

ETHIOPIA

The preparation of the Ethiopia Disaster Risk Management (DRM) Plan comes at a very opportune moment because of: a) the recent (and ongoing) Business Process Re-engineering (BPR) throughout the government, which has considerably transformed structures and staffing at several ministries, including the Ministry of Agriculture and Rural Development; b) the development of a new National Policy on Disaster Risk Management, which is expected to be submitted to Parliament by July 2009 and potentially ratified in 2010; and c) a new mandate and approach for Disaster Management and Food Security Sector (DMFSS) to shift from a focus on ex-post emergency response and relief work to the much broader ex-ante disaster risk reduction. DMFSS is also a lead agency for issues related to climate change.



To prepare the Country DRM Note, consultations were undertaken with members of the World Bank's Ethiopia Country team and the DMFSS, and meetings were held with Ministry of Health, Ministry of Water Resources, National Meteorological Agency, Environmental Protection Authority, European Commission, WFP, UN-OCHA, UNDP, UN-ECA, UNICEF, FAO, DFID, USAID, FEWS-NET, DMFSS Livelihood Integration Unit, SC-UK, IFPRI, Oxfam-US, CARE, Relief Society of Tigray, and the Ethiopian Red Cross.

The matrix of priority areas and actions for DRM and estimated budget allocations were discussed and cleared at a debriefing meeting held at DMFSS on May 15, 2009 with wide participation of stakeholders from Government, donors, and NGOs. There is strong support and ownership and endorsement by DMFSS for the matrix of priority areas and actions.

1. DISASTER RISK PROFILE

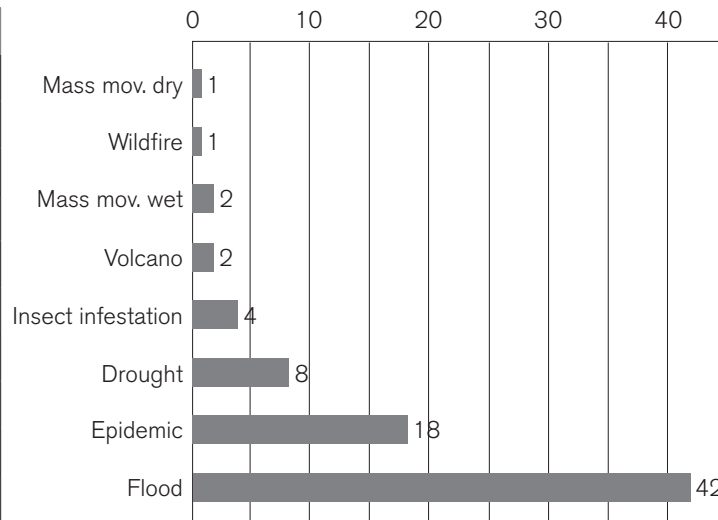
A wide range of natural hazards are present in Ethiopia, including drought, floods, landslides, human and animal diseases, pests, earthquakes, and urban and forest fires. Recurrent drought and floods in particular have the most severe impacts on people's lives in Ethiopia (refer to Figures 1 and 2). The country's vulnerability to natural disasters is due to a number of inter-linked factors. These include dependence on rain-fed agriculture, under-development of water resources, land degradation, low economic development, and weak institutions. Furthermore, with a population of 80 million people, Ethiopia is the second most populous country in Sub-Saharan Africa, and has a relatively rapid annual population growth rate of 3.2%. With a GDP of US\$200 per capita, Ethiopia is also one of the world's poorest countries.

Drought is the most significant and recurrent climate-related hazard affecting the country. Ethiopia has mainly dry sub-humid, semi-arid and arid regions, all of which are prone to desertification and drought. Ethiopia has a long history of recurring drought; however, since the 1970s, the magnitude, frequency, and impacts of droughts have become more severe. Moreover, due to climate change and human-induced factors, the areas affected by drought and desertification are expanding in Ethiopia.

Flash floods and seasonal river floods are becoming increasingly common due to deforestation, land degradation, increasing climate variability, and settlement patterns. During the past two decades, major floods in

Top 10 Disasters in Ethiopia,
1999-2009

Hazard	People Affected	Date
Drought	12,600,000	2003
Drought	4,500,000	2008
Drought	2,600,000	2005
Flood	361,600	Oct 2006
Flood	239,586	July 2007
Flood	235,418	Apr 2005
Flood	110,000	Apr 2003
Flood	79,000	Oct 1999
Flood	45,000	Oct 1999
Flood	38,000	Aug 2006

Natural Disaster Occurrence Reported,
1980-2008

Source: EM-DAT: The OFDA/CRED International Disaster Database, Université catholique de Louvain, Brussels, Belgium.

1988, 1993, 1994, 1995, 1996 and 2006 have caused significant loss of life and property. Large-scale flooding is limited to the lowland areas of the country; however, intense rainfall in the Highlands causes flooding of settlements in a number of river basins, particularly the Awash River Basin in the Rift Valley. Annual flooding in urban areas, especially in Addis Ababa, causes property damage along streams descending from the nearby hills. Flash floods are common in most parts of the country, especially when rains occur following prolonged dry spells.

