the National Assembly on 22 July 2009: *"THAT, aware that northern Kenya and other arid lands face perennial drought of a cyclic nature; mindful that this occasions severe negative economic, social and environmental effects; noting that currently responses to drought are reactive due to lack of proactive measures; concerned that the country lacks a legal framework designed to mitigate these problems; this House urges the Government to establish a Drought Management Authority responsible for drought preparedness and response, including forecasting, impact assessment and management policy, drought preparedness and mitigation."*

## Why is there a need for a drought management authority in addition to a disaster management directorate?

Droughts are predictable, slow-onset phenomena, the management of which requires a very different skill-set and mind-set to disaster response. Drought early warning and response is a particular specialism that has far more in common with sustainable development than with disaster response. In an ideal world droughts should never become disasters. If drought management were to become a sub-set of disaster management, it is likely to get overshadowed by the more high-profile work that's needed when disasters strike. This is particularly probable as drought largely affects the ASALs, which are still recovering from decades of marginalisation and under-development

<sup>1</sup> Based on interviews with staff of the Ministry of State for Development of Northern Kenya and other Arid Lands.

and need continued special attention and focus. The crucial part of drought management is ensuring that action is undertaken during the 'normal' or 'alert' stages of the drought cycle (i.e. when there is no 'disaster'). This requires a shift in thinking and practice, and until this is achieved we will continue to have drought emergencies.

## How will the proposed NDMA relate to the Disaster Management Directorate?

The Disaster Management Directorate, as outlined in the National Disaster Management Policy, will focus on rapid onset disasters, preparedness and response. The thrust of the Disaster Management Policy gives limited attention to the issues of slow onset disasters and the need for long-term development. When both the NDMA and Disaster Management Directorate are established they would work closely together, if and when droughts evolve into crises.

## Which institution with the Drought Management Authority relate to?

The National Drought Management Authority is placed under the general direction of the Minister responsible for drought management. At present this is the Minister of State for Development of Northern Kenya and other Arid Lands.

## Which areas of the country will the NDMA focus on?

The NDMA is a national institution. Contingency funds should only be made available to counties that a) have a functioning community-based early warning system in place, and b) have an effective contingency planning system and co-ordination structures in place. At present these are the 28 (larger) districts where the Arid Lands Resource Management Project (ALRMP) has been working.

## How will the NDMA ensure that long-term development plans focus on building resiliency to drought?

An important role for the county drought managers will be to ensure that drought risk reduction is appropriately mainstreamed within county development plans (which are

the responsibility of the county planning unit). The precise institutional arrangements at county level, including long-term coordination structures for all stakeholders, are being worked out. At a national level, the NDMA will provide leadership in ensuring implementation of the 'Ending Drought Emergencies' country strategy paper presented at the Horn of Africa Summit in September 2011. This paper argues that it is only through investment in the long-term foundations for development that drought emergencies will be ended. The NDMA will ensure coordination of all stakeholders through the Kenya Food Security Meeting (KFSM) and the more technical Kenya Food Security Steering Group (KFSSG) structures (to be reviewed) and through wider ASAL development coordination structures, led by the ASAL Secretariat.

## What measure will be in place to prevent corruption?

The most sensitive area is related to the disbursement of Drought Contingency Funds (DCF). In this regard, the EU-funded Drought Management Initiative (DMI) has facilitated a review of the business process for DCFs and finalised specifications for web-based software (a fund management tool) that will help the National Drought Contingency Fund to systematically organise information related to the use of contingency funds. This is expected to improve reporting and monitoring of the use of DCFs, and therefore enhance accountability and transparency. Moreover, both the NDMA and the NDDCF will have their own audit functions, which should ensure enforcement of tight control measures at the district level.

It has been agreed that the contingency fund (the National Drought and Disaster Contingency Fund) will have two components: one that disburses funds for early response to drought (i.e. well before signs of crisis are apparent) and a second that disburses funds for quick action in the wake of rapid-onset disasters. The two components will have separate management arrangements, in line with the general intention to separate these two distinct functions, but combining them in one body is judged to be a more cost-effective option that will avoid the proliferation of multiple institutions.





Photo/ Oxfam

# Drought Early Warning, Drought Risk and Vulnerability mapping including Data Collection

## Managing the risk, not the crisis. Lessons from the Horn of Africa

By Debbie Hillier, Humanitarian Policy Adviser, Oxfam



Photo/Courtesy oxfam

There were strong and clear warnings for the food security crisis in the Horn of Africa as early as November 2010, with the spectre of 'localized famine conditions' in Somalia looming for the first time in March.<sup>1</sup> Although many agencies started to intervene from December, the international humanitarian community as a whole did not respond at scale until after the rains had failed at the end of May. By the time the humanitarian response really geared up – July-September – many people had gone into debt, many had lost their livelihoods, some irretrievably, many were suffering extreme hardship, particularly women and children, and some were losing their lives. This failure follows the patterns of previous droughts – the Sahel in 2005 and 2010, in Kenya in 2005/6 and 2008/9 – and represents a systemic failure that must be tackled by the international community.

### Did the EWS do their job?

The early warning systems analyse a range of factors, including weather, agriculture, livestock, markets and

nutrition, and are becoming more sophisticated and predictions more reliable. They produce a wealth of information, on a regular basis, which is widely accessible. This information can be used to stimulate a response both in terms of scaling up long-term programming, and preempting the need for emergency intervention. Why did this not happen?

There may be scope for fine-tuning the EWS to look at chronic vulnerability. However it is clear that the EWS provided accurate and timely information that enabled those in positions of power to plan and respond. FEWSNET and FSNWG reports were graded as 'very good' to 'excellent' in terms of their accuracy in predicting the severity and onset of the crisis.<sup>2</sup>

While the early warnings were clear, the scale (numbers of people) and depth (severity) of the crisis still caught many by surprise. This is partly because needs assessments carried out by UN agencies or governments – which are a key driver for donor interventions – are published several months after the assessment was done and critically do not incorporate forecasts or predictions based on a changing situation. Thus the UN appeal for Somalia, launched in November 2010, had relatively low figures for those in need of assistance in 2011 and failed to sufficiently reflect the La Niña predictions.

Ultimately, the early warning systems performed but were ignored. Decision makers must be challenged to develop a system that they will respond to.

### Early response requires acting on uncertainty

All humanitarian actors – governments, UN agencies, donors, implementing NGOs – want to be certain about the scope and depth of a looming food crisis before responding at scale. The international humanitarian system only becomes fully operational when Integrated Phase Classification (IPC) phase 4 – 'emergency' – has been reached.<sup>3</sup> But it is well understood that saving livelihoods as well as lives requires an earlier response.

1 FEWSNET FSNAU, WFP, KFFSG, FAO, FSNWG: East Africa Food Security Alert March 15, 2011. Below-average March to May rains forecast in the Eastern Horn – current crisis likely to worsen [http://www.fews.net/docs/Publications/East\\_Regional\\_Alert\\_03\\_15\\_2011.pdf](http://www.fews.net/docs/Publications/East_Regional_Alert_03_15_2011.pdf)

2 Mija-tesse Ververs (2011) 'East Africa Food Security Crisis – an overview of what we knew and when before June 2011' <http://www.acaps.org/img/documents/early-warning-and-information-systems-in-east-africa-acaps-early-warning-and-information-systems-in-east-africa.pdf>

3 Phase 4, the 'Emergency', is characterised by the following: when the household group experiences short-term instability; and the household group has extreme food consumption gaps resulting in very high acute malnutrition or excess mortality; or the household group has extreme loss of livelihood assets that will likely lead to food consumption gaps. See 'IPC Acute Food Insecurity Reference Table for Household Groups', <http://www.fews.net/ml/en/info/pages/scale.aspx>

The Government of Kenya has explicitly recognised that response is reactive and dominated by crisis management rather than anticipatory and preventive risk management.<sup>4</sup> Crucially, waiting until the emergency is fully established transfers the risks and consequences of inaction onto vulnerable people themselves.

Responding on the basis of forecasts instead of hard data requires a shift in dealing with uncertainty.<sup>5</sup> Forecasts involve uncertainty: they are inevitably based on data which is not totally comprehensive and are tinged with judgement; the earlier the warning, the less accurate it is likely to be. Yet this uncertainty is not unquantifiable – standard risk management techniques allow us to convert this uncertainty into risk, which can then be managed and minimised. The probability that a hazard will occur should be considered against its impact. Using this logic, it would have been clear from around January 2011 that the high probability of poor March–May rains in the Horn of Africa, magnified by the failure of the previous rains in late 2010, would constitute a critical risk that needed to be addressed immediately.

The principles of risk reduction and management are well accepted in other fields, such as insurance, where paying money upfront is regarded as a responsible approach to prevent high losses in the event of a crisis, and public vaccination campaigns, to prevent epidemics and reduce medical costs. These principles must be embedded in short-term emergency response, longer-term development work and government investment programmes.

## Agreeing triggers for earlier response

While many people ‘on the ground’, particularly communities themselves, were aware of the impending crisis in January/February 2011, they were not able to get traction ‘further up the chain’ from the people with

the power to make decisions about funding and other resources. What should the process be?

Once the EWS has flagged a potential problem, this should immediately activate a process of further investigation – detailed monitoring which can be used to design interventions – and the operationalisation of emergency plans. These plans need to be clear on who should do what, and when, but currently there is no shared understanding of this. USAID promotes the use of triggers, but leaves their development up to individual implementing agencies.<sup>6</sup> We need a common approach to using triggers, so that decision makers know exactly what they ought to be doing as the situation deteriorates and the consequences if they fail to act on those triggers.

All actors need to work together to develop a system of triggers that:

- recognises the national government as primary duty-bearer for meeting citizens’ food needs;
- reflects the high levels of chronic malnutrition in some areas;
- reflects the exponential rather than linear development of malnutrition;
- does not lead to interventions that undermine communities’ capacity to cope;
- is context-specific for different livelihoods zones;
- is agreed between different actors, just as the IPC has developed a standardised approach.

Agreeing triggers for response is not likely to create an automatic warning–response system – this is not a panacea – but it will be one important tool to press for early response. It is expected that there will be a range of triggers for different sorts of response. So, for example, at an early stage the trigger might be for advocacy, but as the situation deteriorates, it might be for a livelihood response, and subsequently for a food/nutrition response.

4 Government of Kenya (2011). Ending drought emergencies in Kenya: A commitment to sustainable solutions. Country Programme Paper. 7 September 2011

5 Forecasters ‘warned of Horn of Africa drought’ last year, 14 July 2011, <http://www.scidev.net/en/agriculture-and-environment/food-security/news/forecasters-warned-of-horn-of-africa-drought-last-year.html>

6 USAID (2007) ‘Trigger indicators and early warning and response systems in multi-year title II assistance programmes’, Office of Food for Peace Occasional Paper 5, November 2007.

## Disaster Risk Profiling in Ethiopia: Stepping Stone to Disaster Risk Reduction



Children fetching firewood - Girls fetch firewood in the Borena zone in Ethiopia's Oromiya region. (Photo/IRIN News)

Ethiopia has registered steady and high economic growth in the last several years; however, being one of the most disaster prone countries globally, the impact of disasters on rolling back the socio-economic gains cannot be underestimated. Till half a decade ago, the approach of Government of Ethiopia was to manage these disasters through conventional and mostly ad-hoc response.

The Hyogo Framework for Action (HFA) led to a realisation in the country that Disaster Risk Management (DRM) is a more effective and economic way of mitigating the effect of disasters. It inspired the Government of Ethiopia to undertake a Business Process Reengineering (BPR) which changed the focus from reactive crises management to a comprehensive and proactive DRM. A new institutional structure called Disaster Risk Management and Food Security Sector (DRMFSS) within the Ministry of Agriculture was established in 2008 to implement the new approach. DRMFSS adopted the full cycle of DRM (consisting of prevention, mitigation, preparedness, response, recovery and rehabilitation) to guide the undertaken programmes with a redirected focus on DRM.

One of the first steps required to implement a DRM system based on risk reduction was an information system that could answer questions like:

- Where do disasters take place?
- Why do they take place there?
- Who gets affected?
- What makes them vulnerable to these disasters?

The answers to these questions are critical for an effective DRM system with the focus being on prevention, mitigation

and preparedness but also strengthening response, recovery and rehabilitation. With a view of establishing this information system, DRMFSS launched an innovative programme on *Disaster Risk Profiling*. This programme envisaged profiling every district in the country on risk elements (hazards, vulnerability and capacity) with a view of:

- A examining underlying causes of disaster risk and designing risk reduction programmes
- B defining the kind of early warning and response system that needs to be established in different risk contexts
- C informing a comprehensive contingency plan at district level

The Disaster Risk Profiles form the basis of implementation of the new proactive risk reduction approach of the Government of Ethiopia. This also strengthens the implementation of HFA approach in the country (see Box).

### A. Designing DRR Programmes

DRR programmes contribute to management of causal factors of disasters, reduction in exposure to hazards and vulnerability, besides wise management of land and environment. Using Problem Tree Analyses, Disaster Risk Profiles for a district help identifying the causal factors of hazards. This also leads to prioritisation and targeting of existing sectoral development programmes, identification of risk 'hot-spots' and take preventive action and finally informing the kind of scientific action-based research taking place in the country.

### B. Early Warning System

An early warning system becomes meaningful and effective only when it provides triggers on hazards relevant for a specific area. Ethiopia suffers from a multitude of hazards, but most of these hazards are specific to precise areas - not every area in a district suffers from the same kind of hazards. Therefore, it makes more sense to have location-specific relevant early warning systems. The Disaster Risk Profiles give ready and real-time information to achieve these objectives (e.g. kind of hazards and their inter-relations in a district). This information can then be used not only to decide what kind of hazards need to be monitored but also redesigning the early warning tools (collected on weekly, monthly and quarterly basis) to suit the relevant requirements.

## Box

HFA Priority Areas	Programme Interface
Make Disaster Risk Reduction a Priority	Disaster Risk Profiles prioritise risk reduction both at national and local levels with an institutional framework for implementation.
Know the Risks and Take Action	The programme helps identify and assess risks and their underlying causes, hence enhancing early warning and response.
Build Understanding and Awareness	Profiles at community/local levels enhance knowledge to build a culture of safety and resilience.
Reduce Risk	A database on hazards and vulnerability enables precautionary actions for reducing underlying risk factors.
Be Prepared and Ready to Act	The profiles form the basis for informing an effective and efficient early warning system and contingency planning.

## C. Contingency Planning

A Contingency Plan provides the basis for a rapid and appropriate response in case a disaster strikes. The contingency planning process involves five essential steps: risk analyses; identifying, defining and prioritizing contingencies; analysing scenarios for the planning process; preparing a plan for each selected scenario; and maintaining and updating the plans. Of these steps, the Disaster Risk Profiles provide ready information on the first three – implying thereby that while preparing the Contingency Plans these steps need not be repeated.

## Impact of the Programme

The Disaster Risk Profiling programme is a fully government led and operated programme and presents a classic case of streamlined capacity development of government at all levels. The launch of this programme was marked by secondment of a technical staff to DRMFS by the UN World Food Programme. Once the methodologies, indicators and study tools were developed and tested in field, trainings were conducted at the federal level that were cascaded down to the lowest administrative levels – all by government staffs. The data collection process now is completely managed by government staff. So far, data for

over 100 districts have been collected, consisting of over 50,000 households, over 1800 Focus Group Discussions with communities and over 800 interviews with key district level government and non-government staffs.

Besides community involvement in profile development process, the profiles also have a component on gender elements, besides a related study being conducted on gender based profiles.

The programme has generated huge interest among all actors and stakeholders in DRM. It is being funded by a series of donors, while the government and GFDRR putting the implementation of this activity on top of their agenda. Such profiles also work as baselines for project implementation by NGOs and other agencies. This has also led to standardisation of risk assessments in the country, wherein the assessment methodology has been endorsed by the Central Statistical Agency.

The implementation of Disaster Risk Profiling programme is leading to an informed decision-making process in Ethiopia. This is being regarded as a best-practice case in the IGAD region that needs replication in other parts of the world.

For more information, please visit:  
[www.dppc.gov.et](http://www.dppc.gov.et)

## Bridging the gap, Climate Forecasts and Disaster Risk Reduction: Case of Ethiopia

By Belachew Debeke, DRR Advisor to the Ethiopian Government, DRMFSS

Communities are increasingly vulnerable to the impact of disasters such as drought, hence the importance of having effective early warning systems in place which can save both lives and property. UNISDR has suggested that death tolls from disasters can be reduced primarily due to the implementation and maintenance of early warning systems and disaster preparedness activities.

Recent advances in understanding ocean-atmosphere interactions and their interconnections over distant land areas have enhanced the ability to forecast climate variability at seasonal-to-inter-annual timescales, thus providing a potentially powerful tool for alerting society about climate risks with sufficient lead time to mobilize appropriate preparedness measures (Stern et al 1999; Cane 1986). In the past decade, seasonal and inter-annual forecasts have been applied in a number of different settings, ranging from resource-endowed environments, where the forecast can enhance the effectiveness of well-established emergency response systems, to regions of the developing world where the potential benefits of forecasts are high, but the capacity to utilize the information is low. Long-range forecasts in comparison have been quite effective in the case of high-income regions.

