GHANA

In order to prepare the Country DRM Plan for Ghana the Africa DRM Team agreed with UNDP on beforehand to undertake a joint UNDP-World Bank mission. The mission was also accompanied by a representative from ECOWAS and a member of the donor coordination group on Environment. This joint mission held extensive meetings with the National Disaster Management Organization (NADMO), and met representatives of the Ministry of Interior (MoI), Environmental Protection Agency (EPA), Ministry of Lands and Natural Resources (MoLMNR), Ministry of Food and Agriculture (MoFA), Ministry of Local Government and Rural Development (MoLGRD), Ministry of Water Resources (MoWR), Ministry of Finance (MoFEP), National Meteorological Agency, and various development partners, including UNICEF, WFP, the Danish Embassy and UNDP. The team undertook a field visit to a District Office of NADMO. The Mission also met with the technical team leading the development of the Northern development Initiative (NDI), and included a one day workshop with staff of the Country Management Unit.

1. DISASTER RISK PROFILE

Hazard Risks[1]

Ghana ranks high amongst African countries most exposed to risks from multiple weather-related hazards. Ghana is exposed to floods and droughts, particularly in the Northern Savannah belt. Epidemics, pests, infestations and wildfires occur across the country.[2] There are risks of land slides, urban hazards, and coastal hazards (e.g. storms, storm surges, and coastal erosion). Coastal erosion has become more pronounced, especially along the Eastern coastline. Seismic hazards are most pronounced in areas around Accra, including the Akosombo Dam. The catastrophic floods in the North in 2007 affected more than 325 000 people with close to 100 000 requiring assistance in some form or another to restore livelihoods. The 2007 floods followed immediately after a period of drought that damaged the initial maize harvest, and were indicative of the high variability in climate and hydrological flows in Northern Ghana. The long-term and economy-wide impacts on the regional economy are still not well known, but an estimate of damage alone exceeds USD 130 million. Between 1991 and 2008 the country experienced six major floods; the largest number of people affected being in 1991

1 Some key sources for the Country DRM Plan: Amoako, P. Y. O. and S.T. Ampofo (eds) 2009 Hazard Mapping in Ghana, Report to NADMO, Accra; NADMO website: www.nadmo.org, www.preventionweb.net, HFA Regional Summary of Africa, self-reported data; EM-DAT: The OFDA/CRED International Disaster Database, Université catholique de Louvain, Brussels, Belgium; UNDP-Ghana: http://www.undp-gha.org/project.php?page=25;

2 Between 1995 and 2008 the country experienced six major floods in the following years (number of people reported affected in brackets); 1991 (2.0 mill), 1995 (700 000), 1999 (325, 000), 2001 (144 000), 2007 (325 000), and 2008 (58 000). The last major drought was in 1982-83, affecting more than 12 million people..

(2.0 million people). The floods have revealed weaknesses in the disaster preparedness and emergency response system, and exposed vulnerabilities of people, land use systems and infrastructure.[3] In this regard, it is important to understand the interface between risk, hazard, vulnerability, and capacity (risk = hazard x vulnerability/capacity).

Vulnerability and Exposure to Hazards

Current development dynamics and demographic changes put more people at risk of disasters in Ghana, related to increasing rural poverty, rapid urbanization, growth of informal urban and coastal neighborhoods, poor urban governance, and declining ecosy tems.[4] The high dependence on natural resources in rural areas (more than 60 percent of Ghana's 20 million people depend directly on agriculture), lack of secure livelihoods, and limited informal and formal social safety nets add to these vulnerabilities. Moreover, there are widespread epidemic diseases, often in combination with HIV/AIDS and malaria. The impacts of localized disasters (droughts, local floods, epidemics and wildfires) are likely to have accumulated impacts on rural livelihoods over time as a consequence of climate change, in particular on communities in the North.