Ethiopia's climate is highly variable, and is projected to become more variable due to climate change, with the potential for increased frequency of extreme weather events including floods and droughts. Rural areas are very vulnerable to climate variability. The most vulnerable sectors to climate variability are agriculture, water, health, and energy.¹ Smallholders dependent on rain-fed crop production and pastoralists in drought-prone areas are the most vulnerable rural livelihood systems. Approximately 85% of the population lives in rural areas and depends on the local natural resource base to meet their basic welfare needs. The relatively under-developed, semiarid, and arid regions of Afar and Somali have been historically vulnerable to unfavorable climatic conditions, which are being exacerbated by climate change. The Amhara and Oromia regions are characterized both by areas of good agricultural production in the highlands and midlands and by recurrent droughts. The Tigray region, vulnerable to recurrent drought, is also vulnerable to climate change.²

Recurrent droughts, conflict, rising food prices and isolation of affected populations have resulted in persistent and high levels of food insecurity, and recurrent emergency situations. In 2008, more than six million Ethiopians required emergency food assistance due to drought and rising food prices. In recent years the value of emergency food and non-food aid has reached over US\$350 million on average per year. Although once self-sufficient in food and a net exporter of food grains, since the 1980s, Ethiopia has been a net importer of grain due to a decline in crop production caused by land degradation, soil erosion, and a decline in farm sizes, and rapid population growth and increasing demand for grains as livestock feed. Food aid has tended to be managed through emergency mechanisms that hand out food to needy households, rather than being provided as part of development programs that build and/or

¹ Most of Ethiopia's electricity is from hydro-electric power.

² 'Measuring Ethiopian Farmers' Vulnerability to Climate Change Across Regional States.' Temesgen Deressa, Rashid M. Hassan, Claudia Ringler. IFPRI Discussion Paper 00806, October 2008.

protect assets (human, natural or physical). Thus, although there have been massive flows of food aid into Ethiopia since the 1980s, its contribution to sustained economic development has been insignificant.

The vulnerability to climate-related hazards and food insecurity is closely linked to land degradation. About 85% of the land surface in Ethiopia is considered susceptible to moderate or severe soil degradation and erosion. In the Highlands, shrinking farm sizes and soil degradation and erosion are reducing the sustainability of agricultural production and causing downstream pollution (including siltation of dams), thereby making it difficult for rural populations to meet their basic needs. The annual costs of land degradation are estimated to be at least 2-3% of agricultural GDP.³ To put this in perspective, that means that land productivity would need to increase by more than 20% immediately to reverse the damage of the past 10 years. In addition, land productivity is declining as average per household landholdings are declining due to population pressure and limited uncultivated land.

Despite the widespread problems related to droughts, there are some Highland areas that are relatively high rainfall areas, and, from a national perspective, Ethiopia is relatively well endowed with water resources. However these water resources are unevenly distributed both spatially and temporally. Between 80-90% of the country's surface water resources are found within four major river basins – Abay (Blue Nile), Tekeze, Baro Akobo and Omo and Omo Gibe. These are located in the west and southwest of the country with no more than 30-40% of the total population. In the east and central river basins, where 60 percent of the population resides, there are only 10-20% of the country's surface water resources. The Ethiopian Highlands contain the headwaters of a number of major rivers that flow across its borders and which are vital sources of water for neighboring and downstream countries, especially the Sudan, Egypt and Somalia.⁴ Historically there has been a problem for Ethiopia to exercise its riparian water rights and to access rivers whose source is in Ethiopia.

2. ACTIVITIES UNDER HYOGO FRAMEWORK OF ACTION

HFA Priority # 1: Policy, Institutional Capacity and Consensus Building

KEY DRM INSTITUTIONS AND NATIONAL DRM POLICY

Ethiopia's institutional framework for disaster risk management has undergone numerous changes in mandate, structure, and scope over the past 30 years. Following the devastating 1973/4 famines in Northern Ethiopia, the Relief and Rehabilitation Commission (RRC) was established. During its 20-year existence, RRC focused on disaster response and the distribution of relief supplies. The ratification of the National Policy on Disaster Prevention and Preparedness Management (NPDPM) in 1993 led to a shift in thinking based on the perceived need to more closely link the relief and development agendas.⁵ With this in mind, the government restructured RRC to establish the Disaster Prevention and Preparedness Commission (DPPC), and gave it a mandate to focus on the links between relief and development.⁶

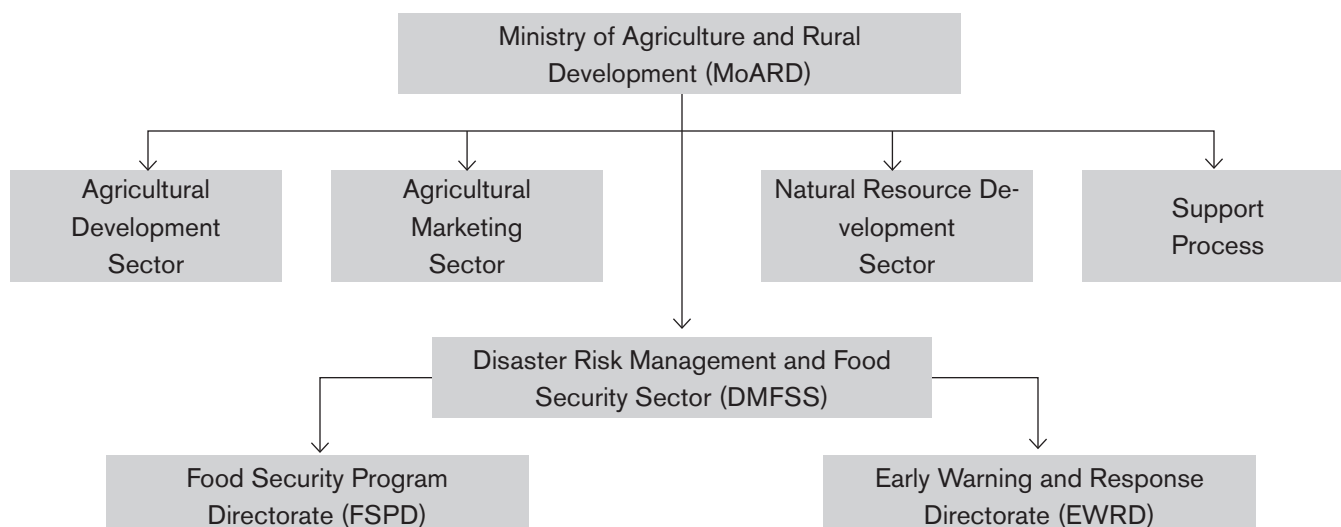
In 2004, DPPC was renamed the Disaster Prevention and Preparedness Agency (DPPA), with a revised and more restricted mandate to focus on acute cases of emergency response. The responsibility to coordinate employment generation, one of the major strategies that link relief with development, was reassigned from DPPC to the

3 Ethiopian Strategic Investment Framework for Sustainable Land Management (Draft). SLM Secretariat. August 2008.

4 Ethiopian Strategic Investment Framework for Sustainable Land Management (Draft). SLM Secretariat. August 2008.

5 In the 1990s, several important documents were created to guide the early warning system and food security: 1) the National Food Security Policy; 2) the 1993 National Policy for Disaster Prevention and Preparedness Management (NPDPM); 3) General Guidelines for the Implementation of the National Policies on Disaster Prevention and Preparedness Management; and 4) the Five-Year Disaster Prevention Plan 1998-2002.