In the Horn of Africa where climate related hazards are common, weather prediction and forecasts rarely reach people at risk. If they do receive climate forecasts, most of the population residing in rural settings in the Horn of Africa have challenges understanding and applying the climate forecasts to reduce their vulnerability to the impact of disasters.

In Ethiopia, the National Meteorological Agency (NMA) has been producing weather forecasts covering different time frames such as one to three day forecast, decadal outlook, monthly outlook, seasonal outlook and agro-meteorological analysis for support of agricultural production through climate information. The NMA has been disseminating weather forecasts through national television and radios by focusing on major cities on a daily bases, the NMA also quarterly produces analyses based on climatic and administrative regions with in the country. NMA has been also distributing the forecast through the website ([www.ethiomet.gov.et](http://www.ethiomet.gov.et)) and presenting it monthly to the disaster risk management platform meeting in the country. In addition, NMA organizes the National outlook forum at the end of each season which informs stakeholders about the seasonal forecasts.

In the Ministry of Agriculture and Rural Development (MoARD), the Disaster Management and Food Security Sector (DRMFSS) has been producing fortnightly early warning bulletins and monthly early warning and response analysis bulletins. For the purpose of coordination there is an early warning committee in each administrative structure i.e. at federal, regional state, zonal, woreda<sup>1</sup> and Kebele<sup>2</sup> level

Even though climate science in Ethiopia provides valuable information through the National Meteorological Agency and DRMFSS provides an analysis of the same information and tailors it into a drought bulletin, the major challenge remains which is the flow of information towards end users in an understandable manner to instill the practice of early action in face of disaster into communities and DRR practitioners.

To address this gap of information flow and provide understandable early warning messages, UNISDR funded by ECHO, together with DRMFSS and the support of a West African expert, who had supported similar activities in the Sahel Region, carried out an early warning – early action workshop in November 2011, bringing together climate scientists, disaster managers and community representatives to bridge the gap between climate science and users of climate science information for disaster risk reduction.

### Gaps in Early Warning - Early Action Planning

In the early warning – early action workshop, disaster managers, community members and climate scientists had an open dialogue based on a presentation of the weather forecast and other products by the NMA and a couple of gaps and challenges were identified during the discussion.

While the climate products and services are containing a lot of information they are not understandable for communities and disaster managers, or the information was understandable but not tailored towards the needs of disaster managers.

The information dissemination through national media has been focusing on cities and specific administrative regions, has been limited to weather forecasting. Further

<sup>1</sup> Woreda is similar or equals district

<sup>2</sup> Kebele is a smaller administrative unit at community level

the weather forecasts are probabilistic, and there is not effective dissemination mechanism in place. Data collection is expensive and there is limited capacity in country to cover data collection.

It also became evident that the NMA provided early warning information was not being used at community level. The participants identified a lack of understanding of the information in the form it is being presented and published in. Communities tend to use and trust in traditional forecasts, which is also due to their limited knowledge about climate and weather forecasting as well as due to their religious beliefs which is based on the understanding that God is the only one who determines the future.

Another limitation of the existent early warning information system seems to be the lack of a clear mandate, meaning that early warning experts are providing conflicting information. There are capacity gaps between the experts who are producing climate forecasts and the end users, such as DRR practitioners and government officials. The information flow is difficult especially at the local level because the responsibility of the NMA for distribution covers only the national level.

It was agreed that early warning information needs to be simple, clear and actionable as well as translated into local languages, understandable and accessible and presented in user-friendly manner. It needs to be timely, it needs to rebuild confidence and trust and incorporate traditional forecasting information and indigenous knowledge about weather-forecasting.

The participants also brainstormed reasons why early warning does not necessarily trigger early action. They stressed that there are no contingency plans in place and no funding to put those in place. There is no aid-independent locally sustained early warning system in place which can

trigger early action at community level; existing early warning systems are dependent on external donors. The early warning information is not packaged for community use; there is no harmonization between the multiple existing DRR projects and the government/national level planning. This seems to be a problem of accountability and the clear assignment of roles and responsibilities in a comprehensive early warning system which goes beyond inner-institutional arrangements.

## Possible Solutions

Recommendations to overcome shortcomings and achieve successful early warning and related early action were, that there is need for a clear and coherent national framework on climate information production and dissemination. There needs to be clear information from the federal to the wereda level, a better link between climate forecasters and end users, an active participation of NGOs and extension agents from the government in information transfer to community and contingency plans at community level which are funded adequately.

## Follow Up Actions Planned

First discussion were held with DRMFS on implementation of the given recommendations, however DRMFS is highly focused on finalizing the Disaster Risk Management Strategic Programme and Investment Framework (DRM SPIF) and the approval of the same and the drafted DRM policy, before addressing the weak early warning system. Meanwhile UNISDR with the kind support of ECHO is hoping to support a strengthening of the EW system together with its partners in close coordination with the DRMFS.

### 3. Early Warning - Early Action Plan of Action (derived from the UNISDR organized early warning – early action workshop)

To support, improve and make effective use of available meteorological forecasts/early warning information for better early action, the meeting developed action points:

#### Agenda item 1: Bridging the gap between national and wereda levels for climate service provision at community level:

##### Action points:

**Capacity development:** Regular meeting forum of the early warning committees at all levels with clear mandate and clear accountability > continuous process and support for training at all levels: train communities on early warning – early action, to disseminate information through all levels, this includes; uniform government led training/workshop bringing together all stakeholders at each level i.e. one national workshop led by DRMFS with all the regional Disaster Preventions and Preparedness Bureaus (DPPBS), early warning committees and development partners for harmonization. The trainings need to cascade down the structure from national to regional to wereda and community level.

**Communization channels:** Regional States Disaster Preventions and preparedness Bureaus (DPPBS) to take responsibility to move information down to the community level. This will include soliciting appropriate technology and means to disseminate information in a timely manner.

#### Agenda item 2: Making climate information more relevant and salient for community end-users

##### Action points:

**Capacity development:** National Meteorological Agency to give Early Warning – Early Action (EWEA) training during the regional, wereda and kebele “reinvigorating” EWEA workshops.

**Integrating local/traditional forecasts into scientific forecasts:** More research information is needed in terms of how to integrate into national forecasts for better and develop more downscaled forecasts

**Identification of end-users for improved tailoring:** Get feedback from end-users during regional, wereda and community level workshops and establish a EWEA online forum of all actors.

#### Agenda Item 3: Enabling community-based Early Warning > Early Action (EWEA)

##### Action points:

**Funding:** Disaster Risk Management funding is donor dependent, hence wereda Early warning committee(EW) to train community at wereda EWEA workshops to empower EW committees to use early warning and to trigger early action using local resources

**Organizations to lead and involve in implementing the action plan:** DRMFS, Regional DPPBs, NMA, NGOs, DRMTWG (Disaster Risk Management Technical Working Group), UN Agencies(UNISDR,UNOCHA and others), Wereda Disaster prevention and preparedness offices.

# Drought Early Warning System in Karamoja

By Malika Ongwang, ACTED Uganda

## Background

Since 2008, ACTED has been a member of the Dan Church Aid led Consortium comprised of the Institute for Cooperation & Development (C&D), and Caritas Moroto (SSD). The consortium has been supporting local and national authorities to design, implement and monitor a Drought Early Warning System (DEWS) in Karamoja, Uganda. This project, funded by ECHO, started with a pilot project in Nakapiripirit district in 2008, where ACTED was running a pilot EWS inspired by the Kenyan Drought EWS model. The data collection for this pilot EWS was done by Community Animal Health Workers, while the data analysis and production of Drought Bulletins was done by ACTED.

In 2009, ACTED decided to build on this experience and expand the project to the whole region of Karamoja (initially five districts which have been split in seven districts). ACTED took this opportunity to re-design the project and to adapt it to the context of Karamoja and to the available resources, both at government and community level. This work has been achieved in close collaboration with local and national government representatives, local and international organizations, UN agencies and the communities. All of these actors reached a consensus on the list of indicators to be used as well as the modus operandi of the system for data collection, analysis, dissemination and how it should be integrated within the local government. The local government has expressed the desire to own this project and receive the necessary technical support from ACTED for its implementation. A series of workshops were held to determine the core principals of the Drought Early Warning System. The first was the National Drought Early Warning Workshop held in Karamoja from 7 to 9 April 2009. The second was the Early Warning System Data Analysis Workshop also held in Karamoja from the 15 to 16 June 2009. The core principles agreed from the two regional EWS workshops are as follows:

1. The DEWS project is to be designed in consensus with district officials, representatives of national government (Office of Prime Minister), UN agencies (UNICEF, WFP, OCHA, FAO, UNDP, WHO), and local and international NGOs.
2. There is government ownership of the system whereby districts run the project relying upon existing government structures and the national government gives support.
3. ACTED will build the capacity of the district and national governments to control the budget.
4. The DEWS relies on existing government institutional resources to ensure low implementation cost.
5. The DEWS is adapted to the context of Karamoja for indicators and the chain of communication.

Although, still highly inspired by the Arid Lands system in Kenya.

6. Each district produces its own Drought Bulletin, while the Office of the Prime Minister gathers and disseminates the data at national level.

The Drought Early Warning System consists of collecting data on a monthly basis from the communities, district offices and the Department of Meteorology, analysing it at district level in collaboration with district heads of department, producing a monthly drought bulletin and disseminating key messages to the communities and development partners. All steps of this system are fully integrated within the structure of the local government.

The list of indicators covers six main sectors (livestock, crop, water, nutrition, livelihood, security) and compiles information on the level of vulnerability of the population as well as the risk of drought.

## Assessing the efficiency of the system and review of a few components in 2010

Following the first year of implementation of the Drought Early Warning System, ACTED carried out a monitoring and evaluation assessment to identify the gaps and subsequently adjust the DEWS as necessary to enhance the efficiency, relevance and reliability of the system. Following the assessment, the list of indicators was revised and reduced (from 36 to 26 indicators), the number of sentinels' (i.e. data collectors) sites was reduced, 75 parishes were re-sampled and a data quality control system was put in place. Following these adjustments, the system became fully operational in December 2010. This meant that the sentinels were undertaking routine data collection; data was sent to district officials; districts heads of departments met to discuss the data collected and produce Drought Bulletins with the necessary recommendations to communities on a monthly basis.

## New innovations and further improvements in 2011

Since the beginning of 2011, new innovations and components of the project have been designed and put in place. One such example is the Nokia Data Gathering application, which is installed on Nokia 2710 phones for instant data collection. This new system piloted in five out of seven districts of Karamoja consist in entering the data collected at community level into an application uploaded

on the phone and sending it directly to a server. From this server the data can be retrieved and automatically downloaded by the District Early Warning Focal Person (DEWFP) in charge of producing the Drought Bulletins. This system is still being tested and it has already shown great results in terms of reducing time for transporting and entering the questionnaire (and therefore reducing time for the publication of the Drought Bulletins), monitoring and motivation of the sentinels.

Similarly, to reflect the changes in indicators and to improve on the layout of the Drought Bulletin, a new application, *the DEWS Tool*, was designed by the same developer of the Kenyan EWS software (REWAS).

In addition, new elements introduced in 2011 include:

- *Dissemination of warnings and recommendations to the community using radio spot messages and SMS*  
These messages are written by district heads of department after the analysis of the data for the production of the Drought Bulletin. They give recommendations to the community on how to prevent livestock diseases and what to do in case of symptoms of livestock disease, post-harvest handling practices, usage of boreholes water for human health, and how to provide adequate water to animals in times of dry weather etc.
- *A wide community awareness component including dramas and songs*  
Every month, drama groups raise the communities' awareness on the importance of listening to the warning messages on the radio and of following the recommendations given by district authorities in order to avoid/reduce losses of lives and assets.
- *Support of the Department of Meteorology in issuing monthly weather forecasts*  
Since September 2011, the Department of Meteorology has begun to issue weather forecasts for each district of Karamoja on a monthly basis. The Department of Meteorology has improved the capacity of the Drought Early Warning System to predict more accurately the risk of drought and possible impact of the weather on the population. This has been achieved after collecting historical

weather data from many districts of Uganda and establishing models and correlations with Sea Surface Temperature.

- The definition of an *Early Warning Phase Classification Methodology/Framework* in collaboration with Integrated Food Security Phase Classification (IPC).

The actual Early Warning Phase classification implementation is planned to take place in 2012 and will improve the level of analysis of the DEWS data and the ability of the system to issue reliable warning messages. The Early Warning Phase Classification will guide the district heads of departments on how to establish warning stages through analyzing the data collected by the DEWS. In the end, the final conclusion of the analysis should guide communities, local and national government representatives, and development partners on the eventual need and level of urgency at which actions should be implemented.

Even though throughout the implementation of the Drought Early Warning System in Karamoja, the sub-region has not experienced any severe drought, the system has already shown its ability to detect small crises (mainly water, veterinary, harvest related) and its efficiency in mobilizing efforts and resources from the local government and other development partners (including UN agencies). Based on this success, ACTED intends to continue supporting the local and national government in order to fine tune the system and make it more accurate and reliable, enhance its capacity to initiate early action, reinforce the involvement of the government; and widen the dissemination mechanisms.

For more information please go to ACTED's website: [www.acted.org](http://www.acted.org)

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*Women, children and donkeys at the end of a convoy, bordering the arid plain at the feet of the Mogila Mountains in Northern Kenya. (Photo/ IRIN News)*

# Building Capacity for Drought Risk Reduction

## Pastoralist Field Schools: Drought Risk Reduction in practice

By Deborah Duveskog, Community Development Officer, FAO



Pastoralist Field Schools Kotela PFS Turkana, Kenya. (Photo/courtesy)

A Pastoralist Field School (PFS) can be described as a 'school without walls', where pastoralists learn through observation and experimentation how to deal with risks and hazards affecting their livelihood. The purpose of PFS is to improve the decision-making capacity of participants and their wider communities and to stimulate local innovation that can help increase resilience to drought and other hazards. PFS activities are guided by some key principles and core activities:

- Learning is by doing, which means through practical activities and exercises;
- The heard and the landscape is the main learning ground, around which all PFS activities are organised;
- The learning is problem based. Participants apply different analytical methods to help them gain the ability to identify and solve any problem they may encounter in their daily life and;
- Discovery-based learning tools trigger a spirit of curiosity and innovativeness.
- Trained facilitators guide the learning process, not by teaching but by facilitation and by mentoring and supporting the participants to take responsibility for their own learning. All PFS follow the same systematic action learning process where the key steps are observation, reflection, group discussion, analysis decision making and action planning. This cycle is internalised by comparative experiments and monitoring of these trials through the Pastoral-ecosystem analysis (PESA) process.

The PFS concept is currently being taken up by numerous NGOs and actors operating in Kenya, Uganda and Ethiopia. By linking the PFS learning principles to processes of Community-managed Disaster Risk Reduction (CMDRR), a powerful platform for technically sound collective action has emerged in several of the intervention sites especially in Karamoja, Uganda and Turkana, Kenya.

The pastoralists' system of livestock production is complex, based on rich experience and culture that is passed down from one generation to the next. New developments – such as climate variability or emerging diseases – means that pastoralists need to supplement their traditional knowledge and practices. This new knowledge and innovation is realized through participatory learning in PFS. The PFS approach, in contrast to most conventional extension approaches, strengthens the capacity of local communities to analyse their livelihood systems, identify their main constraints and test possible solutions. By merging their own traditional knowledge with external information, pastoralists can eventually identify and adopt the most suitable practices and technologies to their livelihood system and needs to become more productive, profitable and responsive to changing conditions.

CMDRR involves analysis by the community of risks and hazards such as drought and building an understanding of the differences between hazards and disasters. For example in Ametheck community, Turkana, their hazard analysis identified deforestation and rainfall variability as causes of their food insecurity and hunger. Warning signs defined by the group as indicators for the situation deteriorating included flowering of acacia trees, water wells drying up, appearance of the comet star and frogs no longer making noise. Seasonal calendars are also commonly used as a basis for contingency planning where rainfall patterns are compared to aspects such as pasture conditions, water availability, livestock conditions and death rates, milk supply, and grain prices. PFS groups use this early warning information as a basis for development of their action plans and learning curriculum. Potential solutions are then identified in PFS groups and new ideas tested through comparative experimentation. Some groups have focused on bulking of fodder for livestock or improved management of water resources thereby increasing their preparedness in case of drought. Other groups have managed to improve their pasture management through re-seeding or rotational grazing schemes thereby preventing the adverse effects of lack of rainfall.

A strong shift of mindsets among PFS participants have been observed following their action learning process, from focus on subsistence or survival to a more business-oriented attitude. Some PFS groups have gained substantial income through, for example, fodder production and sale, and animal fattening. Through this they have diversified their incomes and livelihood sources by taking up crop production or poultry keeping as complimentary

activities to their livestock keeping. An understanding for planning and mitigation of disaster has also taken root and recognition of how social elements such as conflicts and gender inequalities are exacerbating the effects of disasters. By combining technical sound interventions with social learning and wider community empowerment in this manner the potential for reducing the risk of shock on the fragile communities' livelihood base has been increased.