To this end, the severity and depth of poverty is highest in the three Northern regions (Northern, Upper West and Upper East). Out of 18 percent of the total population that live in extreme poverty, 54 percent live in Northern Ghana.[5] Poverty is highest among food crop farmers. Northern Ghana, especially Upper East Region, is also most exposed to land degradation and soil erosion. Land degradation accelerates run off, reduces soil productivity, and capacity of ecosystems to provide critical functions and services, including regulation of floods in key watersheds and resilience to climate variability.[6]

Rapid population growth and pressure on land resources are often accompanied by unsustainable agricultural intensification, including expansion of (shifting) cultivation, deforestation, and depletion of vegetation cover due to overgrazing. The majority of rural households depend on small-scale agriculture for their livelihoods, while they often lack access to markets and infrastructure necessary to improve farming practices, diversify livelihoods, and build up their assets and coping capacity. Hence, many households engage in non-farm income generation, urban migration (temporary or permanent), or become dependent on formal or informal safety nets through family or neighbors.[7]

Climate Change

Overall, there is evidence that the agriculture sectors (including fisheries, cocoa, cereals, and root crops), and water resources sectors as well as human health and women's livelihoods will be negatively impacted by climate change; the poor being most vulnerable. Moreover, climate change may also contribute to accelerated storm surges and coastal erosion, to which Ghana is particularly vulnerable (World Bank et al. 2006, Dasgupta et al 2009)[8]. Coastal fisheries are undergoing severe changes due to change in sea temperature and currents combined with overfishing and non-functioning resource regimes. Similar issues face Lake Volta, with important implications for the lake

3 The catastrophic floods in 2007 destroyed thousands of houses, and key sections of bridges and roads and other infrastructures including treatment plans and pumps for water supply. It also damaged crops and agriculture lands.

4 The UNDP Human Development Report ranked Ghana 129th of 175 countries and approximately 45 percent of the population live below the poverty line of one USD per day.

5 Northern Ghana has only about 17 percent of the total Ghanaian population.

6 Past studies estimate that 69 percent of the total land surface is prone to severe or very severe soil erosion (EPA 2002), the main manifestation of land degradation in Ghana. A recent study estimated soil erosion to cost around 2 percent of the national GDP (World Bank et al. 2006).

7 Population almost tripled over the last 40 years, from 6.7 million in 1960 to 18.4 million in 2000 (Ghana Statistical Service 2000).

8 Dasgupta, S, Laplante, D, Murray, S, and D. Wheeler, 2009: Sea-Level Rise and Storm Surges. A Comparative Analysis of Impacts in Developing Countries, Policy Research Working Paper 4901, DRG, Environment and Energy Team, The World Bank

ecology and livelihoods of fishermen. Disaster risk and poverty are strongly linked in Ghana, and are in turn intertwined with the reality of climate change. Climate change is expected to expose people to higher rainfall variability, water stress, drop in agricultural yields, and depletion of resource-based livelihoods. This would increase the risk of drought periods, increase evaporation and reduce agricultural productivity (10% lower rainfall is expected by 2050; IPCC 1997). Moreover, climate change will probably result in rising temperatures (1.4-1.6 higher temperature is expected by 2050; IPCC 1997), potentially increasing the risk of forest and bushfires. At the same time, Ghana's economy and rural population depend on sustainable growth in these climate-sensitive sectors.[9]

The impacts of climate risks are likely to magnify the uneven social and spatial distribution of risk in Ghana, and possibly amplify poverty in the North. At the same time, the links between disaster risk and poverty

–in a changing climate–means that reducing disaster risk can help reduce rural and urban poverty, further sustainable development and growth and improve adaptation to climate change.

2. ACTIVITIES UNDER HYOGO FRAMEWORK OF ACTION

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

Confronted with a variety of natural hazards, and prompted by the recent floods in the North, the Government of Ghana has initiated actions on several fronts in order to develop strategies and strengthen institutional capacity in disaster risk management with increasing donor support. Disaster risk reduction has its main institutional home within the National Disaster Management Organization (NADMO) in the Ministry of the Interior. NADMO was established in 1996 under a National Security Council, chaired by the President of the Republic of Ghana. NADMO functions under a National Secretariat, ten Regional Secretariats, one hundred and sixty-eight District/municipal Secretariats and nine hundred Zonal offices. The NADMO Committees at National, Regional and District levels implement the policies, and are supported by Technical Advisory Committees. NADMO has a dual objective of i) to manage disasters by coordinating the resources of Government institutions and non-governmental agencies, and ii) developing the capacity of communities to respond effectively to disasters and improve their livelihood through social mobilization, employment generation and poverty reduction projects (ref. Amendment to the NADMO Act).