6 See Climate Risk Management in Africa: Learning from Practice, edited by M.E. Hellmuth and others. (2008) International Research Institute for Climate and Society. The chapter "Food Security in Ethiopia" provides a good overview.



newly created Food Security Coordination Bureau (FSCB). As such, DPPA was no longer responsible for addressing the underlying causes of disasters, and was responsible only to respond to fast-onset disasters or unpredictable events. FSCB addressed national food security through a productive safety nets program, other food security-related projects that attempted to enhance assets and livelihoods, and a voluntary resettlement program. At the institutional level, DPPA was responsible for transitory vulnerability, while FSCB dealt with chronic vulnerability. In practice, though, many perceive that this distinction between chronic and transitory vulnerability is not so clear-cut in reality, and that there is some movement of households between categories.⁷

The recent (and ongoing) Business Process Re-engineering (BPR) process throughout the government during 2008-2009 has again restructured the institutional arrangement for disaster risk management, and established the Disaster Management and Food Security Sector (DMFSS) under the Ministry of Agriculture and Rural Development (MoARD), with a significant shift in policy direction. DMFSS now assumes all responsibilities of the former DPPA and FSCB. DMFSS oversees two directorates: the Food Security Program Directorate (FSPD) and the Early Warning and Response Directorate (EWRD). The diagram on the following page illustrates the current structure of DRMS within MoARD.

BPR, which began more than a year ago, has had a major impact on government capacity, resources, and continuity, and has resulted in staff reductions across ministries. Staff of DMFSS in the national-level MoARD

was streamlined to reduce 60 percent of the staff, including some of the most experienced and skilled staff. There was less turnover at the regional DMFSS level, and a new cadre of DMFSS staff was created at the woreda (district) level. Thus, many of the current staff in DMFSS are new, and/or lack significant practical experience in disaster risk management. As some donors and NGOs are now beginning to re-engage with Government and try to re-establish partnerships with new staff, the DMFSS is in need for large-scale institutional and capacity building during this transitional and transformational phase.

Under the new structure, DMFSS is undergoing a major shift in its approach from traditional reactive ex-post emergency response and relief work to pro-active ex-ante preparedness and disaster risk reduction. The new approach to DRM is highlighted in the new DRM Policy, which is a revision of the 1993 NPDPM. The new

⁷ Burg, Jericho. 'Measuring Populations' Vulnerabilities for Famine and Food Security Interventions: the Case of Ethiopia's Chronic Vulnerability Index.' *Disasters*, 2008.

DRM Policy is still not completed and needs to be submitted to the legislature for approval. The new and ambitious DRM policy is organized according to Hyogo Framework for Action (HFA) priority areas and addresses some of the weaknesses of the 1993 policy, including the focus on drought and lack of information on community vulnerability and flood preparedness. Despite DMFSS's shift toward proactive ex-ante disaster risk management and explicit attention to HFA principles in the new policy, Ethiopia is not yet a signatory to HFA and has not established a national platform. Becoming a signatory to HFA would demonstrate Ethiopia's commitment to the broad principles and strategies outlined in HFA, and would constitute an important political gesture for the new unit. It is anticipated that the new national DRM policy will be presented to Parliament in mid-late 2009 and potentially ratified in 2010.

Government capacity at all levels, but particularly at the national level, is a critical issue in the establishment and implementation of this new mandate and proposed DRM policy. Successful implementation of the new DRM policy will require the development of a concrete and detailed strategic framework and implementation plan. The failure to fully implement the existing NPDPM has been attributed to the chronic capacity problem at all levels and lack of legislation to enforce the implementation of the Policy. Major stakeholders, particularly key line departments, do not always accept and support the main DRM strategy - the Employment Generation Scheme (a mechanism to link relief and development) - as part of their mandates. Links between responsibility, authority and accountability have not been clearly understood and observed. This is a major priority for making the new DRM Policy an effective vehicle for DRM.

Lack of coordination and cooperation among development partners and among government branches, and the lack of a coherent, comprehensive approach to DRM, are the main challenges to the implementation of the new DRM mandate. DMFSS needs to take a strong lead in providing a coherent framework and policy for DRM at the national, regional, and local levels. There is also a need for DMFSS to play a significant coordination role among the many actors involved in DRM, and to provide the donor and NGO community with a clear picture of how the various DRM investments and interests in the country are aligned.