# Disaster Loss Databases as a Tool for Drought Risk Reduction Planning

By Rhea Katsanakis, UNISDR ROA

A precondition to successfully address drought risk is adequate risk identification. In most African countries, no comprehensive statistics are quantifying the impact of disasters on its people. After UNISDR Regional Office for Africa assessed existing disaster databases in Ethiopia, Kenya and Uganda, it was evident that no systematic gathering of data had been taking place.

## Background Desinventar

In 1994, a group of researchers, academics, and institutional actors linked to the Network of Social Studies in the Prevention of Disasters in Latin America (Red de Estudios Sociales en Prevención de Desastres en América Latina - LA RED) initiated the creation of a common conceptual and methodological framework to address the lack of systematic, homogeneous, and compatible records of disaster typologies. Most disaster databases only considered disasters resulting from events of huge proportions and high impact, and hid the thousands of small and medium scale disasters that occur every year in each country.

Until the mid-1990's, systematic information about the occurrence of disasters of small and medium impact and disaggregated data about the effects of large scale disasters was not available in most countries in the world.

LA RED and its affiliates conceptualized a system of acquisition, collection, retrieval, query and analysis of information about disasters of small, medium and greater impact, based on pre-existing official data, academic records, newspaper sources and institutional reports which was piloted in nine countries in Latin America.

This effort was then picked up by UNDP and UNISDR who sponsored the implementation of similar systems in the Caribbean, Asia and Africa. The developed conceptualization, methodology and software tool is called Disaster Inventory System - DesInventar "Sistema de Inventario de Desastres". It facilitates dialogue for disaster risk management between actors, institutions, sectors, provincial and national governments.

DesInventar is a conceptual and methodological tool for the generation of National Disaster Inventories and the construction of databases of damage, losses and in

general the effects of disasters. The Disaster Information Management System is a tool that supports in analyzing the disaster trends and their impacts in a systematic manner and by using it, improved prevention, mitigation and preparedness measures can be planned to reduce the impact of disasters on the communities.<sup>1</sup>

43 data bases are currently publicly available on-line; in Sub-Saharan Africa, Mozambique, Mali and Djibouti have established disaster loss databases.

The idea of a publically accessible database is that it can be utilized by all stakeholders and at the same time represents a common assessment of the situation, as data comes from different sources, which also reinforces credibility.

## Implementation in the Horn of Africa

UNISDR, with the financial support of ECHO, agreed with government officials of the three project countries on the establishment of national disaster loss databases based on existing data from the countries, as none of the three countries had comprehensive data bases of this kind in place. All three governments initiated the establishment of disaster loss databases, and identified the most appropriate institution in the respective country in which the database should be based in; namely the National Disaster Operations Centre (NDOC) in Kenya, the Disaster Risk Management and Food Security Sector (DRMFSS) in Ethiopia, and the Northern Uganda Data Center (NUDC) in Uganda. All three institutions were already doing data collection and have IT tools and trained staff in place, but had to digitalize their data, or build a baseline on disaster losses based on historical data of 20 to 30 years to compare disaster risk then and now.

With the support of the UNISDR deployed DRR Advisors to the three governments, reinforced by three National UN Volunteers per country to carry out the data collection and feeding it into the on-line system, the establishment of the disaster loss databases was initiated between September and November 2011.

The process was carried out in three phases. During a regional workshop in Nairobi, facilitated by a UNISDR expert on "Desinventar" the methodology and its application was presented to government officials from Ethiopia,

<sup>1</sup> [http://www.desinventar.net/what\\_is.html](http://www.desinventar.net/what_is.html)

Kenya, Uganda and Tanzania as well as civil society and UN agencies participants, who then returned for more detailed discussions to their respective countries.

In a second step after the governments of Ethiopia, Kenya and Uganda had agreed that the establishment of a disaster loss database was not duplicating existing databases, and was a good tool for disaster risk reduction planning, UNISDR organized national workshops on application of disaster loss databases and methods of data collection, in which the UN Volunteers were trained. The data collection then started straight away. The databases are expected to be finalized and ready for endorsement by mid-2012.

In a third step, UNISDR will support the three countries through the data collection process and support the official endorsement of the national disaster loss databases when they are finalized. At the same time UNISDR organized a training of trainers on national disaster loss databases for staff members of the Regional Center for Mapping of Resources for Development (RCMRD) in Nairobi, to enhance regional capacities to support establishment of national disaster loss databases throughout the region. The same will be repeated with a Senegalese Institution to support Francophone African countries.

# Application of Climate Information, GIS and Remote Sensing for Drought Risk Reduction

By Byron Anangwe, Regional Center for Mapping of Resources for Development, RCMRD

Geographic Information System and Remote Sensing Technology can be applied for disaster management, especially when it comes to disaster risk and exposure mapping. Other than focusing on training GIS experts in disaster management, the Regional Center for Mapping of Resources for Development (RCMRD), based in Nairobi and supporting 18 member states in East and Southern Africa, has started to train disaster risk reduction and management practitioners in the easy application of GIS and Remote Sensing for disaster risk reduction and management. UNISDR, with funding from ECHO, initiated collaboration with RCMRD to strengthen the linkage between application of climate service products, IT technologies and disaster risk reduction.

Climate information is important not only for Early Warning Systems (EWS) but also for longer-term mitigation activities, especially with respect to slow onset disasters such as drought to which the countries in the Horn of Africa are prone to. For appropriate use of climate services products and GIS, capacity building for disaster managers was identified as a crucial prerequisite to strengthen disaster risk reduction as well as other geo-spatial applications of disaster managers' work.

UNISDR, with funding from the ECHO Drought Decision for the Greater Horn of Africa, supported the National Meteorological Services in their project countries, Ethiopia, Uganda and Kenya, with equipment and training to strengthen their capacity in providing services tailored towards disaster risk reduction. This would be used for development of bulletins and forecasts with strong relevance for disaster risk reduction practitioners such as NGOs, government and UN Agencies, who could then disseminate the information to community members who can carry out actions to enhance their resilience to drought and floods, based on the early warning and forecasts.

## Scoping Missions and Problem Analysis

As first part of the collaboration, RCMRD carried out missions to Ethiopia, Kenya and Uganda to determine capacities in terms of technical, equipment and human resources of key institutions in the country involved in developing EW bulletins. The mission also determined which guidance was needed to disaster managers and key institutions involved in disaster management to successfully use EW bulletins.

Uganda is prone to flooding in the northeastern parts of the country around Lake Chogga, and prone to drought

in the Karamoja region. Areas with a high degree of land degradation when affected by flooding are prone to landslides in the east and southwestern parts of the country. The technical arm of the meteorological service is located in Entebbe at the Airport while administrative units are located in Kampala about 40 km away. The agency has the mandate to monitor weather patterns through models, projections and forecast. It has an elaborate network of 1000 weather stations of which only 100 are presently active. Equipment and technical and human capacity are required to improve the accuracy of the projections and forecasts, although there has been some support from the AU/EU funded AMESD Project. There is no Geonetcast station, providing environmental information in place.

The Government in Uganda treats provinces as semi-autonomous units of the central government so that Kampala City Council as a local government institute is in charge of management and administration of both the Kampala City and the Kampala Province. The planning department acts as focal point in EW and disaster risk reduction, mitigation and management. It also has a system for tracking of diseases. Flooding is a common result of the topography of Kampala where unplanned housing units in the low lying areas have encroached on flood plains.

According to the National Disaster Management Department in the Office of Prime Minister skills and tools to enhance disaster risk identification are urgently needed to enhance the capacity of a full-fledged data center which is already in place. Other tools needed to increase performance of the data center are GIS and remote sensing tools for planning and management, the automation of data records as well as standardization of data collection protocols. The existing staff needs to be trained in information sharing and dissemination, risk and vulnerability mapping and information management. The center has sufficient hardware in place but enhanced skills are required to better utilize available resources as well as harness additional resources.

The Ministry of Water is a key player in the identification of disaster hotspots and the protection of water resources as human activity and practices lead to the degradation of wetlands with adverse effects on rainfall patterns and flooding. Vulnerability assessments which could be carried out by the ministry are important in assessing possible damage caused by flooding and a strong synergetic relationship with the Disaster Management Department is crucial for effective disaster risk reduction in the country.

Ethiopia is prone to disasters such as flooding in 63% of the low lying areas and droughts in the northern, eastern and southern parts of the country. Land degradation due to human activity has increased landslides. Ethiopia has an elaborate network for dissemination and collation of disaster related data, technical supported by UN Agencies in the country. The Disaster Management and Food Security Sector (DRMFSS) in the Ministry of Agriculture has the mandate for co-ordination of all actions and activities relating to disasters, while liaising with stakeholders and government ministries. It is well equipped with IT hardware but there is lack of capacity of its staff to utilize the equipment appropriately. Additional human capacity is urgently required though some of this is provided through seconded staff by UNDP.

The National Meteorological Agency (NMA) also has equipment in place, but its staff lacks skills to fully use the available IT tools. The NMA has an "African Monitoring of Environment for Sustainable Development" (AMESD) Programme station for extended use of Earth observation technologies, as well as a Geonetcast portal, however not fully functional.

In Kenya, the National Disaster Operations Centre based in the Ministry of Special Programmes, which is in charge of disaster response but has limited human resources and little funding from the central government. The staff lacks appropriate IT skills as well as hardware though it has an analogue library and well equipped situation room. The agency has a network and linkages with the majority of DRR actors in the country.

The Kenya Meteorological Department serves as the Regional Office of the International Meteorological Organisation and as such hosts a Resource Centre for capacity building. It maintains models that monitor flooding in Kenya as well as the region providing monthly meteorological bulletins through the media. It is well equipped and hosts an AMESD Station as well as a Geonetcast station.

As overall result of the three country visits, it became evident that disaster risk reduction agencies lack synergies with partners such as the Kenya Red Cross Society and the Famine Early Warning and Services Network (FEWSNET) Regional Office, which are active in prediction and early warning, but are not currently closely linked to the national DRR institutions.

There is need in developing continuous capacity in DRR for new and current staff of relevant agencies as well as to develop models for DRR institutions to retain staff, which is currently changing all the time. Each agency would need to understand activities of DRR institutions in their neighboring countries to ensure cross-border risk assessment and reduction. This will also be important for exchange of best practices from the region. Lastly available IT tools need to be better applied to DRR.

## Capacity Building

As second part of the collaboration between UNISDR ROA and RCMRD, a workshop series on application of Geo-Spatial Techniques to Early Warning and Disaster Risk Reduction was carried out in Ethiopia, Kenya and Uganda, bringing together actors from the Meteorological Department as well as participants dealing with Disaster Risk Reduction. The workshops focused on capacity building for disaster managers and officers in appropriate use and application of geo-spatial technologies, namely remote sensing, geo-information and global navigation systems, for disaster risk reduction.

The institutions participating presented various DRR projects in which they had applied spatial technologies. They were then trained in understanding of satellite remote sensing products and their application and the harnessing of on-line tools. The participants were introduced to map reading, satellite image interpretation and data mining, satellite positioning, GPS techniques and navigation with GPS. Exercises on software installation were carried out using GIS software i.e. ILWIS and QGIS, data analysis was presented for assessment and change detection and pre and post event map production and the Disaster Charter were discussed. Finally participants visited partner institutions to strengthen collaboration such as RCMRD SERVIR Lab, FewNET Office and Department of Remote sensing and Resource Surveys in Kenya, to Kampala City Council GIS Unit and the Disaster Management Department and Makerere University and the Geography Department to assess the GeoNetCatst Unit in Uganda, and the Information Science and Technology Division at the UNECA and the Office of the Geo-Information Management Network (GiMAN) in Ethiopia.

The participants acquired skills and information on how to integrate GIS, remote sensing and use of GPS in early warning as well as how to harness use of the internet as well as software installation. As follow-up activities it was recommended to facilitate the access to the Disaster Charter for the three countries, continue capacity building on software and hardware for mapping, carry out a follow-up training on Rapid Mapping for early warning and DRR for 2 weeks using open source mapping software systems, to provide a GeoNetcast Installation and Training of 5 days, and finally to conduct exchange visits between countries to share experiences and best practices for disaster risk reduction managers.



# The Multi-Stakeholder Approach: Drought Risk Reduction In South Africa

By Makala Jeffrey Ngaka, Senior Agricultural Economist, Department of Agriculture, Forestry and Fisheries, South Africa

## 1. Historical Background

Drought has become a permanent feature of the South African agricultural sector. This is usually interspaced with flooding arguably due to climate variability. As a result, South Africa has a long history of drought risk management. This has evolved tremendously during the mid-90s in response to changing focus from reactive to more proactive approaches to drought risk management. Most importantly, it changed as a result of the government's gradual but focused process of transformation in the agricultural sector.

This process started with the development and launch of the "Green Paper" on Disaster Management in 1998. Its purpose was, inter alia, to provide all stakeholders with an opportunity to reflect on the approaches to disaster management and risk reduction and to provoke thinking around future strategies that will match with international trends and those that are more appropriate to current and future needs within the country as well as in the Southern African region.

This was followed by development, in 1999, of the "White Paper" on Disaster Management. The fundamental purpose of the White Paper was to "advocate an approach to disaster management that focuses on reducing risks - the risk of loss of life, economic loss" and "...aims to protect the environment".

This paved way for the development and promulgation of the Disaster Management Act (DMA), (Act no 57 of 2002) which made provision for "an integrated and coordinated disaster management policy that focuses on preventing or reducing the risk of disasters, mitigating the severity of disasters, emergency preparedness, rapid and effective response to disasters and post-disaster recovery" at various levels of government. One of the key components of the act is that it requires all spheres of government – national, provincial, and local – to develop their disaster management plans. The implementation of the act started in April 2004 for national and provincial spheres and in July 2004 for the municipal spheres of government. As a result of these developments, there has been a growing emphasis on the move from reactive, crisis management approaches to a proactive, risk management approach.

In line with the DMA, the Department of Agriculture, Forestry and Fisheries (DAFF) developed an Agricultural Drought Management Plan (ADMP) which strives to create a balance between prevention, mitigation, preparedness, response, recovery and disaster-related development. A key thrust of the ADMP is a paradigm shift from reactive to proactive approach to agricultural drought management and it clearly lays out the roles of various institutions including the role of the farming community. This plan advocates a number of good farming practices and conservation measures including adherence to advisories.

## 2. Drought Early Warning Systems

The Drought Monitoring Desk at the South African Weather Services (SAWS) provides information on observed rainfall and long range forecasts which is accessible to the public. Seasonal forecasts and daily extreme weather warning are also issued by the Department of Agriculture, Forestry and Fisheries (DAFF) based on information from the Weather Services. The effectiveness of the drought early warning system depends largely on four key elements, namely: (i) prior-risk knowledge, (ii) monitoring and warning service, (iii) dissemination and communication, and (iv) response capacity. DAFF further established the National Agro-meteorological Committee (which comprises



(Photo/ Courtesy)

of the Agricultural Research Council (ARC), Provincial Departments of Agriculture (PDAs), South African Weather Services (SAWS), academic institutions etc.) to assist with the implementation of the system.

An example of drought early warning systems include a system, developed by the Agricultural Research Council, known as *Umlindi* (Zulu word for “watchman”), which provides information on drought conditions based on the interpretation of satellite and climate data. The information is used for crop estimation by the National Crop Estimate Committee (NCEC) and is also disseminated through the provincial departments, the National Agro-meteorological Committee (NAC) and subsequently to the farming community. Furthermore, a book on *Strategies for coping with drought* has been published by DAFF in the eleven official languages for the farming community and has also been disseminated through the relevant stakeholders.

To improve the uptake of weather and climate products, the DAFF, in collaboration with Provincial Departments of Agriculture, is packaging and translating the information into easy understandable messages for the communities. This is usually followed by an assessment of uptake of early warning information (EWI) to evaluate the effectiveness of the information and preparedness of the farming community to utilize and act on it for drought planning.

### 3. Information Management and Communication

The role of communication technology is integral in drought disaster risk management to communicate awareness messages with the vulnerable communities in time. Although application of communication technology has a role in all reduction measures namely, mitigation, preparedness, prevention, response and recovery, some of the application has traditionally been in response and recovery phases.

Various communication systems are available including the Internet, mobile phones, fax, e-mail, radio and television as well as face-to-face visits. There are, however, both social and technical aspects to the application of these communication technologies and the effective application depends on their appropriateness in a social and economic context in which they are applied.

Communication technologies will help establish preparedness for disasters, track approaching hazards, alert authorities and warn those who are likely to be affected and build resilience within communities. Because communication is vital during the whole cycle of disaster risk management, it is important that communication infrastructure in disaster prone areas is established well.

The dissemination of information required at all decision-making levels and implementation thereof holds the key to a risk reduction strategy. Political decision-makers, administrative officials, and most importantly the vulnerable individuals require information to mitigate, prepare for and respond to hazards and disasters. They should be aware of risks and the options available when disasters occur.

The information required includes knowledge of the availability of resources (financial and human capacity) to disseminate information, and communicate in times of emergencies. Farming communities directly affected by a hazard or a disaster should be fully informed of actions they should take and assistance they are or are not entitled to so that they can make provision for this in their planning. Effective communication and information dissemination enhance and continuously improve disaster risk management, Early Warning and advisory information.