Since its inception under the NADMO Act (Act 517, 1996), NADMO has contributed considerably to the management of disasters across the country, despite a constant struggle to obtain resources and maintain response capacity on the ground. A draft National Disaster Management Plan (NDMP) has recently been prepared (as a revision of the 1997 NDMP), along with an Amendment to the Act. These documents will be considered revised to reflect a stronger role of NADMO in DRR and CRM. NADMO has also prepared draft Operational Procedures will also be finalized in view of this. OCHA has helped develop the modalities for a national relief fund, through a three days workshop, which are intended to be captured in the Amendment of the Act. As an organization, NADMO possesses a country-wide structure with representation at regional, district, and zonal levels with about five staff members in each district. As such, the structure of NADMO makes it relatively well positioned to play a key role in disaster response and preparedness – as well as in disaster risk reduction. NADMO does however lack required capacity at all levels and budgetary support to play such a key role (see below).

9 While Ghana's growth was historically furthered by natural resources exploitation (agriculture, forestry, energy), this growth cannot be sustained in face of the alarmingly high rates of degradation, which represents a cost to Ghana's GDP of about 10 percent per year (Ghana Country Environmental Analysis (CEA), World Bank, cited in NREG program document).

Beyond strengthening its capacity in emergency response and relief work, a main challenge for NADMO and its stakeholders is to keep reinforcing the approach to ex-ante preparedness and disaster risk reduction. This approach would need to address the critical factors that drive the increasing exposure to risk in communities of Ghana linked to vulnerable rural livelihoods, poor urban governance and declining ecosystems. Such a shift in focus would need to involve an institutional transformation in NADMO related to e.g. management, capacity, mindsets of staff, and communication systems. It would imply that national disaster management policies and strategies be coordinated with sector programs in policies, legislation, and practice. The choice of approach would need to exploit synergies and ensure mutual reinforcing measures across ministries and agencies more so than what has been achieved in the past. This needs to be done at the national, regional and district level – with outreach mechanisms to engage the community level. This is a tall order that requires sustained Government interest and commitment across all key sector agencies (for further details on institutional capacity building opportunities, see under section HFA 4 and HFA 5).

There is also a need for more regular and substantive exchange of risk information and knowledge across boundaries with e.g., Burkina Faso, Togo, Cote d'Ivoire on floods and other hazards. There is scope for transboundary collaboration on issues of climate change, coastal zone and fisheries management, drought management, and issues related to epidemics and pests. ECOWAS can potentially play an important role in this regard, given its recent strengthening in areas of DRM&CCA.

HFA Priority # 2. Disaster Risk Assessment, Vulnerability Assessment, Monitoring, Early Warning

Ghana has recently undertaken country-wide hazard mapping that covers the broad geographical distribution of disaster exposed areas for key hazards, such as for ge logical (seismic, coastal erosion, and landslides), hydrometeorological (floods), pests and insects, and fires (wild bush fires, domestic, industrial).[10] Other hazards have not yet been mapped. Moreover, the interface between hazard exposure and vulnerability is poorly mapped, and the information is not analyzed and brought together and made available for different audiences on a regular basis, except in some pilot programs. Vulnerability and capacity assessment is ongoing by the National Development Planning Commission (NDPC), and WFP has engaged MoFA and MoH in a Food Security Monitoring System for Northern Ghana.

Climate predictions linked to hazard exposure and vulnerability need to be improved as an information service for targetted early warning systems. NADMO has established Technical Advisory Committees that has the mandate to identify, monitor, and assess hazards. However, these committees need to be strengthened through training and support. The capacity of NADMO to monitor and forecast hazards, and provide early warning and mechanisms for preparedness and early response is limited at all levels. Messages do not reach out. The 2007 floods indicated weak communication and coordination among key stakeholders engaged in emergency response or risk management. There are elements of EWS in place, for example, for river-level monitoring.

A key recommendation would be to assess the need for an effective and decentralized multi-hazard early warning system, including how to design such a system, linked to stronger monitoring, information analysis, communication, and outreach. Such a system would need to start from improved climate predictions and information services from an upgraded National Meteorological service. An early warning system would need to be supported by contingency plans and improved response capacity at local and district levels (and tested through rehearsals and simulations). This would require a coordinated effort by several agencies including between NADMO, Ministry of Environment (EPA), which coordinates work with the National Climate Change Strategy, and the Ministries of agriculture, water, energy and health, which would depend on improved climate information services for decision making.