There is also a strong need for greater coordination by DMFSS for sectoral-level DRM activities within the line ministries. DMFSS is the lead agency for dealing with hazards including drought, flood, and food insecurity, and the coordination of DRM across the ministries. Line ministries address the integration of DRM issues at the sectoral level. The Ministry of Water Resources, for example, is responsible for flood preparedness and the coordination of responses to water and sanitation-related disasters including floods. The National Meteorological Agency (NMA) falls under this ministry and prepares and disseminates monthly, seasonal, and annual climate bulletins and seasonal and annual hydro-meteorological bulletins; NMA also finalized the Government's National Adaptation Program of Action (NAPA) in 2008 and is mobilizing financial resources for its implementation.⁸ The Ministry of Health oversees an emergency preparedness, early warning, response and recovery system for health emergencies linked to hazards including floods and drought. These DRM activities at the sectoral level need to be better coordinated by DMFSS to avoid duplication of efforts and develop common methodologies and baselines for risk profiling (see next section for more details on risk profiling)

There is a recognition that food security and early warning activities must be decentralized to regional and woreda (district) levels. In 1995 the new constitution established a decentralized federal system that divided the country into a series of semi-autonomous Regional States. Most responsibilities for the planning and implementation of development policies and programs were decentralized to this level. Each region has its own set of government institutions which largely replicate those at the federal level. Resources and responsibilities for service delivery and

8 Other environmental strategies and policies include: (i) the 20-year Ethiopian Forestry Action Program (EFAP) formulated in 1994; (ii) the Ethiopian Water Sector Strategy formulated by the Ministry of Water Resources in 2001 and its 15-year (2002-16) water sector development program; and (iii) the Ethiopian National Biodiversity Strategy and Action Plan prepared in 2005 in fulfillment of the country's obligations following ratification of the UN Convention on Biodiversity.

project implementation have been moved to the woreda offices. In practice, however, both woreda and regional policies are still guided by federal sector policies and by cross-sector strategies and programs.⁹

A second phase of decentralization in 2002 established the woredas as the center of socio-economic development and empowered woreda administrations. The woredas now have economic autonomy and receive direct block grants from the regional level. Each woreda now has an elected council, from which are elected a woreda administrator and deputy who exercise overall leadership. The administrator chairs the woreda cabinet, which consists of the heads of the various government departments found at this level.¹⁰

There is a Task Force on DRM, led by DMFSS, that is supposed to bring together all of the Ministries that deal with DRM at the sectoral level:¹¹ Ministry of Water Resources, Ministry of Health, Ministry of Agriculture and Rural Development, Ministry of Environment, and NMA. This forum and other similar working groups and platforms, including the Early Warning Working Group (EWWG), Rural Economic Development – Food Security (RED-FS) Group, and the Sustainable Land Management (SLM) national platform, need to be better coordinated and integrated, with the clear establishment of roles and responsibilities. However, during and immediately after the BPR, this Taskforce has not been functioning. It is important to re-establish a functioning Taskforce on DRM to help finalize the new DRM Policy and to help lead the process for developing a detailed operational strategy and implementation plan.

HFA Priority # 2: Disaster Risk Assessment, Monitoring, Early Warning

RISK ASSESSMENTS

A major priority of the DMFSS is to develop risk (hazard/vulnerability/coping) profiles at the woreda level.

The purpose of the profiles would be to integrate the baseline data on livelihood zones (disaggregated by livelihood groups) developed by the USAID-funded Livelihoods Integration Unit (LIU) with historical woreda-level data on hazards (e.g., floods, drought, malaria outbreaks, livestock disease) provided by the line ministries to determine multi-hazard risk profiles at the woreda level. Ultimately, this information can serve as a source of forecasting and early warning information based on historical data and also based on real-time data. In addition, the risk profiles can serve as a tool for analyses and planning exercises based on the interface between sustainable land management (SLM), DRR and CCA, and incorporate information on other sectors such as water balances, health and nutrition, land use, etc.

As such, DMFSS is seeking a common methodology for its proposed risk profiling. The existing early warning system places more emphasis on the livelihood zone database (i.e., vulnerability profiles), and how climate variability (notably lack of rainfall) can impact household well-being in terms of food production and consumption. It is possible to have more detailed historical and “real-time” multi-hazard data to estimate the potential disaster risks, and to extend the number of household well-being variables under consideration and to better model coping mechanisms and other household adjustments to changing conditions (including changing prices). Thus, the woreda-level risk profiling could provide a vast amount of information to integrate monitoring, forecasting, early warning systems, contingency plans and contingency financing for multi-hazard analyses that cover many sectors.

EARLY WARNING SYSTEM

The National Early Warning System (EWS) has been in place in Ethiopia since 1976. It is supported by a National Committee for Early Warning (NCEW), whose members, as stipulated in ‘Directives for Disaster Prevention and

9 Ethiopian Strategic Investment Framework for Sustainable Land Management (Draft). SLM Secretariat. August 2008.

10 Ethiopian Strategic Investment Framework for Sustainable Land Management (Draft). SLM Secretariat. August 2008.

11 Additional ministries and agencies with relevance to DRM include the Ministry of Federal Affairs, Ministry of Transport and Communication, Ministry of Works and Urban Development, Ministry of National Defense, Ministry of Mines and Energy, and Environmental Protection Authority.

Management,' include senior staff members of EWRD, Ministry of Agriculture and Rural Development, Ministry of Health, Central Statistical Authority, Ethiopian Mapping Authority, and NMA. In 1996 the multi-agency Early Warning Working Group (EWWG) was established to coordinate early warning activities related to food-insecurity among government agencies, donors, UN agencies, and NGOs. Early warning committees at all levels, including woredas, gather information and report to higher-level committees.

The EWS conducts hazard assessments periodically and yearly by monitoring social, economic, cultural and physical indicators. The EWS was established to “monitor and warn the threat of disasters ahead of time to trigger timely, appropriate, and preventive measures.” However the primary focus of the EWS has been to monitor causal factors of food insecurity. Thus it monitors the occurrence of drought, rainfall, pests, and the outbreak of human and livestock diseases that affect the availability of, and access to food. The existing EWS is not well-suited to fast-onset natural disasters such as floods, and certain rapidly spreading diseases and pests, and conflicts.

Communication among the kebele (community), woreda, regional, and federal levels is at the core of the early warning system and must be strengthened for effective functioning of the system. This includes improved systems for data collection, analysis, and dissemination to end users, as well as strengthening of the communication channels from the community to national levels.