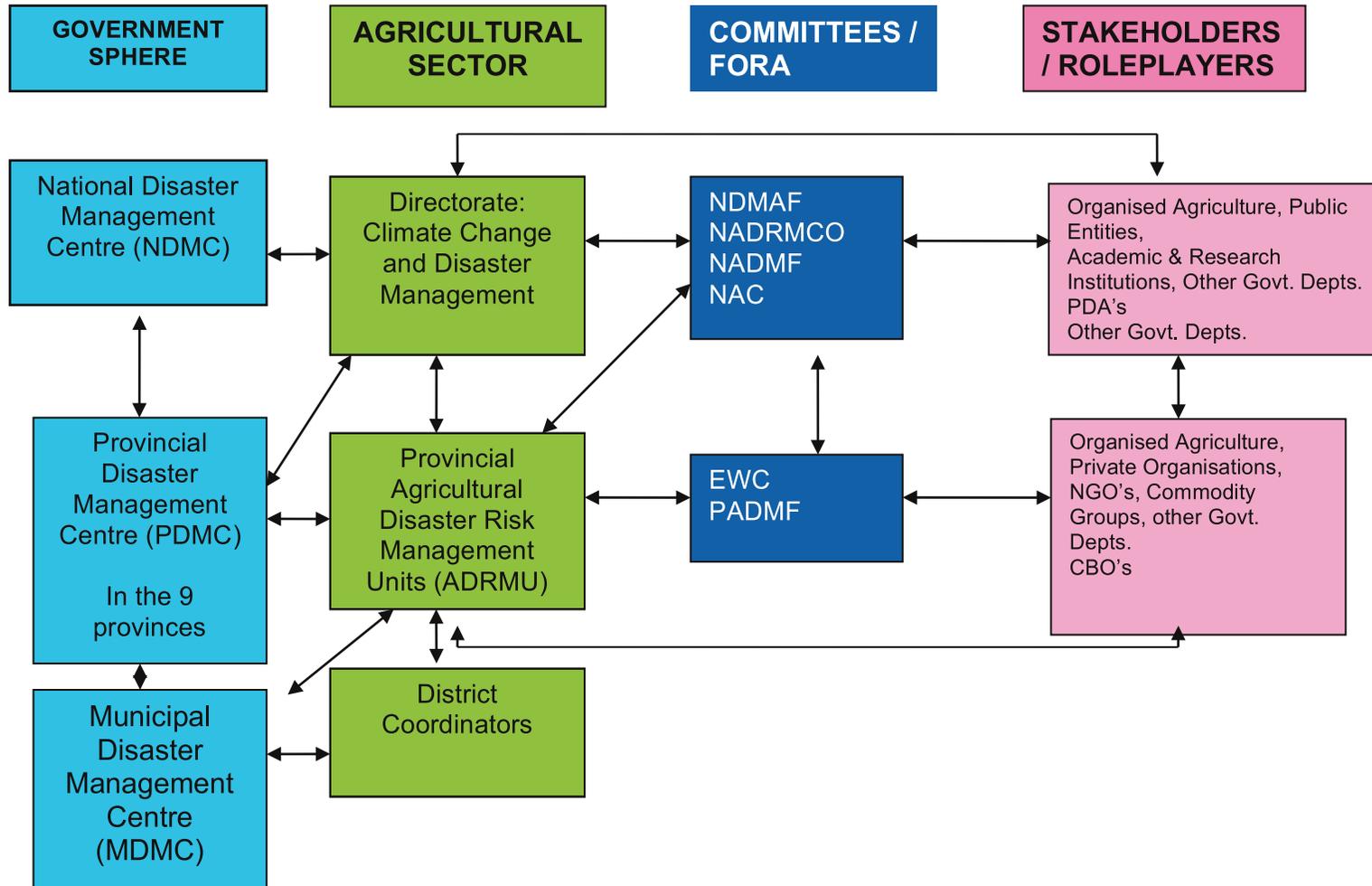
## 4. Institutional Framework For Drought Disaster Risk Reduction In South Africa

The National Disaster Management Center (NDMC) within the Department of Cooperative Governance and Traditional Affairs (COGTA) coordinates all disaster risk issues including drought at national level. DAFF forms part of the National Disaster Management Advisory Forum (NDMAF) which reports to NDMC. The NDMAF provides a mechanism for relevant role players to consult one another and to coordinate their activities on disaster management issues. At the provincial level the Provincial Disaster Management Centers (PDMCs) coordinate and at municipal level the Municipal Disaster Management Centers (MDMCs) coordinate municipal disasters within their jurisdiction.

Specifically focusing on the agricultural sector, DAFF through the Climate Change and Disaster Management directorate (CCDM) coordinates disaster risk activities which include drought while in the Provinces the Provincial Agricultural Disaster Risk Management Units (ADRMU) lead regarding disasters in their respective areas. At the district level, District coordinators assist.

There are several committees which assist in coordinating disaster risk activities in South Africa, namely the National Agricultural Disaster Risk Management Committee (NADRMCO) which is national, both national and provincial senior management members participate; the National Agricultural Disaster Management Forum (NADMF) operates at national level, and coordinates post-disaster activities. The Early Warning Committee (EWC) at Provincial level assists with dissemination of early warning information. And lastly the Provincial Agricultural Disaster Management Forum (PADMF) at Provincial level coordinates post-disaster activities.

# Institutional Framework for Drought Disaster Risk Reduction in South Africa



## 5. Drought Response, Recovery and Rehabilitation

As drought as a hazard cannot be addressed the focus is on improving the coping capacity thus reducing its severity and impacts. If drought occurs and the severity and magnitude is such that communities cannot cope by using their own means and resources and it is proven that amongst other factors prevention and mitigation measures were taken into account, a state of disaster is declared in line with the DMA. Declaration of state disasters usually leads to the establishment of disaster assistance schemes.

The post disaster support measures for the farming communities usually address both the short-term (e.g. supply of fodder) and long term (e.g. revitalization of infrastructure for livestock drinking water) development needs. In ensuring applicability as well as sustainability with regard to post disaster interventions, DAFF continuously conducts research to update and review the programmes. Furthermore, the department promotes the implementation of disaster risk reduction measures such as reduction of livestock to protect and conserve the natural resource base.

South Africa advocates addressing drought in the context of sustainable development by among other measures: building technical capacity of affected communities to deal with impacts of drought, desertification and climate change, improved field training and capacity building to grow climate-resilient crops to maintain soil productivity and increase food production in drought-affected dry lands as well as by encouraging 'Index-based weather insurance' as an emerging innovative market scheme for managing risks associated with drought.

As drought may become more frequent and severe in nature, more importance should be placed on water-sharing agreements between countries in search for practical options to ensure equal access while avoiding potential water conflicts. South Africa also supports the establishment of disaster management capacities and centres at regional levels, in particular where they do not yet exist as outlined in the African Regional Strategy for Disaster Risk Reduction. These to include capacity to identify and assess disaster risks; enhancing disaster related knowledge management systems; integrating disaster management programmes with the on-going sustainable development plans.



*(Photo/ IRIN News)*

## Improving Access to Services in Drought prone areas

## South-South Adaptation Knowledge Sharing: Senegal Eco-Villages and Kenya Eco-Communities

By Conor Phillips - UNOPS Project Manager for Eco-Communities, Kenya

United Nations Office for Project Services (UNOPS) Kenya office is currently carrying out the assessment phase of a Kenyan Ministry of Environment and Mineral Resources (MEMR) initiative that seeks to assist communities with adaptation to climate change through sustainable rural development. Examples of similar initiatives applying an “eco-village model” have been implemented around the world for the last 20 years. Africa’s first pilot was carried out in 2001, when NGOs in Senegal piloted a network of rural eco-villages. There are currently 50 such villages within the country, which are predominantly operated by NGOs, however, in 2009 the government adopted the approach and founded the Ministry of Eco-Villages, Artificial Lakes, and Basins, with the intention of rolling out the project to all of Senegal’s 14,000 villages. The above mentioned Senegalese and Kenyan ministries are setting up a knowledge sharing partnership, which includes exchange visits of relevant technical staff to each other’s projects to learn from both successes and failures.

### The Senegalese Example: Mbackombel Pilot Eco-Village

Approximately 500 people live in Mbackombel, a cluster of villages 130km south of Dakar. This is the flagship pilot eco-village for the “Agence Nationale de Eco-villages” (ANEV), a department of the newly formed eco-village ministry. ANEV is covering five villages in the current pilot and another ten are being covered by funding from the Global Environment Facility, UNDP, and a variety of smaller sources. The key components of the initiative in Mbackombel are renewable energy, climate-smart farming, a plant nursery and tree plantation, microfinance, and eco-housing, all of which are aiming to reduce strain on resources while promoting development. ANEV believes that emphasizing the interconnection of these different project components is critical to achieve community ownership and follow-up and thus long-term project success and sustainability of implemented measures.

### Water Conservation in Senegal

Between rainy seasons, water for the village becomes scarce, particularly during drought years. Even following the installation of a solar pump supplied water reservoir by an NGO two years ago, agriculture has remained predominantly rain-fed because the quantity of stored water is too little to maintain a sufficient farming area using traditional irrigation methods. To improve availability of water for both households and agriculture, several eco-village components aim at reducing the water stress.



Photo/UNOPS

One example is a drip irrigated 10-hectare plot in which each household in the community is allocated space to test newly learned farming techniques. The drip irrigation method is being carried out through a hosepipe with small holes. The hosing, which helps to target water distribution and minimize evaporation, is laid in evenly spaced shallow furrows in the community plots. Plot owners pay the equivalent of \$0.05 for 20 liters of water for the drip system, ensuring both a community water committee managed fund for system repair and a financial incentive to limit water overuse.

### Comparison between the Senegalese and the Kenyan initiatives

While Mbackombel lies within a region that receives between 500 and 750mm of precipitation per year, the Kenya eco-community projects will take place in varied livelihood zones with a broad range of annual precipitation. This requires initiatives that are tailored to the unique set of needs identified in the communities. In an upcoming pilot site in Kenya’s Turkana region precipitation is between 250 and 500mm per year, so if drip-irrigated systems are to be used, alterations from the Mbackombel model will be necessary, such as, for example, smaller plot sizes and

drought-resistant plant varieties to respond to the lower rates of rainfall.

## Minimizing Wood Use

Both the Senegalese and the Kenyan projects seek to minimize environmental degradation by reducing the use of other important natural resources, such as wood. Eradication of tree cover both accelerates erosion of topsoil and decreases soil water retention, contributing to agricultural challenges, particularly during drought periods. Both countries intend to use a variety of methods to address the issue of deforestation, including, where appropriate, wood lot creation, fuel-efficient stove promotion, and renewable energy supply. In addition, the Senegal project is piloting a method of wood and metal free housing construction using a team of builders from Burkina Faso. The builders are skilled in a traditional Burkinabe construction method of mud-brick houses, which maintain a cool interior in the hot season, is cost-efficient by requiring about 1/3 of the cost of wood and concrete houses, and has an estimated lifespan of 25 years. ANEV believes that upon seeing the demonstration house, community members in the eco-villages and beyond will be encouraged to adopt the model, which local builders have been trained to replicate.

## Lessons Learned

Pilot projects are rarely without teething problems. The tree plantation in Mbackombel, for example, has been almost completely decimated by livestock and the cost of fencing the area is not economically viable. That is why Ibrahim Sall, ANEV's monitoring, evaluation, and implementation manager indicates the pilot phase is so crucial to the sustainability of the project. One of ANEV's methods to achieve sustainability of the eco-villages is to demonstrate a variety of techniques to the population over the course of five years - those that are popular will be adopted and brought to new eco-villages, those that are not will be discontinued. In the case of the wood lots, rather than abandoning the initiative, the community has suggested incorporating beehives, purchased through a microfinance facility provided by an NGO, the Senegalese Eco-village Microfinance (SEM) Fund. The hives need to be frequently attended, which ensures humans will be often present to protect the lot from animals.

This method of trial-and-error in ecologically diverse areas of Senegal will help to better define what components work in eco-communities. Knowledge sharing between Kenya and Senegal also helps to accelerate uptake of successes of the model and decrease the likelihood of the same mistakes being repeated across the continent. Mr. Sall has a vision to create an African network of environmentally sustainable communities, thus increasing the knowledge base behind this innovative method to address global warming and its many related symptoms.



*Burkinabe builder working on wood-free building design in Mbackombel*

## Kenya edges closer to mainstreaming DRR in Schools.

By Moses Mung'oni, DRR Advisor for Kenya, UNISDRS ROA



School children in Nairobi, Kenya as they marked the 2011 International Day for Disaster Reduction on 13 October, under the theme Step Up for Disaster Risk Reduction. Photo/UNISDR

In 2001, a fire broke out at Kyanguli School in Machakos District in Kenya leading to the death of 67 boys. A one storied dormitory, books and personal items of the students were destroyed. The school closed down and most students with trauma related complications had to be transferred to other schools.

Disaster incidences in Kenyan Schools, Villages and Cities are not new. Kenya's disaster profile is dominated by droughts, landslides, lightening/thunderstorms, fires, floods, strong winds, terrorism, technological accidents, diseases and epidemics. In the recent past, these hazards have increased in number, frequency and complexity. The level of destruction has also become more severe with more deaths of animals, loss of livelihoods, and destruction of infrastructure among other effects resulting in losses of varying magnitudes. Quite a sizeable chunk of resources that would otherwise have been directed to the much needed development has had to be diverted towards responding to the need of those affected.

In line with priority three of the Hyogo Framework for Action on Disaster Reduction, efforts are gathering pace among stakeholders in the education sector in Kenya to mainstream DRR in schools in response to the need to reduce the risk of disasters. This is in light of the fact that school children are best placed to propagate knowledge on DRR to communities. School children have also carried the burden of the effects of disasters including having to drop out to support their siblings in pursuit of livelihoods. Schools have quite often played the crucial role of hosting communities that are displaced by disasters.

The UNISDR in collaboration with the Ministry of State for Special Programs, Ministry of Education, UNICEF and other stakeholders under the umbrella National Platform on DRR

have made preliminary attempts to holistically address the question of mainstreaming DRR into the education system in Kenya. This committee has set its eyes on promoting the inclusion of disaster risk reduction knowledge into primary and secondary school curricula and taking an inventory of schools in Kenya to ensure strong and DRR compliant infrastructure at all learning institutions. The infant committee aims to achieve these through:

- Advocating for increased demonstration by government policy makers of their political commitment to mainstream DRR into school curricula or informal education activities.
- Obtaining policy-makers' support for mainstreaming DRR into curricula and promoting safe school programmes.
- Reviewing the current curriculum to identify strong areas & gaps in DRR.
- Developing both teacher and pupil support material to fill the DRR gaps
- Mobilizing teachers and organising teachers' training on DRR to meet the needs for mainstreaming DRR into curricula.
- Making an inventory of schools and taking necessary risk reduction measures to ensure that school buildings and facilities are resilient to disasters

With technical support from the UNISDR, the Kenya Institute of Education in collaboration with UNICEF and UNDP are already a step ahead in developing teachers support material on DRR and will soon be launching a teachers' resources book on DRR. Technical support has also been provided by UNISDR in training close to 100 curriculum developers from the Kenya Institute of Education on DRR with financial support from UNICEF. These are expected to embark on the long term task of reviewing the education curriculum with the aim of identifying opportunities for mainstreaming DRR.

It is expected that these initiatives will lead the way in building a culture of safety and resilience to disasters at all levels by use of knowledge, innovation and education which is the third priority of the global DRR Framework, the Hyogo Framework for Action (HFA). The Kenya activities also feed into the UNISDR lead *One Million Safe Schools and Hospitals Campaign*, which encourages an individual, a family, a community, an organization, a government, a business or any other entity to make a pledge for a safe, disaster-resilient school or hospital to make them withstand the impact of disasters and safeguard institutions and their clients, school children and patients.

More information on the campaign and how to make a pledge on: <http://www.safe-schools-hospitals.net/en/Home.aspx>

# Health and Climate Change Disaster Risk Reduction: An NGO Partnership Approach to Building Community Disaster Resilience Building in Africa

By Lynn Wilson - SeaTrust Institute on behalf of SeaTrust Institute and Nurses Across the Borders Humanitarian Initiative

As climate change creates more erratic weather patterns, storms become more severe and drought more frequent throughout much of Africa. Building capacity at all levels to adapt and create resilience to the effects from drought is particularly crucial in African drylands where the expansion of drought is threatening large portions of the continent. Drought accounts for the majority of disasters reported as having affected more people, as well as leading to more deaths and economic losses, than any other hazard.<sup>1</sup> Through training nurses and other health workers in meaningful ways to 1) lead and engage communities in developing self-defined combined climate change adaptation (CCA) and disaster risk reduction and management (DRR/M) strategies affecting drought prone areas, 2) collect local data, and 3) participate in policy decisions that affect disaster preparedness, planning and responses, the South-North NGO partnership Nurses Across the Borders Nigeria and SeaTrust Institute builds capacity to combat drought in Africa.