10 Amoako, P. Y. O. and S. T. Ampofo (eds) 2007: Hazard Mapping in Ghana, UNDP/NADMO, Accra

An early warning system is however no better than its weakest link. Hence, any EWS would need to be accompanied by systematic institutional capacity strengthening and conscious efforts to link e.g. climate information to multimedia communication systems e.g. cell-phones, radio, television, and tailor information to different audiences.

It would be particularly useful to carry out urban hazard mapping – linked to ways of improving urban governance – in one or two coastal cities. This could be done by testing a World Bank Cities Primer methodology (carried out already for Dakar). Flooding in urban areas, especially in informal settlements due to lack of proper drainage system is a key issue; drains often being clogged by solid waste. There is also a need to consider piloting participatory risk mapping in hazard prone areas of vulnerable rural and urban communities.

There is also a need to identify and map key assets and infrastructure at risk as basis for spatial planning, sectoral, or integrated urban or regional planning. This could involve focused mapping of assets in urban and coastal areas and river basins; areas which are most exposed to hazards.

HFA Priority # 3. Knowledge and Capacity Enhancement for DRM

A risk aware population is essential to promoting risk reduction behavior at different levels of society. Hence, public awareness and education about hazard risks and vulnerabilities are essential for effective disaster risk management. Ghana is known for its relatively strong education system and independent think tanks. Some of these institutions conduct specific research in the areas of water resources, pest and insect infestations, epidemiology and geology, and there are experts from academic institutions as members of NADMO's Technical Advisory Committees. However, there are at present no educational programs that directly address DRM. A strategic approach to the inclusion of disaster risk management and climate change in school curricula should be developed, including an approach to the training of teachers.

NADMO has a history of engaging in public awareness building and social mobilization, and received some funding from UNDP recently to revitalize public awareness campaigns (2007/8). A general awareness and sensitization program on DRR & CRM should be designed for different audiences within Government and outside the Government. Initially, community volunteers and leaders could be key target groups of such campaigns, including also Local Assembly representatives. This work is intended to be stepped up with UNDP funding in particular.

HFA Priority # 4. Reducing Underlying Risk Factors and Integration Across Sectors

An increasing number of Government and donor sector programs in Ghana are addressing disaster risk reduction – and related issues of vulnerability and sustainable land management (see below).

To this end, there exists a set of innovative approaches and tools across sectors in the areas of agriculture and rural livelihoods, watershed management, ecosystem management, urban governance, risk transfer, and community-based development that might be applied to a variety of local context in Ghana. The main challenge is to reinforce and mainstream new approaches by linking national policy and governance systems for disaster risk reduction, poverty reduction and climate change adaptation through a coordinated approach. A selection of piloting exercise could be initiated related to for example flood protection; water harvesting/watershed management in drought prone areas; coastal erosion in selected sites; and social infrastructure using safe building norms in collaboration with sector programs.

Development strategies to address hazard risks and vulnerabilities, however, cut across the Government's

sector forms of organization, and require coordination and types and scales of programs well beyond NADMO's mandate and capacity. This is for example recognized in the draft Development Plan for the North, which covers all key sectors and includes a strong focus on mainstreaming disaster risk reduction. Various new sector programs are being planned, including for the North, within which NADMO could usefully play a proactive role and become partner (including new programs with World Bank funding in integrated river basin management, social protection, and carbon finance/forestry).

However, until recently, where NADMO has been capable of engaging sector agencies in the DRR&CRM agenda, it is more from an emergency response perspective rather than from a perspective of mainstreaming DRR/CRM in sector programs and strategies. The National DRR Platform has not started functioning, and few substantive linkages have been built across sector agencies since its inception in 2005. Coordination is relatively week and there are no focal points for DRM in most of the sector agencies; while there is a fairly active Environment Sector Group.[11] Relevant

stakeholder agencies also lack resources and appreciation of what constitutes hazard risks, hampering effective engagement. Hence, the strengthening of NADMO alone would not be sufficient for effective emergency response, say integration of DRR & CRM in planning and development at different levels of society. For example, there is at present no system of integrated physical/environmental/ land use planning at district level which is a responsibility of the Ministry of Environment; a mechanism that could help bring actors together around issues of land use planning, zoning, and codes for climate/risk resilient infrastructure and buildings. Moreover, decentralization processes have moved slowly, and vertical linkages between national sector ministries and local state bodies and local assemblies are not well developed (including between NADMO, the Ministry of Local Government Rural Development, Environment, and MoFA). It is also not clear what role traditional authorities (Chiefs and local leaders), play or can play in this regard.