There is widespread recognition, among Government and development partners, of the need to develop a more unified, transparent, coordinated, and objective early warning system, that has a system of “checks and balances.” Although more than 30 early warning systems, methodologies, and approaches exist in the country, there is no coordinating framework that brings together the different streams of information into a multi-sectoral early warning system that assesses hazards in, e.g., agriculture, health, nutrition, and natural resources management.¹² There should be one major unified early warning system that assesses multi-sectoral hazards across the country, including monitoring of drought risk, food insecurity, health epidemics, malaria outbreaks, livestock diseases, and market information. This requires the coordination of early warning activities from the community level up to the federal levels, across line Ministries at the federal level, and among the many actors and donors working on early warning issues at the community, regional, and national levels.

There has been some progress toward the development of unified early warning systems. In recent months the USAID-funded FEWS NET and the WFP-funded Vulnerability Analysis Mapping (VAM) have joined forces to generate a unified monthly Early Warning Bulletin. This is a major stride toward streamlining and integrating existing monitoring and early warning systems in Ethiopia. In addition, DMFSS has requested technical assistance from FEWS NET and VAM to help in preparation of monthly reports by Government.

The Government has made a strategic decision to decentralize the early warning system to the woreda level, particularly with regards to slow-onset risks such as drought and food insecurity. Given the importance of data captured and used at the woreda level, DMFSS needs to focus on woreda-level capacity building for monitoring and early warning, along with contingency planning and financing. In the existing system, the key information gathered and potential decision-making is at the woreda level. This allows information gathered at the community level to be used by those at the community level. One potential mechanism for the transfer of information between the community, regional, and national levels is through the WoredaNet system, an initiative to connect the woredas through a network. This system is largely non-functional at present but has the potential to be an important mechanism for information dissemination.

12 Sue Lautze, Yacob Akalilu, Angela Raven-Roberts, Helen Young, Girma Kebede and Jennifer Leaning.: Risk and Vulnerability in Ethiopia: Learning from the Past, Responding to the Present, Preparing for the Future. A report for the U.S. Agency for International Development, 2003.

Improved data collection at the local level and a strengthened multi-hazard early warning system require reliable information on climate monitoring. The National Meteorological Agency (NMA) currently has about 1,000 hydro-meteorological stations of various classes located throughout the country,¹³ however, information at the local level is seen as unreliable, and not captured in a way that would allow the community itself to use the data for early warning and forecasting, and for planning of crop-livestock systems. There is a need to provide capacity building for better and more reliable climate information at the local level through climate downscaling, expansion of hydro-meteorological stations, and support for new technologies.

The NMA is promoting the “Mali model” for community-based climate monitoring whereby climatic data, along with other data (e.g., on vegetation, crops and livestock status, human and animal health and nutrition, water resource availability and quality, environmental indicators, etc) are collected at the community level to help in forecasting and early warning, and also to better understand local conditions. In turn, this information can be used together with agriculture and health extension agents for planning farming systems and livelihoods that have higher returns, are more resilient to hazards, and are environmentally sustainable.¹⁴

CONTINGENCY PLANNING

Along with capacity building for the early warning system, there is a clear need to strengthen the entire contingency planning process, including the development of contingency plans at all levels, formulation of

objective and transparent “triggers” for the plans, and integration of the plans into the EWS. Woreda level risk profiles can be key for linking EWS and contingency plans. Contingency plans are currently developed at the national level to guide emergency responses, and are activated by the Policy and Planning Department of DMFSS and the associated regional Disaster Prevention and Food Security Bureau. The movement toward decentralization of the EWS and the transfer of more responsibilities to the woreda level, including the collection of early warning information, requires greater capacity and responsibility at grassroots levels to develop appropriate and actionable contingency plans. This includes the development of alternative contingency planning and funding mechanisms, along with risk financing and risk transfer mechanisms (including index-linked insurance) to strengthen and complement contingency funds.

RISK FINANCING

Within the framework of the NPDPM, a National Disaster Prevention and Preparedness Fund (NDPPF) has been established as an emergency fund that provides resources for carrying out relief measures. The Fund is owned at the federal level and is managed by a National Disaster Prevention and Preparedness Fund Administration (NDPPFA). The Fund, which is guided by a Board of Directors and with technical involvement of major donors, intends to provide loans to agencies involved in disaster reduction. The NDPPFA has been operational and supported relief measures in three instances in 2003; however, this fund is relatively new and has limited capacity.

A risk financing mechanism is being established through the LEAP (Livelihoods, Early Assessment and Protection) index, supported by the World Food Program and the World Bank. The LEAP index is intended to harmonize key components of a risk management framework designed to translate early warning information into early emergency response. LEAP produces good indicators of yield shortfalls and livelihood stress and has been used by the Government for early warning and crop stress monitoring during 2008, while the World Bank has used the index to help

13 There are about 18 synoptic “full-service” stations, 180 “indicative” stations, 300 rain and temperature gauge stations, and 500 rain gauge stations.

14 See *Climate Risk Management in Africa: Learning from Practice*, edited by M.E. Hellmuth and others. (2008) International Research Institute for Climate and Society. The chapter “Agriculture in Mali” provides a good overview of the “Mali model” for community-based climate monitoring.

determine regional allocations of a US\$25 million contingent grant to livelihood-stressed beneficiaries. The framework is designed to protect five million livelihoods and would scale up the existing Productive Safety Net Program (PSNP) to reach transient food insecure beneficiaries.

To quote Ato Mathewos Hunde, Director of the EWRD of DMFSS:

“Early warning systems are useless unless backed up by contingency plans and financing”

HFA Priority #3: Knowledge and Capacity Enhancement for DRM

Ethiopia’s undergraduate and graduate program on DRM at Bahir Dar University is an important mechanism to increase knowledge and capacity enhancement for DRM, and should be supported as a critical element of an overall national DRM strategy. The Department of Disaster Risk Management and Sustainable Development (DRMSD) was developed within the Faculty of Agriculture and Environmental Sciences at Bahir Dar University (BDU) as a response to an identified need to build more resilient communities through strengthened capacity and sustainable development in Ethiopia. The three-year interdisciplinary undergraduate DRMSD curriculum was created in 2005 by a joint committee of experts (BDU, Save the Children/UK and Canada and DPPC).