These efforts help African countries address unmet Millennium Development Goals (MDGs) and *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (HFA)* Priorities for Action through integrating traditional and modern risk management knowledge, science and strategies. Training nurses and other health workers in the coordinated aspects of climate change and health also directly addresses calls in the *Extended Programme of Action for the Implementation of the Africa Regional Strategy for Disaster Risk Reduction (2006-2015) and Declaration of the 2nd African Ministerial Conference on Disaster Risk Reduction (2006-2015)* for "promoting integration of DRR in the formal and informal education systems and specifically the health sector" as a major area of activity.

Over 650 million people in Africa are dependent on rain-fed agriculture in areas that are already affected by water scarcity and land degradation. FAO reports that climate change will likely accelerate drought occurrence causing as

much as two-thirds of the region's arable land to be lost by 2025<sup>2</sup> through increasing levels of desertification and soil salinization. While African drylands have always been subject to recurring droughts, these have increased in frequency in recent years, occurring in 2005, 2006, 2008 and 2011.<sup>3</sup> Although considered as a viable method for reducing the scale of emergency response needed to combat drought by "maximizing the potential of the drylands in a sustainable manner and it makes productive use of what could otherwise be idle ecosystems<sup>4</sup>," pastoralism becomes an increasingly less viable adaptation option due to land tenure issues as well as increasing water stress. New approaches to building disaster resilience to drought in at-risk African regions are urgently needed.

All efforts to address the effects of drought, whether through climate change, agriculture, water, migration, forestry or other sectors, use human health as the ultimate measure of success or failure. Health effects commonly associated with drought include asthma, cardiopulmonary diseases, cardio-respiratory diseases, headaches and nausea associated with dust and compromised air quality, heat exposure stress and mortality. Compromised water availability for drinking and food production directly leads to dehydration and starvation. Other less commonly considered health effects include meningococcal (epidemic) meningitis, lowered immunity to malaria and other mosquito vector borne diseases when droughts break out, and diseases from contamination of drainage canals and rivers. As water becomes scarce, people turn to compromised water sources; diarrhoeal disease is a significant cause of child mortality in Africa. Extreme ultraviolet radiation (UVR) exposure frequently is associated with areas experiencing drought; UVR exposure increases cancers, skin issues, cataract and other eye diseases, reducing the effectiveness of the immune system. In 2000, excessive UVR exposure alone was implicated in 1.5 million disability adjusted life years (DALYs) lost and 60,000 premature deaths from skin, eye and cardio-respiratory diseases.<sup>5</sup>

1 [http://www.preventionweb.net/english/countries/statistics/index\\_region.php?rid=1](http://www.preventionweb.net/english/countries/statistics/index_region.php?rid=1)

2 FAO. (2010). Climate change implications for food security and natural resources management in Africa. Twenty-sixth regional conferences for Africa. Luanda, Angola.

3 IFAD. (2011). Press release No.: IFAD/48/2011 Horn of Africa: The rains will fail in 2015, 2016, or 2017, but must we also fail? [online] Available at: <http://www.ifad.org/media/press/2011/48.htm>

4 Haji, A. 2012. Improving the Current Livelihoods Development Policy in Pastoralist Communities: The Case of Afar Pastoral Tribe in Ethiopia. Unpublished paper.

5 See Confaloniere, U. et al., 2007. Human Heal. In M. Parry, O. Canziani, J. Palutikof, P.v.Linden, and C. Hanson (Eds), *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK: Cambridge University Press.

Calls by the IPCC for closer integration of disaster risk management and climate change adaptation policies and practices to achieve measurable benefits at local, national and global scales led SeaTrust Institute and Nurses Across the Borders Nigeria to create programs that allow communities to develop strategies using local climate and health issues and knowledge, and to disseminate the strategies widely by training nurses and midwives - who constitute the largest single professional group in any health setting worldwide - to deliver the programs in local communities. By including nurses in developing and implementing social development policies and plans to reduce the vulnerability of populations most at risk, communities define evidence-based local health outcomes that become key indicators of successful DRR/M and CCA strategies.

## Local to Global Opportunities and Actions

Drought knows no national, political or social boundaries. Yet disaster prevention actions are governed by nations and by the availability of services as defined by social conditions. Therefore, effective DRR and CCA efforts need to include geographic as well as political and social constraints. By combining organizational programs, technical abilities and resources related to climate change and health science, communications and databases technologies, life cycle approaches to managing climate related diseases and health issues, humanitarian relief response and training capabilities, SeaTrust Institute's and Nurses Across the Borders's integrated initiatives operate at multinational, national and local scales.

Leaders of the two organizations serve as co-Chairs of the UNFCCC *Coalition on Health and Environment: Climate Change Initiative* in collaboration with WHO; together they regularly chair side events, workshops and represent the partnership at international meetings on climate and health for disaster reduction and climate change adaptation global leaders. These global activities support the local programs and projects *Capacity Building for Nurses on Climate Change and Human Health and Surveillance of Changes in Diseases*; and the *Global Response by First Responders to Climate Change Disasters*. The close affiliation between these two NGOs leverages a wide range of partners and experts dedicated to integrating human health with climate change adaptation and disaster reduction efforts to build and support resilient communities.

Stronger efforts at the international level do not necessarily lead to substantive and rapid results at the local level. At the same time, locally successful efforts are not necessarily leveraged at the international level. That is why these NGO-led initiatives link local projects to international climate

change adaptation and disaster risk reduction efforts and events through strong relationships with UNISDR Africa, WHO, ECOWAS, the African Union and other multinational and multilateral agencies. Maintaining the necessary continuity by the joint NGO initiative leaders also requires leveraging partnerships with country level ministers, other NGOs, scientific and technical experts, universities and local community health professionals.

Disaster risk reduction has the potential to integrate emergency responses to drought with long-term planning and development efforts, to reduce the likelihood that hazards become disasters. In dryland areas, blending DRR/M with CCA highlights the underlying causes of vulnerability through participatory experiences such as this joint NGO partnership that builds disaster resilience by providing guidance and tools for placing the community in charge of planning, preparing for, and managing their responses.

## Local Programs and Initiatives

### 1) *Capacity Building for Nurses on Climate Change and Human Health and Surveillance of Changes in Diseases*

This capacity building approach involves engaging in local projects that help nurses and other health professionals tailor their own local adaptation strategies around their specific local climate change and health issues. Participants collect meaningful health and climate surveillance data through available technologies, and participate in policy discussions and decision making that affect the communities in which they live, work and serve. Through using health as the indicator for success in climate change decisions, the work crosses the boundaries of climate change science and risk from climate change related disasters as well as building self-reliant climate resilience that allows communities, through the leadership of their health providers, to borrow and integrate the appropriate science and technology from the North and adapt it in within African institutional, cultural and societal frameworks.

Because major drivers for human health have always been poverty and conflict, using health as an indicator for disaster risk management strategies and implementation incorporates DRR/M into the planning, and into the very fabric of communities as part of building resilience. Health workers become exceedingly valuable resources and integral players in all aspects of disaster management and risk recovery and active contributors to climate change adaptation strategies.

Activities: Nurses/Health Professional Capacity Building and Data Surveillance Program

6 See Davis, K., and Kingsbury, B., 2011. Indicators and Interventions: Pitfalls and Prospects in Supporting Development Initiatives at <http://www.rockefellerfoundation.org/news/publications/indicators-interventions>.

- Uses locally relevant climate, other disaster relevant information, and health data
- Data surveillance of changes in health conditions and supporting information using available technologies
- Facilitated scenario development using a process for self-defined vulnerability assessments, data selection and application within potential DRR/CCA scenarios
- Vulnerability and adaptive capacity mapping
- Analytic techniques for making informed choices from the scenarios
- Developing a policy action voice in local CCA and DRR strategies through evidence-based arguments using health as the indicator
- Access to external data analysis for wise practices comparisons
- Nurses mentorship program pairing U.S. and African nurses to support local learning and train-the-trainer expansion of the program to the community level by in-country health professionals

## 2) *Global Response by First Responders to Climate Change Disasters.*

*Global Response by First Responders to Climate Change Disasters* is a collaborative effort between SeaTrust Institute, Nurses Across the Borders and the African Environmental Action Network (EANet-Africa) to target first responders for training related to the health aspects of disaster risk reduction. This initiative was launched during a six-hour interactive event, *Global Disaster Management: The Roles of Nurses and Health Workers*, held on November 29, 2011 in the African Pavilion during COP 17 in Durban, South Africa.

This initiative received a special endorsement from Dr. Victor Fodeke, Advisor, Climate Change COP 17 & African Pavilion Side Event for the African Union. Dr Fodeke stressed the need to engage first responders in climate change disaster preparation, highlighting the appropriateness of starting with nurses as key first responders. He congratulated participants for being part of the global launch of the *Global Response by First Responders to Climate Change Disasters*, because the loss of one life is too much and “all the money in the world cannot replace one single person. If we fail to plan, we plan to fail.”

This initiative is linked with the capacity building program for nurses in that it begins with nurses as the first responders for pilot projects. Nurses were selected as pilot first responders because of their roles in disaster relief, the level of trust nurses hold in communities, their scientific information and process capabilities, and roles as community leaders and teachers. They are ideal candidates for “train the trainer” programs that replicate the capacity

building system in remote communities. The core project directors and leaders of the South-North partnership have the goal of empowering health workers, and linking research and capacity building with global policy and action to build momentum for health as the universal societal and political driver of climate policy. Expanding the initial program to include other first responders is a natural extension, combining coping and response with resilience and capacity development with a focus on inclusion of both youth and women on the front lines of disaster management.

Nurses are ideally positioned as trusted professionals and community educators to carry the messages and engage local people in focused DRR/M and CCA implementation and local strategic development. By building the capacity of local nurses throughout Africa to monitor and report changes in climate related diseases, train communities in disaster reduction through a focus on health issues, participate in policy discussions about disaster planning and mitigation, and materially participate in building scenarios as a part of regional disaster planning efforts, these health professionals expands risk management work beyond traditional analyses to incorporate comparative pathways to DRR/M that are community driven, replicable and continually draw upon the best scientific and technological global expertise. The knowledge gained from working with and learning from trained disaster risk reduction professionals benefits the health community immensely, and is essential for developing local capacity and innovation through knowledge and education to build a culture of safety and resilience at all levels.

## Forward Steps

It has become clear that unless local capacities are built and underlying vulnerabilities reduced in this increasingly unpredictable environment, the greatest threat posed by climate change is the accelerating and amplifying effect it has on existing risks and vulnerabilities. Examining and addressing these risks and vulnerabilities through the lens of health and engaging nurses, other health workers and first responders will create the desired outcomes of these projects between SeaTrust Institute and Nurses Across the Borders in collaboration with key partners who are helping to launch the pilot projects in Africa, EANet-Africa and UNISDR. As has been shown in a variety of contexts, the process of creating, using and disseminating indicators can, in themselves, be useful interventions;<sup>6</sup> health serves as such an indicator in these initiatives to address drought through building local capacity to develop and implement disaster risk reduction and climate change adaptation strategies. More robust and locally accepted strategies result in more resilient communities.

**Pillars of SeaTrust Institute/Nurses Across the Borders Work**

- 1 Engagement with and support of local populations in self-determined climate change adaptation and disaster risk strategies
- 2 Climate change and health training of healthcare workers, particularly nurses incorporating local data surveillance and policy action engagement
- 3 Collaborating with partners and affiliates to inform policy at all levels through a “Local to Global and Back Again” approach to capacity building, research and active UN participation by key personnel in our South-North partnership

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## Connecting with Change: A Risk Management Approach to the Drought Crises

By Stephen McDowell, Regional Advisor IFRC and Alexandra Crosskey, Independent Consultant for Save the Children

*The latest drought in the Horn of Africa has posed challenges for the humanitarian/development community. It has led Save the Children and IFRC to explore their programming and consider what programming modalities have been successful and what needs to change to more effectively manage the effects of the next drought.*

There was early warning of the last drought at grassroots, national and international levels. Action was taken on the basis of that early warning, but it didn't have the impact intended, and one year on, millions of people continue to struggle with severe hardship. By connecting our analysis of the changing context, our understanding of how the effects of drought can be managed, and the processes that move people towards reducing risk we can obtain insights into how assistance can be provided more effectively.



*A boy drinks water from the jerrycan at one of the mobile water points in Pabbo that formerly was an IDP camp. (Photo/ IRIN News)*

The learning and analysis we conducted highlights how gains in effectiveness can be achieved by strategically strengthening three specific programming components. Firstly, in periods between drought crises, **Engage with Change** – i.e. support participatory development processes and innovations that increase resilience of vulnerable communities and thus reduce their exposure to hazards and put them at risk of negative outcomes. Secondly,

during periods of crisis, **Manage the Risk not the Crisis**. Thirdly, recognise that many people are seeking alternative and complementary options to pastoralism and create **Safer Transitions** for these populations.

### Engaging with change

The arid lands have never been static, but the types of changes and the scale of those changes currently being seen are unprecedented. Population increases of perhaps five times over the last five decades, together with significant developmental changes, have imposed new sets of problems – and created new opportunities. These are a whole range of factors that influence this changing context; we will focus here on urbanisation and rural services/business environment to illustrate the concept of Engaging with Change.

#### Urbanisation

Looking at population movements in Wajir County, North Eastern Kenya as well as in Gode, Degahbur and Dollo Ado towns of Somali Regional State of Ethiopia, it is clear that the way in which people live together is changing. In Wajir there has been increased population movement to urban, peri-urban and rural centre settlements, with new settlements springing up even during the last 3-4 months. Informal discussions in Wajir reveal the scale of this increase: a member of the Wajir District Pastoral Association thought settlements had increased from 4 to 100 over the last 10 years, while community leaders in Wajir reported a 40% increase in households in their settled communities over the last six months. They also predicted that less than 10% of these households plan to return to their pastoralist origins. This type of movement in and out of settlements and urban centres will require further investigation and monitoring to confirm its scale and permanence.

Experience from Ethiopia shows that push factors such as hazards, loss of livelihood assets, conflicts, population pressure, and the lack of alternative livelihood options have stronger effects on pastoralists' movements towards semi-urban centres and new livelihoods than do pull factors (e.g. improved basic services, security). Present trend analysis shows that these push factors are increasing, meaning that more and more households will move out of pastoral livelihoods. Yet this does not mean that all pastoralist connections are severed. Settled households may still have livestock looked after by pastoral relatives, and may support pastoralists with marketing transactions in a complex system rooted in strong social and cultural ties.

One coping strategy widely employed by pastoral communities is the splitting of families, with female-headed households moving into settlements, while the male family members (adult and youth) either continue to herd livestock or look for urban employment. Women and children may be purposely sent to settlements to access aid as part of a broader familial livelihood diversification strategy.

The youth are a massive – and growing – demographic often overlooked in studying these process of urbanisation. They are oscillating between their traditional roles and the modern world. Save the Children’s conversations with young people in Wajir, Gode, Degahbur, and Dollo Ado indicates that although they are attracted to the modern world, they struggle to find the skills or opportunities to find work and build a future. At the same time, they are proud of their deep-rooted passion for animals and pastoralist identity. Young women are doubly challenged: they are increasingly educated and have access to the non-traditional world, and like young men they too struggle to find their place and work in towns or rural settlements. Additionally, they must also confront pressures and expectations to assume a traditional role in their communities.

#### *Changing Rural Services and Business Environment*

IFRC hosted an informal meeting of humanitarian agencies in August 2011 in order to look for different approaches to drought response in this context of rapid change, and to identify high impact opportunities to reduce risk to drought. Participants consistently emphasised the crucial importance of engaging with county level government services and businesses. They noted that services in rural areas are now being addressed through innovative partnerships between government, the private sector and consumers.

Veterinary services are evolving through partnerships between private sector drug providers and veterinarians; rural water is moving away from models of either community management or government provision to hybrids where private sector actors fill gaps when community or government provision models fall short; and changes in road and communication infrastructure as well as the growing presence of financial and telecommunication services are dramatically increasing the inter-connectedness of these communities. This demonstrates that innovation to promote resilience can happen at scale and on a sustainable basis.

#### *Incorporating change into programme interventions*

Providing the right kinds of protection, relief and access to services requires taking into careful consideration all of the groups affected by growing urbanisation and changing modes of pastoralism. These transitions need to be supported in order to avoid hardship and insufficient fulfilment of basic needs/rights for vulnerable children during these phases of change. To ensure that the design of interventions is appropriate for the specifics of the

situation and the particular livelihood zone, it can be useful to combine the assessment of different livelihoods systems with a community-based and needs-based participatory approach. This avoids a scenario in which assistance is provided based upon out of date assumptions about who is a pastoralist and what kind of support they need. Through this approach, and to engage with change, vulnerable pastoralists can be supported by diversification of livelihoods, and connecting with innovative solutions and partners. Types of interventions include:

- Drought-proof, sustainable income-generating opportunities;
- Keep livestock better linked with markets and processing facilities;
- Changes in the provision of health, education and water (e.g. the establishment of libraries that travel on the backs of camels);
- Access to financial services and cell phone networks.

### Managing the risk not the crisis

In addition to incorporating an analysis of changes in different places across the ASALs, it is necessary to investigate assumptions underpinning existing drought responses so that they better support diversity and change in times of crisis.

#### *Better drought cycle management*

There is a vast range in terms of levels of resilience and coping within a community, and these fluctuate over the course of the drought cycle. Appropriate assistance therefore requires different support to different people at different times, and at the same time a recognition that the core of their coping strategies is their livelihood capital and the local enabling environment.

In the recent drought crisis, agencies have faced criticisms for their delayed reactions to early warnings. But our analysis suggests that even where there was early action, it regrettably did not deliver the impacts intended. There are several explanations for this outcome:

- **Risk reduction interventions were not enough to reduce vulnerability.** Many of our community development activities were risk reduction activities, but they were not transformative enough to ensure that communities were both less vulnerable and better positioned to cope with drought. This does not mean they were poor development activities, only that they could not reduce vulnerability and increase coping capacities to an extent that would have been necessary to reduce risk in the most severe drought for 60 years.
- **The rate of change in rural livelihoods is rapid.** As such, our drought responses – aimed at supporting families and their children to move out of poverty and to fulfil basic rights – must continue supporting

households based increasingly in settlements or peri-urban areas.

- **All four distinct phases of Drought Cycle Management must be sustained during a crisis.** We have learned that it is vital to continue with (normal) development or preparedness/mitigation interventions throughout a crisis – including through the alert, response and recovery phases. Health, education, and protection interventions in particular must continue, in order to achieve complementary impacts and maintain/improve resilience.
- Drought response is sometimes embedded in the causes of the problem. The drought relief provided by humanitarian agencies has become inter-woven into drought coping mechanisms in many communities. Many permanent settlements have actually evolved as a response to decades of relief assistance, especially food aid and water trucking. Despite the undeniable importance of the humanitarian imperative, helping communities to remain in these unplanned settlements or providing relief that acts as a disincentive to change, has increased levels of dependency often perpetuated by each subsequent relief response to drought.

#### *Change the scale: integration*

Supporting the range of requirements at different points during the drought cycle is a daunting task. A lesson learned in the Ethiopian context is to apply a cross-sectoral approach to enhance resilience, and to focus and build on customary institutions as the backbone of appropriate interventions. Doing so enables the implementation of crisis responses at scale, and making investments that enable change to continue through the crisis and serve the wider community long after the crisis has passed.

Our learning showed that sector integration is an effective drought Disaster Risk Reduction measure – not surprising given that drought disasters have complex causes and drivers. For instance, the Food Security framework alone does not enable sufficient conceptualisation of “economically viable households”; it therefore needs to be combined with the Sustainable Livelihoods Framework.

Integration across institutions, as well as across sectors, is an important component of this approach. A “landscape approach” in supporting county/district/woreda level planning informed by community-led interventions increases resilience of these vulnerable communities before, during and after the crises. This requires a bottom-up approach, in which community-based processes inform county/district/woreda level planning to enable environments for sustainable livelihoods. Such activities promote a deliberate, planned action and one that seeks to work at scale. Participatory Natural Resource Management (PNRM) is a useful tool for bringing together customary institutions and government. Save the Children has found that PNRM boosts customary institutions and adaptive

capacities, promotes community ownership, reduces dependency, and creates space to innovate, be progressive, and gain direct benefits from community-own work.

## Safer Transitions

We are concerned that over decades, many relief responses have become embedded in drought vulnerability by helping households to adopt or “hang-on” to unviable rural livelihoods and in inappropriate locations. To complement drought relief, agencies should support communities to use the crisis as an opportunity to safely transition those hanging onto unviable rural livelihoods, and make sure the new communities can live safely and with dignity. These activities don’t need to look different in terms of the activity itself, but rather in terms of what they seek to achieve, where they are targeted and where they are not targeted.

Strategies include identifying obstacles and impediments to those who want to move or migrate temporarily or permanently, and assisting their transition where possible. This is not to suggest that we should make things easy, but rather that we support self-help capacities and communities’ own initiatives to strengthen resilience. And we must support “hangers on” to find alternative livelihoods, to be flexible, to identify opportunities and to make use of them. They will need these skills for permanent adaptation to changing conditions.

Activities include:

- Assisting with short-term labour migration
- Supporting skills training to develop alternative or complementary livelihoods options (electric, bricklaying, IT, phones, mechanics, book-keeping, functional literacy, business skills development, primary education for older students)
- Facilitating access to pasture and water for migrating people and livestock.

## Connecting with Change

These preliminary insights into the changing context in the ASALs and drought risk reduction programming, emphasise opportunities for humanitarian agencies to engage differently. Some may argue that they are already doing this, and in fact, we would argue that it is not that something new needs to be done but how it is done that should change. A wealth of effective and innovative work is being undertaken, but for it to have the desired impact, approaching the problem differently might deliver greater impact. Against the backdrop of change, humanitarian and development agencies need to rethink the manner in which they serve their communities.

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*Photo/ IRIN News*

# Drought Preparedness, Contingency Planning, Contingency Funding, Early Action Measures

## “Karamoja Productive Assets Programme (KPAP)”

By WFP

Karamoja is part of the semi-arid, pastoralist belt of the Horn of Africa. It is the poorest and most marginalized region in Uganda, with over 80 percent of its people living below the poverty line. Due to its geographical location, Karamoja is prone to natural disasters - particularly droughts - which are becoming more frequent and severe as a result of climate change. At the same time, the sub-region is also affected by chronic insecurity, due to inter-ethnic tensions and cattle raiding. Over time, the combination of frequent natural disasters, on-going violence, severe environmental degradation and high poverty rates has not only eroded people's capacity to cope but left them heavily dependent on food aid, which was the principal assistance modality of WFP's programmes in the region until 2010.

The Karamoja Productive Assets Programme (KPAP) is a large-scale food and cash for work and asset creation programme that marks a shift to support government efforts to promote recovery and longer-term development in the region<sup>1</sup>. Launched in 2010, KPAP has been supporting 76,000 chronically food insecure households with labour capacity (roughly 38 percent of the population) to transition from dependence on food aid towards self-reliance. The objectives of the programme are twofold, firstly to prevent the spread of negative coping strategies during the traditional hunger season and secondly to stimulate recovery.

In line with the Governmental strategy for Karamoja, the KPAP is a three-tiered programme consisting of: public works, meaning that beneficiaries qualify for conditional food or cash transfers in exchange for their participation in public works activities. The types of activities supported include: livestock watering points; land/soil conservation measures; reforestation and road rehabilitation.

Household income support, meaning that beneficiaries receive both 'soft' and 'hard' inputs aimed at strengthening and diversifying their livelihoods systems. The types of activities supported include: drought-resistant staple crops e.g. cassava and millet; vegetable gardens; fruit orchards; gum Arabic; dairy production and energy-saving stoves. Capacity development, which means that WFP and implementing partners systematically engage with communities and district local governments at clearly defined points in the annual programme cycle.

Given the context of food aid dependency, community acceptance of the programme is essential. To this effect, standardized core messages have been imparted to communities about the roles and responsibilities of stakeholders in the project, beneficiary entitlements and obligations and the importance of self-reliance and building resilience. Karamoja consists of three different ecological zones, which has inevitably influenced livelihood patterns along divergent lines<sup>2</sup>. Recognizing the intrinsic differences between each livelihood zone is different, households are offered different 'menu' of public works/household income activities in each zone. Activities supported under the programme must always be appropriate for the livelihoods zone, as well as technically suitable for low-skilled manual labour. Around 10 percent of households (who live in and around the seven major trading centres of Karamoja) have been switched from food to cash transfers, in order to foster market development which has been constrained by the low purchasing power within households. District local governments play a formal, active and clearly-specified role in terms of approving activities carried out under the programme, and monitoring and evaluating the performance of sub-projects against their stated objectives. The programme also focuses on building government capacity to improve sustainability.

KPAP relies on strong technical and operational partnerships. FAO played a key role in developing the investment menu for KPAP and is advising district local governments, WFP, and other implementing partners on a range of technical issues on the programme pertaining to livelihoods promotion and environmental management. This is essential for quality assurance on sub-projects, as well as harmonization with the work FAO itself is supporting through Agro-Pastoralist Field Schools (APFS). Nine NGO partners also worked closely with WFP to adjust geographical coverage and ensure adequate implementation capacity across the region, allowing a rational large scale effort to be mounted.

### Relevance for Resilience Building

KPAP strengthens households' resilience to shocks and adverse events by building sustainable livelihoods. A livelihood is sustainable when it can cope with and recover from shocks, and when it can maintain or enhance its

1 Since 2011, the KPAP has been an implementing arm of a broader framework/programme of the Government of Uganda known as the Second Northern Uganda Social Action Fund (or "NUSAF2"). Governmental ownership – both at national and district level – is an extremely important aspect of the programme.

2 Karamoja has three livelihood zones: (1) Agricultural; (2) Agro-pastoral and; (3) Pastoral. In recognition of this, the KPAP 'menu' is tailored to each of the livelihood zones. The 'menu' has been discussed at length with the Government of Uganda and FAO, with modifications having been made along the way.

3 Lindsey Jones, Susanne Jaspars, Sara Pavanello, Eva Ludi, Rachel Slater, Alex Arnall, Natasha Grist, Sobona Mtisi. 2010. Responding to a changing climate: Exploring how disaster risk reduction, social protection, and livelihoods approaches promote features of adaptive capacity. Overseas Development Institute: working paper 391.

capabilities and assets while not undermining the natural resource base<sup>3</sup>. In particular, KPAP builds resilience in three main ways: firstly through preserving and building-up the asset base of households under the public works component of the programme, WFP is providing households with access to food/cash transfers during the traditional 'lean' season when the sale of assets (most often livestock) is a common negative coping strategy. Productive assets are therefore preserved allowing households to better absorb and manage 'stresses during unexpected shocks.

The second approach is the strengthening and diversifying of livelihood systems. Under the household income support component of the programme, WFP is providing households with the means both to 'climate-proof' their existing livelihood practices (e.g. by improving the access of livestock to water sources), and to diversify into new livelihood activities (e.g. by supplementing cattle-rearing with basic agriculture). In this way allowing beneficiaries to

better adapt to changing climate patterns by helping them mitigate risk and avoid the spread of risk across multiple livelihoods.

The third approach is about ensuring the continuity and sustainability of the programme. Emergency response can be expensive and can be unpredictable as flows of relief aid are often insufficient. However, ensuring the continuity and sustainability of programmes is necessary to securing results in terms of building more resilient livelihoods. The cost effectiveness of KPAP accounts for the sustainability and high coverage of the programme. While the 2009 food aid operation, covering the same target group as the KPAP, cost approximately USD \$120 per beneficiary per annum, the KPAP costs approximately USD \$50 per beneficiary per annum. KPAP therefore advances the agenda for prevention over response.

# Comprehensive Drought Risk Management in Ethiopia: The Livelihoods, Early Assessment and Protection Project (LEAP)

## Managing Disaster Risk

Ethiopia is particularly vulnerable to droughts and floods, both of which are expected to increase in intensity and frequency under climate change scenarios. As the livelihoods of more than 80 percent of the Ethiopian population fully depend on agriculture, climate risks represent a serious threat for the most vulnerable communities and farmers.

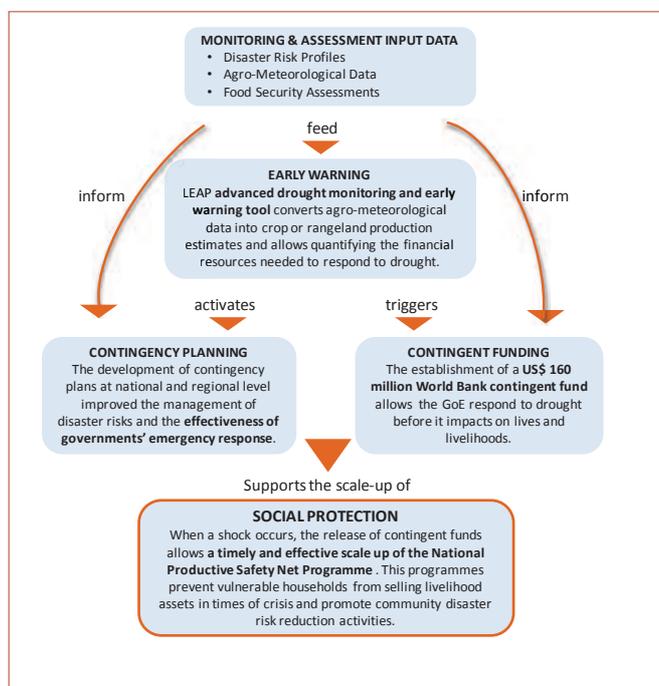
To address this challenge, the Government of Ethiopia (GoE) launched a comprehensive National Food Security Programme (NFSP) in 2004 and subsequently established a Productive Safety Net Programme (PSNP).

The PSNP aims to enable millions of chronically food-insecure rural people move out of hunger and poverty shifting from recurrent emergency assistance to more secure and predictable forms of social protection. It also promotes the livelihoods of vulnerable households through asset creation, resilience building and disaster risk reduction interventions conducted through public works using food and cash as payment. In support to the NFSP, WFP and the World Bank are working with the Government of Ethiopia to help develop an integrated national risk management framework through the Livelihoods, Early Assessment and Protection (LEAP) project. LEAP combines early warning, contingency planning, risk profiling and contingency finance to support the flexible scale-up of the national level productive safety nets.

## Early Warning

WFP provided technical assistance to help the GoE develop an advanced food security early warning tool that converts agro-meteorological data into crop or rangeland production estimates. This allows quantifying the financial resources needed to scale up the national PSNP in case of a major drought.

The meteorological information comes from a network of automated weather stations and satellite data. In order to improve the quality and availability of this data, the LEAP project also supports the National Meteorological Agency improve the meteorological infrastructure with the installation of automated weather stations in highly food insecure areas of Ethiopia.



## Risk profiling and Contingency planning

As part of LEAP, direct and indirect technical support is provided to the government risk analysis and contingency planning activities at national, regional and community levels. When climate stresses are detected by the LEAP early warning systems the activation of contingency plans and the availability of risk analysis enable the government to respond in a timely and cost effective way, targeting the most vulnerable communities.

## Contingent Financing

Through LEAP, WFP facilitated the GoE access to international risk transfer mechanisms and supported the establishment of a US\$ 160 million contingent fund through World Bank. The contingent fund allows the government to timely scale up the PSNP before a shock impacts on people's lives and livelihoods. LEAP crop monitoring and EW outputs are used as a transparent, objective and verifiable indicator to trigger the release of part of the fund to activate the government response.

## Capacity Building

A core component of the LEAP capacity building approach is the provision of trainings to GoE technical staff, aimed at building the government capacity to provide trainings at sub national level. Technical support is also provided through secondments of technical staff to the government and facilitation in the establishment of government partnerships with national and international universities and research institutes. The provision of computers, servers and meteorological infrastructure based on actual needs also represents an important factor in strengthening the GoE early warning and monitoring capacity.

## Project Impact

LEAP helped the government of Ethiopia establish a national disaster risk management framework and increase the timeliness, transparency, and cost effectiveness of livelihood assistance interventions. During the first project phase a national food security early warning tool was created, and a training mechanism was established, with government and partner staff trained and enabled to train regional officers. The creation of the early warning mechanisms resulted in the regular generation of crop monitoring and drought early warning information, which is now used by the GoE for decision making process. The project also strengthened the national meteorological infrastructure and improved the access to existing meteorological data through a close collaboration with the National Meteorological Agency.

Inter-ministerial collaboration was also enhanced, with official partnership agreements established and dialogue and information exchange promoted as part of the project implementation.

Government access to the most advanced disaster risk monitoring tools and technologies was also promoted through the establishment of partnerships with national and international universities and research institutes.

The second LEAP phase (2012) aims to support the improvement of the LEAP food security early warning tool, including the creation of an index to monitor the pastoral areas, integration of seasonal projections to improve the understanding of the new rainfall patterns and integration of LEAP outputs with livelihood baselines for comprehensive early warning and assessment. In 2012 LEAP will also seek to strengthen the national meteorological infrastructure and develop the national disaster risk management expertise promoting national trainings, GoE partnerships with national and international universities and staff exchanges.

## Sustainability and Replicability

The LEAP approach is set to ensure the sustainability and continuity of the established risk management framework. This is pursued through:

- Government project ownership and project management structure fully integrated into the government early warning-early response institutional mechanism;
- Continued transfer of technical knowledge and expertise to local actors;
- Creation of a risk financing mechanism aimed at increasing the cost effectiveness of livelihood protection interventions;
- Use of innovative technology with limited running costs. This includes the use of free satellite data for crop monitoring and the installation of fully automated weather stations.

Based on the successful experience in Ethiopia, WFP and partners with the support of the GoE are now exploring options for replicating the LEAP approach in other countries helping those to shift from managing disasters to managing risks and improve the food security of vulnerable communities.