By strengthening and expanding upon the undergraduate DRMSD program at Bahir Dar University, USAID is funding an interdisciplinary Disaster Risk Science and Sustainable Development Masters of Science program. The curriculum is structured broadly to have both a proactive component that develops the skill to assess the underlying vulnerabilities of different livelihood systems, contributing to sustainable development, and a reactive component that addresses all stages of the disaster risk cycle.

Continued support for applied research and studies on DRM-related issues conducted by other Ethiopian research institutes is important to further the DRM agenda in the country and to build capacity of local institutions. Such institutions include the Ethiopian Development Research Institute (EDRI) and the Ethiopian Institute of Agricultural Research (EIAR).

HHFA Priority # 4: Disaster Risk Reduction and Financing

RISK REDUCTION

Disaster risk reduction in Ethiopia is closely linked with poverty reduction, food security, and sustainable land management (SLM) initiatives at the community and local level. Programs to reduce vulnerability include: increase crop and livestock production and productivity of vulnerable population through moisture retention, soil and water conservation (SWC), water harvesting and pasture development activities and improvement of extension services; programs that improve the access of poor people to food in chronically food insecure areas through implementing diversified income generating and cash based safety net, provision of credit and skill training; programs that improve health and nutrition including water and sanitation, nutrition education, and preventive health activities; and resettlement programs to provide access to land to the landless and/or to those who are settled in agriculturally marginal areas.

Although Ethiopia is mainly a rural country and largely dependent on agriculture, in urban risks are increasing because of increasing hazards and vulnerabilities (e.g., increased population and informal settlements, industrialization, and changing land use patterns). In particular, the Environmental Protection Agency (EPA) has emphasized that industrial water and air pollution could contribute to a major environmental disaster. Also, lack of adequate household and industrial solid waste management contributes to poor sanitation and drainage and increases

exposure and vulnerability to flooding and disease. EPA expressed urgency to address industrial water and air pollution and solid waste management as a means to address risk reduction in urban areas.

HFA Priority # 5: Disaster Preparedness and Recovery

Given the restructuring caused by the Business Process Re-engineering (BPR) and shift toward decentralization, there is a need to assess the best mechanisms for logistics, funding, and distribution of relief supplies during a disaster response. At present DMFSS has institutionalized a Strategic Relief Fleet that provides transport services in areas that are not accessible by long-haul trucks. In addition to short-haul trucks the logistics plan is to mobilize pack animals to transport relief commodities. This system needs to be reviewed for upgrading of the relief fleet; enhancement of delivery mechanisms; and improvement of the logistical system for distribution.

The community level storage facilities known as Relief-Food Outlets (RFOs) are established so that affected populations receive assistance within their vicinity. The Government-owned storage capacity throughout the country is around 1.7 million MT. Primary warehouses are placed in seven strategic locations and have 23,500MT capacity. At regional states level the total storage capacity is nearly 1.3 million MT.

However, most drought-prone areas are inaccessible, forcing beneficiaries to travel long distances to collect food rations. During emergencies, it is a common practice to use schools and other public facilities for storing food as necessary. However, transportation of relief food from ports to the primary warehouses has not caused a major problem so far although port congestions have been reported periodically.

The UNDP, though UNDP/BCPR, has just initiated a new integrated early recovery program that is a multi-sectoral, multi-level and multi-stakeholders response mechanism to risk and disaster management. The UNDP's new integrated early recovery program aims at restoring the livelihoods of disaster-affected communities and provides basic social services. The objective is to strengthen disaster response systems by lessening the negative impacts of disasters and enhancing the positive development process.

3. INTEGRATION OF DISASTER RISK MANAGEMENT IN DEVELOPMENT STRATEGIES

The FY 2008-2010 Ethiopia CAS recognizes the risks posed by climatic shocks, including droughts and floods, and the need to reduce poverty and strengthen livelihoods for food-insecure Ethiopian households to withstand adverse climatic shocks. The CAS identifies the potential entry points for reducing household vulnerability from food insecurity. These include existing programs such as the Productive Safety Nets and Food Security program as well as proposed programs such as the Land Management Project and the Tana Beles Integrated Water Resource Development Project. The CAS also emphasizes urban development and extending infrastructure for poverty reduction.

The Ethiopia Plan for Accelerated and Sustainable Development to End Poverty (PASDEP, 2006-2010) provides an overarching policy strategy for reducing poverty and addressing food security. PASDEP builds on the initiatives pursued under the Sustainable Development and Poverty Reduction Program (SDPRP), particularly in promoting agricultural and rural development, developing human capital, promoting local capacity building in support of the decentralization process, increasing household access to primary health care, and responding more effectively to the HIV/AIDS pandemic.

4. KEY DONOR ENGAGEMENTS

There are many ongoing donor activities in DRM in Ethiopia. A major challenge is to better coordinate efforts between Government, donors, NGOs and civil society to provide a more integrated and effective DRM program that is synergistic and not duplicative and/or contradictory.