For more information, please visit:  
[www.dppc.gov.et](http://www.dppc.gov.et) and  
[www.wfp.org/disaster-risk-reduction](http://www.wfp.org/disaster-risk-reduction)





*Photo/ IRIN News*

# Coordination and Partnership for Drought Risk Reduction

# Drought Risk Reduction Special Topic: The Importance of a Coordinated Approach

By Eric Patrick for United Nations Development Programme -Drylands Development Centre

## Overview

This article begins with an overview of the inherently interconnected nature of drought impacts, compares this to the even bigger challenge of managing potential impacts from climate change, and argues that multiple forms of coordination – the need for some of which often go overlooked – are required in order to be more effective. It is then argued that part of the reason for the relatively limited progress in reducing the impact of droughts is due to the failure to appreciate the differential impacts on different parts of the economy and this is taken as a starting point for a coordination process. Institutional factors, however, including competition for resources, are also highlighted as a culprit and it is argued that a realistic assessment is foundational to generating critical political will from the key stakeholder, another prerequisite for a successful process.

Areas where coordination may be critical are then proposed. Some examples of more innovative approaches to drought risk management, with an emphasis on the coordination aspect, are provided from various parts of the world comes next. Finally, several step-wise approaches to engendering a coordinated approach to drought risk management are highlighted together with some resources for practitioner peer learning.

## Managing Drought: a dry run for a coordinated response to climate change?

Drought has repeatedly been shown to be the natural hazard which has the greatest human mortality and economic impacts (for example the *Global Assessment of Risk 2011* – UN ISDR). It is important to note that droughts do not just affect drylands, which require a particularly wide range of integrated development interventions, and where the impacts are often directly on the human welfare (the ‘classic’ famines of Sahel) but also areas which are not regularly affected; in fact these areas are typically more strongly affected economically as they are usually more important in the national economy and are less well prepared / adapted.

Unlike most other natural hazards, drought is both (a) slow onset and (b) is part of a short term natural cyclicity of weather patterns (as opposed to aridification, which is a long term process of the climate becoming drier due to either natural and/or human drivers). Both these facts, in principle, should allow for management of the risk of

drought impacts as a normal part of planning at various scales. Drought is often blamed on climate change, which is a convenient but often inaccurate and unhelpful explanation which can shift the discussion beyond human influence and therefore out of policy discussions beyond when a declaration of emergency (and drought relief) should take place.

There does seem to be evidence that the *pattern* of rainy seasons is shifting in many places, which is likely due to climate change, can increase the risk of an agricultural drought even if the actual amount of rainfall has not changed, as planting may have taken place at the wrong time. On the other hand, uncertainty about the timing, amount, duration and location of rainfall has always been characteristic of drought prone agro-eco zones and can be managed.

The recent IPCC Special Report on Managing the Risks of Extreme Events and Disasters (November 2011) reports observation of longer and deeper droughts in various regions. In terms of projections, the number of ‘hot’ days is expected to increase by a factor of 10, which can induce a similar end state as lower rainfall through higher evaporation (ie from reservoirs) / transpiration (from plants, trees) demands. Hence it is more important than ever to get drought risk management well coordinated, which in fact could be seen as a dry run for future conditions more widely. Managing the risk of climate change implies a high burden of coordination at multiple scales; perhaps some good principles can be derived from drought risk management experiences.

## Different drought risk policies are required for different parts of the economy, as is coordination between them

In the popular imagination drylands are remote and rural; however the reality is more complicated as many large cities are found in drylands (such as Los Angeles, New Delhi, Cairo etc) but their economic reach allows them to compensate in their immediate supply zones through either an engineering (diverting the Colorado river) or trade based solutions (importing food from non drought affected areas); in short the economic dynamics of cities generates adaptive potential yet authorities at the municipal level may be hostage to lack of coordination with planning at higher scales. A country such as Egypt has structural water and food deficits; urban mouths are fed through effectively

importing the rainfall which went into buying-in cereals ('virtual water') equivalent to the annual flow of the Nile! This demonstrates the potential for trade to reallocate the relationship between people and the geographic distribution of water resources.

In principle the density of cities affords authorities the potential for efficient distribution; however different levels of disposable income and political influence at the household level may mean that this potential does not necessarily translate into food going to those most in need. On the other hand, food aid targeting in rural areas is more expensive per unit and there is often a lack of current information even of where people may be, given that migration is the most common traditional response to drought.

As can be seen, different policies are required for low and high density areas. Furthermore, urban centres often become 'refuge zones' for dropouts from the rural economy, whose livelihood asset base may have been undermined by successive weather and related price shocks. Hence planning coordination needs to reflect an understanding of economic geography and of how this is influenced by drought on both an event-specific basis and over the long term. For a variety of reasons this sort of holistic analysis is rarely undertaken as a basis for drought policy formulation; typically because it is assigned to a lower level entity (such as the Ministry of Agriculture or Water or Meteorology) which lacks the range of expertise and authority.

Drought impacts have a particularly strong knock on effect on the economy, especially where an economy depends significantly on agro-industrial production, as supply is not available to add value to in addition to the impacts on agricultural producers; but also and often most greatly in monetary terms due to loss of power to urban and industrial sectors. In a diversified economy such as Australia the loss in terms of Gross Domestic Production can be on the order of 1%; in developing countries the figure can be ten to fifteen times as high or even more. Time series of annual mean rainfall and national GDP show a remarkable correlation in various countries such as Ethiopia and Morocco.

## Policy coordination in the real world: competing perspectives and institutional interests

Drought policy formulation processes need to both distinguish between and take into account (i) the *general development challenges* of regularly drought prone areas such as drylands in addition to (ii) the *specific impacts* of drought on populations, their resource base and livelihoods; and the latter in (iii) different ecological and/or economic zones, as they may have different degrees of rainfall dependence and different types and degrees of coping and adaptive capacity. This is explained and illustrated in

more detail below and this emphasis is necessary because most drought policy and planning exercises start from apparently self-evident but simplistic and often misleading assumptions (such as 'drought means lack of water, so we need to drill wells' – to cite a Special Envoy to a drought affected region, or 'food insecurity means not enough food production in dry areas so we need irrigation – which is often not cost effective or environmentally sustainable) may not in fact represent the most effective allocation of fungible capital.

Furthermore the resources for investing in drought risk reduction are politically scarce and hence contested; thus to be politically viable and sustainable institutional solutions need to be seen to engage and benefit a range of influential stakeholders. This is especially true in the case of advocating for budget allocations to prevent the impacts of something which might not happen; or if it will happen, with uncertain timing and location. Making the case and putting it into practice both start from holistic analysis and investment in engagement of key stakeholders; drought events themselves provide a window of opportunity amongst shifting institutional attention spans but the background work needs to have been done in order to be in the position to take advantage of these opportunities. Finally, the consequence of failing to do so tends to reinforce aid fatigue for regularly drought affected areas and narratives about hopeless systems.

## Areas where coordination for drought risk management should be considered

As has been demonstrated, it is indisputable that drought risk reduction in particular requires an integrated and coordinated approach. Coordination may in a particular case be required in one or more of the following areas – among other possible areas - and should start where there is low hanging fruit:

- (i) Coordination is needed between units created by bureaucratic divisions at government level:
  - Between the classic *economic (productive) sectors* and their corresponding (and likely competing) ministries; for example policies to promote agriculture such as research and development for drought tolerant crops can have the perverse effect of undermining other more inherently suitable sectors such as livestock production.
  - Between 'productive', *tax generating* and social, *tax spending* sectors such as health and education; for example, droughts can cause parents to keep children out of school and food shortages affecting young children can have lifelong effects, which in turn will affect the productive sectors. However by time these impacts are felt the current government may be out of power and therefore may not have a political incentive to do so; furthermore, the

consequences of lack of investment in drought-prone areas may be externalized as a humanitarian emergency and therefore becomes the responsibility of the 'international community' under the current international political economy.

- Between *areas of policy*; disaster, agriculture, environmental but also other less obvious but relevant areas; the process which led to Kenya's draft policy on drylands development is a good example of an inter-ministerial process; furthermore this policy informs Kenya's long term strategy document *Vision 2030*

(ii) Coordination across space and their corresponding institutions:

- *Between objectives and modalities for urban and rural development* (often little attention is paid to the economic geography of the relationship between urban centres and their hinterlands; some urban centres even grow up around drought relief distribution locations and road networks emerge for the same reason)
- *Between spatially defined units of administration* at various scales, as drought may affect a large area, including cross border within and/or between countries. There have been good examples of international agreements for food trade and regional physical or virtual grain banks; however in practice these are often disregarded or misallocated during a crisis due to domestic political pressure and opportunities at various levels

(iii) Coordination across time:

- *Across time, politically* (droughts may strike during points in an electoral cycle which results in inaction and/or politicization);
- *Across time, operationally*, during and between droughts (drought cycle management)

(iv) Coordination between types of approaches:

- *Between efforts to address chronic and acute vulnerability* (much drought relief is actually permanent transfers to areas or production systems which are manifestly unviable – this needs to be explicitly recognized in order for a sound analysis of options to be possible); what is the role of early recovery to bridge this gap?; rules around what funding can be spent on can influence effectiveness and this bureaucracy is another area where significant benefits of coordination could be realized

(v) Coordination between types of actors:

- *Between development and humanitarian activities* (for example, between drought relief and investment in drylands development); and between the actor

groups involved in each as well as their sources of financing (whose rules often preclude good use of funds designated for lifesaving activities to also address underlying sources of vulnerability to impacts from future droughts)/ The area of 'early recovery' attempts to bridge this gap, in this case in the context of drought cycle management. Other attempts have generated many new acronyms but all represent ways of trying to break the mould, with varying degrees of success against deeply entrenched habits, processes and incentives.

- *Between the public and private sector* (some enabling conditions / pre-conditions for private sector investment in drought prone areas are inherently public goods such as major road networks, security when transporting goods etc). Is there a business case / demand for particular public investments or are these made for political reasons or just out of good intentions? On what basis are alternatives being compared; many drought risk reduction activities have a weak empirical basis for investment of scarce capital and people often resort to common sense ideas which may not in fact prove to work. Similarly, there may be a minimum set of conditions necessary before the power of the private sector can be tapped; addressing only one or two dimensions may even be a waste of money. Finally, there can be a lot of mistrust and different sets of assumptions / perspectives between private and public sector actors which may need to be overcome, and sometimes corrupt relationships between them.

## Drought risk management through various forms of coordination

There are many good examples of drought risk management; however these may rarely be understood in terms of the coordination dimension. Conversely the root of failure of many good DRM efforts is often found in the lack of coordination. This section briefly introduces some examples of DRM practice from various areas of the world to illustrate aspects of coordination. Much good practice remains undocumented. Hence peer-to-peer learning needs to be increasingly facilitated in this area and systematically documented in the forms of practical guidance material. A good example of such a mechanism is the Africa-Asia Drought Risk Management Peer Assistance Project, a Japanese funded practical network implemented by UNDP-DDC ([www.undp.org/drylands/aadp.html](http://www.undp.org/drylands/aadp.html)). A related activity is the Africa Drought Risk and Development Network, managed by UN-ISDR and UNDP-DDC, which has held 4 practitioner forums to date to highlight and debate various aspects of DRM across individuals who might not otherwise interact. This diversity of engagements with drought reflects the complex nature of the phenomenon and our often scattered approach to it. In this section we pick up on some of the areas of coordination introduced

above, providing a more detailed discussion as well as citing some examples of where this has been attempted and with what results. This can only provide a rough survey at best and the reader is encouraged to avail themselves of the online resources for practitioners mentioned, as well as guidance material highlighted in the Resources section at the end of this article.

#### *Coordination by policy related entities*

Coordination is often assumed to mean formal coordination between policy making or policy delivering entities, meaning departments or other institutionalized authorities at various (but mainly national scale). Some examples are whole-of-government approaches when the impacts of drought are considered to be an existential threat. For instance, a root problem narrative emerged in Ethiopia about an imbalance between the location of resource users and resources in this still primarily rural society. As such, the solution is seen to be a centrally organized resettlement program, with mixed results for a number of reasons. Another example of national level coordination is the Chinese programme to transfer resources from areas affected by dust storms (mainly the eastern coastal cities) to the desertification control activities in the source areas, thousands of kilometers away. International agreements in East Asia also take this to a higher scale.

#### *Coordination of information and analyses as a basis for agreed priority actions*

Coordination around the definition of a drought, its extent and severity, while seemingly simply a technical exercise, often has large political implications as they are often the basis of declarations of emergencies which, in turn, can trigger the release of raising of funds. There have been various criticisms of the way in which chronic drought relief, irrespective of the actual weather conditions, have been politicized and created dependency parts of South Asia and Africa. Coordination between scientists at an international level (such as agreement on a Standardized Precipitation Index); between humanitarian actors (such as various agencies working in Somalia who adopted an Integrated Phase Classification to monitor drought as it evolves) or its equivalent in the US, the National Drought Monitor (based on consensus across numerous observers); or at a sub regional level between Met Depts and met data using ministris through seasonal Climate Outlook Fora in the Greater Horn or regional vulnerability assessments in Southern Africa involving a wide range of practitioners in national Vulnerability Assessment Committees; or through regional institutions in the Sahel such as Agryhmet provide greater credibility and hence lower political risk.

A coordinated response starts with a generally agreed upon analysis, which in turn depends on a credible methodology. Joint assessments in the field, for example convened through the Kenya Food Security Meeting, provide information pooling opportunities which are also

operationally useful. Vulnerability Assessment Mapping (used in particular by humanitarian actors) have a similar purpose and, being built on a computer platform, can also be useful for a range of analyses. However various entities have developed their own systems for their own purposes and there can often be disagreement on which, if any, should be used by everyone. Furthermore, these systems often originated from the need to produce numbers and location for relief distribution and have a difficult time when top loaded with types of data they were not designed for and to answer other types of questions (for example the impact of HIV/AIDS on food insecurity). Hence ideally national systems would be developed which take into account the broad needs of planning and the relationship to drought, including longer term trends.

Monitoring systems do exist, such as FEWSNET, but tend to be high on satellite data and not necessarily well integrated into government decision making and corollary information systems. Alternatively a national committee could be formed, as happens in a number of countries to sift through various forms of data produced by various systems. However the data producers may be more technical than the data consumers and unable to express the data in terms of the decision making criteria actually used. Vulnerability assessments in particular can be useful to reveal underlying dynamics which could then inform policy formulation and drought planning; for example in Ethiopia analyses concluded that roads were useful both for the rural poor (to get food relief in) and for the high income producers (to get their products to market). A very large programme of road construction in Ethiopia has resulted in part from such insights.

#### *Coordination of financing*

Amongst many other aspects of coordination which could be covered, coordinated financing is critical both across sectors and time. This could be triggered by early warning or could be part of an ongoing financing mechanism; a good example is a budget reallocation process which begins at the municipal level in areas of Brazil when drought is forecast in order to create a resource to address needs as they emerge. The private sector can provide a similar service in the form of index based weather insurance (which helps overcome some limitations of classic, evidence-of-loss, based insurance) and interesting pilots have been attempted (underwritten by external parties) in Malawi (transferring the responsibility for cereal delivery to the private sector and taking advantage of the international grain hub in South Africa), Ethiopia (to forward finance drought relief costs) and elsewhere for possible use at national level. However these have yet to be really institutionalized for a number of reasons, in part the political risk of paying premiums to compensate for something which may not end up happening. Other ideas include virtual grain reserves in the form of cash; however in the case of one Southern African country developing a drought policy this option was dropped because of a low

level of trust between ministries as to who would manage the funds. National and regional physical and virtual grain reserves typically flounder for similar, management related reasons.

Insurance financing for the weather risk (hurricanes) have been attempted in Central America and elsewhere, as opposed to waiting for public re-insurance through a hoped-for international humanitarian response. Publicly funded equivalents tend to be broad, ongoing social safety nets which are ideally actually needs targeted; examples include the National Rural Employment Guarantee scheme in India and the Bolsa Familiar in Brazil, both of which have been disproportionately significant in drought prone areas. These programs really represent a decision to transfer wealth to areas which typically have poor resource endowments and as such are forms of drylands development which also reduce vulnerability to drought shocks. Specifically with respect to drought, coordination of financing has been very successful with very large numbers of dollar-a-day farmers buying commercial weather insurance in India, with the risk passed on to the international financial pool through purchase of re-insurance. Due to the complex mix of objectives, the right mix of financial instruments

will need to be put together. Line ministries are rarely technically competent in this area; hence ideally the involvement of the Ministry of Finance either in an advisory or central role. Their engagement is made easier when the arguments about drought impacts utilize the language they understand; economics – both direct and indirect losses as well as opportunity costs.

## Conclusions: Critical prerequisites for a successful process

As with Disaster Risk Reduction, drought risk management should be conceived from an integrating office such as the Ministry of Planning, Ministry of Finance, a regional development authority, the Prime Ministers Office, the Ministry of National Development etc, informed by the key stakeholders. However there needs to be buy-in beyond the symbolic placement of the process in a high status office. This will only take place when the key institutional actors and others are convinced of the significance of the issue for their concerns, that budget allocations are on the line, that it is being pushed from the top, that funding will be sustainable and that other types of resources (technical support etc) will be available. Due to this demanding set of conditions, success is more likely if there are partnerships in the case of aid recipient countries between external and internal actors, with the caveat that this can create the risk of the perception of ‘policy capture’ by a major external partner and/or resentment of the activity as the pet project of an individual or ministry who is seen as having captured the external resources.

## Resources for establishing stakeholder processes towards better drought coordination

A ten step process to develop a drought plan, widely used in the United States and adapted in the Near East and elsewhere, can be a useful reference (US National Drought Mitigation Centre: [drought.unl.edu](http://drought.unl.edu)). A five step process of mainstreaming drought risk management can be found in a drought mainstreaming primer produced by UNDP-DDC (2011), which incorporated a wide range of what we know about process related aspects of what works as well as providing various case studies in more detail than can be covered in this article (available at: [www.undp.org/drylands/docs/Mainstreaming%20DRM-English.pdf](http://www.undp.org/drylands/docs/Mainstreaming%20DRM-English.pdf))

*For comments or questions contact the UNDP DDC at [ddc@undp.org](mailto:ddc@undp.org)*



Photo/Courtesy



*Mobility is the key to the resilience of mobile livestock keeping*

## Ending Drought Emergencies: will the promises of the Nairobi Strategy be met?

*By Safia Abdi, Cordaid/REGLAP Country Lead for Kenya*

The 2010-2011 drought, in the East and Horn of Africa, is estimated to have affected 13 million people, of which 4.5 million are Kenyans. Lives and livelihoods have been lost. The drought has also generated extensive debates on how to end repeated drought emergencies, with discussions hitting media headlines and forming the agendas of national and international conferences. Some key statements have cut across all the debates acknowledging that:

- While drought is an unavoidable natural phenomenon, it need not and should not lead to famine and other disasters.
- Long-term under-investment in the foundations of development in drought prone areas has caused the increase in vulnerability that has led to this crisis.
- There is a need for urgent investments in programmes and actions that build resilience.
- While the drought's impact on lives and livelihoods may be localised, it affects the overall socio-economic growth of the country.
- Despite the early warnings about looming drought, many responses have been reactive rather than proactive.
- With climate change, drought will become more severe and frequent, and therefore climate-resilient livelihood options need to be supported.
- Mobility, the key to the resilience of mobile livestock keeping, should be supported through ensuring rights to communal grazing areas and migration routes—both within countries and across borders.

- There is a need for social safety nets for vulnerable populations though strategies such as cash transfers, but with additional clear programs to ensure that long term sustainable livelihood options are developed for the vulnerable.

On September 9th 2011, the Leaders of Eastern and Horn of Africa countries and the African Union, in the presence of the United Nations, Development Partners and the International Agencies, gathered in Nairobi Kenya to develop a strategy to end drought emergencies. In this summit most of the countries, including Kenya, presented country programme papers outlining their strategies for ending drought emergencies. The final product of the summit was the adoption of "The Nairobi Strategy: Enhanced Partnership to Eradicate Drought Emergencies". The Nairobi Strategy provides details on how to deal with Somalia's governance and refugee issues, and general strategies for overcoming drought emergencies. Here we concentrate on the drought component, alongside a regional strategy for IGAD to support the successful rollout of country plans via its own regional strategy for disaster resilience and sustainability. Some of the key strategies for overcoming drought emergencies were given as:

1. **Accelerate investment in the foundations of development:** This includes pro-poor infrastructure and human capital, secondary roads, water, energy, education and health. [North Eastern Kenya is desperately under-served, with 74% - 97% of the

population living below the poverty line, primary school net enrolment at only 36% compared to the national average of 93% and only 48% of children immunized, against 77% nationally.]

2. **Strengthen adaptive capacity and livelihood choices:** This includes environmental protection, integrated resource and water management; rangeland management, fodder and crop production, reforestation, small business support, social protection, and assistance to pastoralists to help reconstitute their livestock and start a sedentary life.
3. **Promote integrated land and water management** including both ground and surface water development for irrigation, livestock and human use.
4. **Facilitate formal trade and promote efficient flow of commodities in the region.**
5. **Support pastoralism as provided for by the African Union Pastoralist Policy Framework.** Support includes protecting property rights and livestock assets, providing market, veterinary health and financial services, and supporting livestock mobility.
6. **Fast track climate change adaptation initiatives** so that drought risk reduction and climate change adaptation are integrated into development planning and resource allocation frameworks.
7. Ensure that more **effective institutional frameworks** are in place to promote development of arid and semi-arid lands and manage droughts in more sustainable ways, for example the National Drought Management Authority (NDMA).
8. The strategy also recognizes the need for **Governments to work closely** given that arid climatic conditions cut across boundaries.

These strategies are laudable, although there are others, e.g. large-scale irrigation in the ASALs and sedentarisation of pastoralists, which require careful and urgent consideration of the environmental, social and economic impacts and the implications on resilience of vulnerable households. There is also a need to ensure that dryland dwellers themselves have the information, capacities and opportunities to determine the use of their localised natural resources and decide their futures.

Most of the strategies are not new, what is new is the national, regional and international determination to end drought emergencies including public demand for change in governments' approaches to drought. This is an enormously positive forward-looking step, yet the key will be its implementation. Three months down the line there are some positive signs. At the end of November, a Kenyan Stakeholders Meeting was convened, including all the major ministries and international agencies, in order to develop a roadmap for national implementation. IGAD also held a meeting of regional stakeholders to ascertain its role in implementing the regional strategy, establishing a stakeholder group in order to ensure regular follow-up and effective implementation of the plans. Donors have also made commitments to support this strategy and IGAD: Donors are planning to help countries develop investment plans and to support IGAD to lead a regional platform to promote this process.

The governments, the UN, the international community, NGOs, the private sector and citizens will all need to act to ensure that the intent of *the Nairobi strategy* and the country plans are maintained, and that all efforts are focused on promoting sustainable livelihoods, the resilience of drylands populations and ensuring that the people themselves are central in deciding investment priorities.

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Uganda National Platform for DRR

## How functional coordination mechanisms can accelerate drought risk reduction

By Rhea Katsanakis, UNISDR ROA

Drought impact on communities can be mitigated only if its root causes are being addressed and therefore the risk is being managed and not the crisis, as OXFAM and Save the Children call for in a recent paper entitled “A dangerous delay”. One of the challenges in drought risk reduction, and therefore one of the root causes of drought disasters is a weak institutional basis at national level, which in turn limits governments to act early.

The first priority of the Hyogo Framework for Action (HFA) reads “Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation”, one of its key activities emphasizes on the importance of “DRR institutional mechanisms (national platforms)”.

This refers to a multi stakeholder coordination mechanism which is a nationally owned and led forum for disaster risk reduction, which serves as catalyst for national consultations and consensus building, enhances collaboration and coordination amongst national stakeholders, increases levels of knowledge and skills on risk reduction and supports the identification of urgent needs in the area of reducing disaster risk. The platform manages the progress towards achievement of DRR objectives rather than producing a « plan », leads, monitors, evaluates and reports and also facilitates the allocation of resources from donors, development banks and UN agencies. The national platform contributes to the development of a comprehensive national DRR system, as appropriate

to each country, and functions as its custodian; it is not necessarily a new institution, but relies on the advantages of existing structures and processes.

In relation to drought risk reduction this means that a functional national platform for disaster risk reduction enables the disaster risk reduction actors in a drought affected country to carry out early action activities in an effective and coordinated manner, led by the institution at government level in charge of DRR. A functional platform as an effective coordination and consensus building mechanism therefore is essential to accelerate drought risk reduction activities.

The UNISDR Regional Office for Africa has since its existence in the year 2002 supported the establishment of national platforms for DRR. These national platforms were in the Africa Region complemented by the Africa Regional Platform which was launched in 2008 and the Sub-Regional Platforms for DRR which were established in 2011 for ECOWAS, ECCAS, EAC and SADC. The regional platforms are important especially to build consensus among member states as most of the natural disasters affecting the Africa region have cross-boundary impact and bi-lateral or multi-lateral coordination is needed to address pastoralist movements, trade etc. as well as interventions at the border area.

## Coordination challenges at national level

To date we have 30 official national platforms for DRR in place in Sub-Sahara Africa, which means 30 out of 44 countries covered by UNISDR Regional Office for Africa do have national coordination mechanisms for disaster risk reduction in place. In order to have a comprehensive disaster risk reduction approach, involvement of a wide range of stakeholders is needed to achieve real change. To achieve drought risk reduction for instance apart from the disaster management authority, the Ministry of Agriculture, the Meteorological Services, the Ministry of Water, the Ministry of Environment as well as Ministries of Education and Health have a role to play among many others.

UNISDR with the support of ECHO reviewed the national coordination mechanisms for disaster risk reduction in Kenya and Ethiopia to identify gaps and challenges in their work modalities, which seem to be typical for challenges faced also by other national coordination mechanisms in the Africa region.

In Kenya, according to the assessment carried out by UNISDR, disaster management and risk reduction continues to attract more and more attention from government and non-governmental agencies, given the profound losses in lives, livelihoods and environmental damage due to natural disasters affecting the country, first and foremost drought. However the role of the National Platform for DRR in coordinating these matters has not grown in the same proportion.

Limitation of technically qualified staff has been identified as major challenge. The platform is supported by two staff members from the Ministry of State for Special Programs, who do not have in-depth technical knowledge in DRR, while the Ministry itself is critically understaffed. The platform further lacks a dedicated secretariat, including staff, office space and office equipment, to facilitate the work of the national platform in convening coordination meetings and follow up of resolutions thereof.

The process of approving the draft DM policy has been slow, but the policy provides the basis for the formation of the National Platform as well as for the county platforms. This means in reality that the platform as it is, is operating but has no legal basis. It further results in the absence of guidelines within the relevant Ministry for allocation of funds and other resources to run the activities of the platform at the national level and at the counties. The high frequency of disasters affecting Kenya has attracted focus to response leaving little time for risk reduction initiatives.

In Ethiopia a similar assessment carried out by UNISDR showed that the coordination mechanism on DRR in Ethiopia, namely the Disaster Risk Management Technical Working Group (DRMTWG) is more actively coordinating emergency response and preparedness activities than DRR,

as well as funding is more available to emergency response. As a result the balancing between emergency response and DRR activities has been a challenge as emergency response competes for funding with DRR activities. Furthermore the delay in the approval and release of the DRM policy and the Disaster Risk Management Strategic Planning and Investment Framework (DRMSPIF), have posed similar challenges as in Kenya.

As recommendations out of the two assessments it was recommended to support ratification and enacting of the draft DRM policies through high level lobbying, a sensitization of the public on the draft policy and a revision of the terms of reference of the DRR coordination mechanisms, as well as an agreed work plan, and clearly distributed roles and responsibilities. Discussions are under way in both countries to discuss how to strengthen the coordination mechanisms to enhance drought risk reduction coordination capacity.

In Uganda, the national policy for disaster preparedness and Management was approved by cabinet in April 2011, which is a crucial pre-condition for a national platform to function. The national platform is now working towards the development of a 5-year Strategic National Action Plan to implement the approved policy. Over the next years, the platform will also be developing the Disaster Management Act, as provided for in the approved policy.

In further strengthening the work of the national platform, the national platform in Uganda has embarked on creating and strengthening of sub-committees of the national platform, as one of the challenges identified was that the platform cannot carry out tasks as a whole but needs technical expert groups for different tasks, which has been addressed with the sub-committees.

The Early Warning sub-committee has been created and is chaired by the Minister of Agriculture, Animal, Industry and Fisheries. It is co-chaired by a senior Officer in the OPM and seconded UNISDR as a Secretariat. It is believed that the creation of such committees will further improve the effectiveness and efficiency in the operation of the national platform.

Overall from experience from these assessments and work with other national platforms in Africa, the following pre-conditions, if not in place usually hinder the effective coordination of DRR, which is in most cases to be spear-headed by the national platform for DRR:

- Any national coordination mechanism needs a legal framework in place on which basis it operates. This gives it the necessary weight when providing advice and guidance to decision makers, as the platform is not a decision-making organ itself.
- It is further important that the platform has constant members, that it operates based on a work plan with designated roles and responsibilities of

organizations and that it has a budget through its members or by itself, and if possible a dedicated secretariat and secretariat staff.

- It is further helpful if the platform is anchored in one of the highest decision-making institutions in the country, so the Prime Minister's Office or the President's Office to enable it to coordinate other Ministries.
- Lastly a high level of decentralization to at least district level is advisable, so that guidance from national level can lead to appropriate action at district or provincial level, as a national platform will not be able to reach out to local level.
- The model of Uganda which is utilizing technical task teams has proven successful in a number of Southern African countries as well and is a good solution for large national platforms for DRR especially, which can easily lose focus.

UNISDR therefore aims at supporting these components to be in place so that effective coordination can take place at national level, to as an overarching goal, reduce duplication of efforts, enhance early action and mitigation measures and prioritize national activities based on the broadest technical expertise possible, by consulting all sectors involved.

## Coordination at sub-regional level

At sub-regional level IGAD and EAC have established sub-regional platforms on DRR, which gather all national DRR focal points from the member states and discuss issues around disaster risk reduction, including drought risk reduction. The mechanisms are still very new and have just been established in 2011, nevertheless have reactions of member states been very positive, as they find the regional forum and the involvement and leadership of both EAC and IGAD highly relevant and useful as the need to address cross-boundary hazards is clear, but member states seem to prefer regional leadership than bi-lateral discussions only.

## Coordination at regional level

Although most discussions relevant for country-level implementation of disaster risk reduction happen at sub-regional level, trans-regional learning, for instance between the Sahel and the Horn of Africa on drought risk reduction is being organized at the regional platform for DRR. It further provides a forum to consolidate an African contribution to global dialogues, such as the Climate Change negotiations, the Global Platform inputs etc. In addition UNISDR together with UNDP DDC hosts the Africa Drought Adaptation Forum, a dedicated forum to drought risk reduction in the region, as it was recognized that drought is affecting a vast amount of people in Africa, and is a recurrent threat.

Through the different layers of coordination platforms for disaster risk reduction, supported by UNISDR Regional Office for Africa, limited capacities and resources can hopefully be applied in the most effective way, reducing duplication and disconnect between development and humanitarian action, early warning and early action, so that mitigation measures can be applied earlier and prevent losses resulting from drought and other hazards.

## UNISDR is at the heart of a global partnership which plays a vital role in raising awareness of the socio-economic benefits of disaster risk reduction.

### Mandate

UNISDR was established in 1999 to facilitate the implementation of the International Strategy for Disaster Reduction (ISDR). UNISDR was mandated "to serve as the focal point in the United Nations system for the coordination of disaster reduction and to ensure synergies among the disaster reduction activities of the United Nations system and regional organizations and activities in socio-economic and humanitarian fields" (UN General Assembly Resolution 56/195). With the adoption of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (HFA), the United Nations General Assembly tasked UNISDR with supporting its implementation. UNISDR also organizes the Global Platform for Disaster Risk Reduction (UN General Assembly Resolution 61/198).

### Who

UNISDR is the UN office dedicated entirely to disaster risk reduction. UNISDR is an entity of the UN Secretariat led by the Special Representative of the Secretary-General for Disaster Risk Reduction. UNISDR mobilizes and coordinates a vibrant network comprising numerous organizations, States, intergovernmental and non-governmental organizations, financial institutions, technical bodies, UN agencies and civil society. UNISDR was a founding member of the World Bank-based Global Facility for Disaster Reduction and Recovery and manages its global and regional components.

### What

UNISDR coordinates international efforts on disaster risk reduction, organizes a Global Platform every two years which brings together all parties involved in disaster risk reduction, and campaigns to build global awareness. UNISDR advocates for greater investment and the integration of disaster risk reduction into policies and programmes for climate change adaptation. UNISDR informs and connects people by providing practical tools and publishing the biennial Global Assessment Report, an authoritative analysis of global disaster risk. UNISDR also supports the HFA Monitor which allows for national reporting on HFA implementation.

### Where

UNISDR implements its mandate through five regional offices based in Asia (Bangkok), Africa (Nairobi), Europe (Brussels), Arab States (Cairo) and Latin America and the Caribbean (Panama). The regional offices are guided and supported by UNISDR Headquarters in Geneva. UNISDR also maintains a UN HQ liaison office in New York, a liaison office in Bonn and field presences in Kobe, Japan, Suva, Fiji, Incheon, Korea and Almaty, Kazakhstan.

The Hyogo Framework for Action Expected Outcome:

"The substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries"

## The Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters

Adopted by 162 Member States of the United Nations, The Hyogo Framework for Action (HFA) is the key instrument and global blueprint for implementing disaster risk reduction. Its overarching goal is to build the resilience of nations and communities to disasters, by achieving substantive reduction of disaster losses by 2015.

The HFA offers five areas of priorities for actions to achieve disaster resilience for vulnerable communities in the context of sustainable development. The Priority Areas are:

- 1. Make disaster risk reduction a priority: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.**
- 2. Know the risks and take action: Identify, assess, and monitor disaster risks and enhance early warning.**
- 3. Build understanding and awareness: Use knowledge, innovation, and education to build a culture of safety and resilience at all levels.**
- 4. Reduce risk: Reduce the underlying risk factors.**
- 5. Be prepared and ready to act: Strengthen disaster preparedness for effective response at all levels.**



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