World Bank and Other Donor-Supported Projects Related to DRM in Ethiopia		
Ongoing Projects and Organizations	Indicative budget, years	HFA activity area(s)
World Bank Projects		
Facilitating Provision of Baseline Vulnerability Information on Flood-Exposed Communities in Ethiopia (GFDRR Track II)	\$550,000 2008-2010	2
Mitigating Impacts of Adverse Shocks on Nutrition and Health (GFDRR Track II)	\$745,000 2008-2010	2, 4
Weather Risk Management Framework using Weather-Based Indices (GFDRR Track II)	\$660,000 2008-2010	2, 4
WMO/IGAD Climate Predictions and Applications Center (ICPAC) (GFDRR Track I)	\$473,000 2008-2010	1, 2
Economics of Adaptation to Climate Change (EACC) – Ethiopia Case Study	\$80,000 2008-9	2,3,4
Food Security Project (World Bank, CIDA; DFID; Italy)	\$85 million IDA, with other donor funds to a total of \$110 million, 2002-2009	1,2,4,5
Productive Safety Net Program (PSNP) II (multi-donor project) ➔ includes a specific component for risk management	\$175 million WB/IDA contribution with other donor funding to a total of \$906 million; 2007-2010	1,2,4,5
Pastoral Community Development Project (PCDP) II APL ➔ includes a specific component for risk management	\$80 million 2008-2013	1,2,3,4,5
Protection of Basic Services in Ethiopia (PBS) II	\$540 million IDA plus donor contributions, 2009-2014	2,4,5
Ethiopia Financial Sector Capacity Building (National Bank of Ethiopia; NMSA; Ethiopia Inst of Banking & Insurance; IMF; IFAD)	\$15 million 2006-2009	4
Rural Capacity Building Program (WB/CIDA program)	\$54 million WB/IDA, \$17 million CIDA 2006-2011	1,4
Ethiopia National Nutrition Project	\$21 million IDA, 2008-2013	2,4
Irrigation and Drainage Project	\$100 million IDA, 2007-2015	2,4,5
Eastern Nile Flood Preparedness and Early Warning	\$3.5 million (Phase I) 2007-2010	2,4,5
Sustainable Land Management (SLM) Country Program (IDA, GEF, GTZ)	\$19.6 million IDA 2008-2013	1,2,4,5
Tana and Beles Integrated Water Resources Development Project (World Bank, Finland; MoWR; river basin organizations; regional BoARDS; ENTRO) ➔ includes a specific component for risk management	\$45 million IDA 2009-2013	2,4,5

(Cont.)

World Bank and Other Donor-Supported Projects Related to DRM in Ethiopia		
Ongoing Projects and Organizations	Indicative budget, years	HFA activity area(s)
World Bank Projects		
Donor Projects		
UNDP Program for Food Security and Recovery	\$4.4 million for 2009 2009-2011	1,2,4,5
UNDP Recovery Strategy for Ethiopia	Salary for 1 international and 3 national, 2009	1,4,5
UNDP Technical Assistance (IT Support) for DMFSS	\$300,000 (estimated), 2009	1, 2
UNDP/BCPR Early Recovery Program	\$3 million, 2009-2011	1,2,4,5
WFP Managing Environmental Resources to Enable Transition to Better Livelihoods Project (MERET)	Planned budget for 2009: about 32,000 MT food	1,2,4,5
WFP Relief Program (save lives and livelihoods in emergencies through food and non-food relief)	\$4.9 million	4,5
WFP HIV/AIDS (multi-donor fund, PEPFAR, Global Fund)	\$22 million; \$43 million with other donor contributions, 2008-2010	3,4
WFP Food for Education (CIDA, US Government)	\$43 million, (2007-2011)	4,5
WFP Targeted Supplementary Feeding Program	\$1.2 million	4,5
USAID Livelihoods Integration Unit	\$5 million 2004-2009	1,2,3,4,5
USAID Miscellaneous Activities: Support for Preparation of New DRM Policy, support for Preparation of Multi- Hazard Profiles	2008-2009	1, 2
USAID Support to Bahir Dar University	\$300,000 per year 2008-2010 (?)	
USAID Famine Early Warning Security Network (FEWS NET)	???	1,2,3
FAO SLM Activities (Land tenure/administration, Participatory Forestry Management (PFM)/Natural Resource Management (NRM), watershed management)	\$1.6 million 2009-2011	2,4,5
DFID: Productive Safety Nets Project	Approx \$30-40 million per year 2006-2012	1,2, 3, 4, 5
DFID: Risk Transfer	Approx \$15 million 2010	2, 5

5. GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY (GFDRR): ACTION PLAN

HFA Priority Areas	Key Partners*	Estimated GFDRR Budget for 2009-2011	Already Approved GFDRR Funding for 2008-2010
HFA 1: Strengthen national disaster risk management strategies and institutions			
<ul style="list-style-type: none"> a) Support for Ethiopia to become a signatory to the Hyogo Framework for Action (HFA), and to establish a National Platform for DRM by strengthening existing platforms dealing with issues related with DRM b) Finalization of new DRM Policy, with process of awareness building and advocacy c) Support for development of DRM Implementation Strategy and Plan d) Support for preparation of DRM legislation e) Institutional and capacity assessment of DRMFSS, line ministries, and regional, and woreda levels to implement new DRM approach f) Support to line ministries to mainstream DRM into sectoral strategies and plans g) Capacity needs assessment and subsequent capacity building at national, regional and woreda levels (e.g., training, computers, transport logistics and communication equipment including cellphones and PDA) to implement DRM h) Develop software and application packages to use woreda.net and other IT technologies/systems an integrated DRM information and communication links between kebele, woreda, regional and national levels i) Funding for DRM Technical Advisor for DMFSS j) Funds for selected short-term consultancies 	UN-ISDR, IGAD, ECA, UNDP, USAID, DFID	\$1,300,000	
HFA 2: Ensure risk and vulnerability assessments, early warning and contingency planning and financing – in both rural and urban areas			
<p>1) Risk Assessments:</p> <ul style="list-style-type: none"> a) Technical support to develop methodology and implementation modalities of risk profiling (hazard/vulnerability/coping) at woreda level (including collection of additional data to build upon existing livelihood zone baselines and hazard profiles) b) Technical support to develop methodology and implementation modalities to link recently developed WB-DFID financed climate change computable general equilibrium (CGE) models to woreda level risk profiling c) Training, experience sharing (with other countries), and capacity building for DMFSS staff (and other relevant persons and institutions) to support of a) and b) d) Piloting of woreda level risk profiles that aggregate community/ kebele level risk profiles (in areas with different hazards and different livelihood zones, both inside and outside areas supported by World Bank projects) e) Support for preparation of woreda level integrated DRM and Environmental Plans to be mainstreamed into woreda-level Development Plans 	WFP, UNDP, UNICEF, IGAD, ECA, DFID, IFPRI, TerrAfrica/ SLM Network, NGOs	\$1,400,000	\$550,000 (GFDRR Track II Funding for Flood Hazard Risk Assessments, GFDRR \$350,000 plus co-financing)

Ethiopia (Cont.)			
HFA Priority Areas	Key Partners*	Estimated GFDRR Budget for 2009-2011	Already Approved GFDRR Funding for 2008-2010
HFA 2: (Cont.)			
<p>1) Risk Assessments (Cont.):</p> <p>f) Piloting of woreda level risk profiles that aggregate community/ kebele level risk profiles (in areas with different hazards and different livelihood zones, both inside and outside areas supported by World Bank projects)</p> <p>g) Support for preparation of woreda level integrated DRM and Environmental Plans to be mainstreamed into woreda-level Development Plans</p>			
<p>2) Early Warning Systems: Multi-Hazard Forecasting and Warning</p> <p>Support to the National Meteorological Agency (NMA and others):</p> <p>a) capacity building for improved timeliness, reliability and local specificity of climate forecasting through use of new information (e.g., climate downscaling) and technologies (e.g., satellite imagery), and expansion of meteorological stations including communities-based "stations",</p> <p>b) improve flood monitoring, forecasting and early warning system</p> <p>c) improved systems for data collection, analysis and dissemination to end users</p> <p>d) improved access to NMA data by DMFSS through networking and improved coordination</p> <p>e) improved application of climate information and forecasts for DRM by end users at various levels, including the community</p> <p>f) link to other DRM monitoring and forecasting systems (e.g., health epidemics and malaria forecasting)</p> <p>g) adopt relevant climate risk modeling techniques and tools, and build capacity for their application (e.g., LEAP)</p> <p>h) improve capacity for preparation of early warning bulletins at national, regional and woreda levels</p>	IGAD, ACPC (ECA), WMO UNICEF, WHO, WFP, FAO, USAID FEWSNET	\$600,000	<p>\$473,000 (GFDRR Track I IGAD regional project, part of which to benefit Ethiopia)</p> <p>\$750,000 (GFDRR Track II funding for Health Early Warning Systems to support National Nutrition Project, \$350,000 GFDRR funding plus co-financing)</p>
<p>3) Contingency Planning and Financing: Moving from Early Warning to Response</p> <p>a) Support for design of community and woreda level integrated multi-sectoral monitoring, early warning, contingency planning and contingency financing mechanisms (using objective and transparent "triggers" that are linked to the community and woreda risk profiling)</p> <p>b) Review and revise early warning guidelines in line with new DRM approach</p> <p>c) Capacity building to implement integrated early warning system that includes monitoring, forecasting, warning, contingency planning and financing linked to rapid response at community, kebele, woreda, regional and national levels</p> <p>d) Support for development of different risk financing and risk transfer mechanisms (e.g., index-linked insurance) to strengthen and complement contingency funds (e.g., for catastrophic events)</p>		\$700,000	\$330,000 (GFDRR Track II funding for Risk Financing piloting to support Productive Safety Project)

(Cont.)

Ethiopia (Cont.)			
HFA Priority Areas	Key Partners*	Estimated GFDRR Budget for 2009-2011	Already Approved GFDRR Funding for 2008-2010
HFA 3: Increase and sustain awareness creation, education and capacity building			
a) Support to strengthen BA and MA Programs in DRM at Bahir Dar University, including applied research b) Support for specialized training programs in DRM at Bahir Dar University in DRM c) Support for DRM-related applied research and studies at other Ethiopian institutions (e.g., EIAR, EDRI)	USAID, DFID, IGAD	\$400,000	
HFA 4: Reduce underlying risk and vulnerability (and integrate DRR into sector planning and practices for example in water, agriculture, health, environment)			
Design and implement pilot programs to reduce industrial water and air pollution, and to improve solid waste management in Addis Ababa and Bahir Dar (linked to climate change programs that provide "credits" for pollution reduction)	UNDP, DFID, GEF	\$300,000	
HFA 5: Improve emergency preparedness and response through capacity strengthening			
a) Conduct study to propose optimal logistics and funding mechanisms for decentralized rapid response and recovery (e.g., identify needs for warehouses for pre-positioning of food and non-food items, maintenance of strategic reserves, relief fleet, and management/administration of the system) b) Support for implementation of a), above c) Support for development of appropriate post-disaster needs assessment methodologies and techniques for rapid onset disasters, and implement training and capacity to facilitate early recovery focusing on community, kebele, woreda, regional levels d) Support for design of decentralized emergency rapid response systems based on all of the above, that also strengthens regional collaboration and information exchange	WFP, UNDP, UN-OCHA, UNICEF, IGAD, ECA, USAID, NGOs	\$300,000	
GFDRR Track II Funding:		\$5,000,000	\$1,030,000**
Co-financing for GFDRR Track II Projects			\$400,000
Total GFDRR Track II Funding and Co-financing			\$6,430,000
GFDRR Track I Funding			\$473,000

Note: this matrix reflects the overall priorities of the DMFSS. The proposed GFDRR funding can, obviously, only provide some of the required funds to carry out the activities.

* Key Partners: This refers to key partners for ongoing or potential funding and/or technical support. There are many ongoing and proposed activities in DRM in Ethiopia. There is expressed interest to provide support for the activities detailed in this matrix in different parts of the country. There are also ongoing World Bank projects funding activities in these priority areas in different parts of the country.

** Only a very small part of these budgeted funds have been utilized to date.

See: www.gdfr.org for details about GFDRR Track I and II Projects in Ethiopia and other countries, along with Track III and South-South Cooperation