HFA Priority # 5. Disaster Preparedness and Recovery

In Ghana, the disaster response structure has four levels of organization beyond the community level. Response to a given natural hazard starts with the local level (Zonal Offices of NADMO) determining whether the event is of a magnitude that require outside assistance from the District, Regional or National levels. In reality, due to limited capacity of the Zonal Offices, emergency warnings at local level often rely on ad hoc messages from community volunteers, and/or District Assembly representatives with contacts in rural locations.

The 2007 floods revealed that effective disaster preparedness and recovery operations in NADMO face critical challenges related to coordination and implementation capacity at all levels, due also to inadequate and late release of government funding.[12] NADMO has been underfunded for years, and has received limited government support. Institutional capacity strengthening is required at all levels, including in management, logistics, and transport. The systems of hazard monitoring, early warning and communication are not well-functioning and the hardware is outdated. The system of warehouses, logistics and equipment for effective disaster response is weak – in particular at the level of the regional and district offices. Training and capacity building are lacking, and rehearsals and simulation exercises are done only rarely. There is no substantive DRM planning at district and regional levels. The recent capacity assessment of NADMO concludes that the organization faces low human resources capacity, lack of training opportunities, low remuneration, and weak coordination power in terms of engaging relevant sector agencies in disaster response and emergencies.

11 The National Platform was established in 2005 and a program of action prepared, involving all the key objectives of the HFA (ref. Report on the Establishment of a National Platform for Disaster Risk Reduction in Ghana, Sept. 2005).

12 Sync Consult 2008: Capacity Assessment, Disaster Preparedness of NADMO, Accra (with UNDP funding)

Given that volunteers at local level play a critical role in local level disaster response, it is important to test community-based approaches to disaster risk reduction that may enable volunteer groups and communities and local government to identify and explore appropriate community-based solutions to DRR&CRM.

A main challenge, beyond strengthening the institutional capacity of the response system at different levels, is to mobilize funding and ensure capacity for rapid and early recovery in the aftermath of a disaster e.g. a flood event.

The Government, related to its work with OCHA on establishing a relief fund, expressed an interest in examining various mechanisms for risk transfer and risk financing. Mechanisms for risk financing and risk transfer are still insignificant, reflecting that such measures are still in their early stages also in neighboring countries. There are still no mechanisms developed for private or sovereign catastrophe insurance. In certain coastal areas or water basin areas, where the level of risk and infrastructure exposure is high, financial risk transfer mechanisms can be considered an area for future development in Ghana.

3. INTEGRATION OF DISASTER RISK MANAGEMENT IN DEVELOPMENT STRATEGIES

The mission met strong Government commitment to the integration of DRR & CCA in development policy and programs across key ministries. However, it is fair to say that DRR & CCA have only recently attracted more substantive attention in development planning, even if for example NADMO – as well as key sector ministries – have in various manners been engaged in disaster risk reduction for several years. The renewed attention to these agendas reflects concerns over the 2007 floods as well as observed changes in climate variability. It may also be a response to global trends and increased opportunities for external funding to these agendas. DRR & CCA are increasingly manifest in new donor programs and policies, and have also started to become more firmly reflected in Government sector programs. The National Planning Commission has recently raised the issue of CCA in long term development planning, while DRR has not yet been internalized. The Government budget allocations to disaster management, as a measure of commitment, is limited; NADMO being provided only about $ 5 million annually; less than 5% of this budget set aside for investments and programs.[13]

The 2003-2005 Ghana PRSP does however refer to the potential impacts of climate change and the importance of DRM, early warning, and flood prevention. The Joint Staff Advisory Note, commenting on the PRSP progress in 2006, commends the focus on addressing environmental decline and natural resources degradation, which is seen to severely undermine economic growth, and refers to the need for effort to manage land, forests, mining and urban environment better. But the report does not raise issues of climate risks and variability and effects on sustainable land use. Moreover, the Ghana Growth and Poverty Reduction Strategy – GPRS II (2006-2009) refer to these themes only indirectly with reference to the degrading environment and declining agricultural productivity and its impact on poverty. The focus is on economic growth, human resource development and governance. Hence, DRM is not well integrated in these key planning documents. Similarly, UNDAF (2006-2010) does not refer to DRM and climate change – although issues of environmental degradation and vulnerable groups in the North are addressed.

In the recent years, however, as the next section indicates, the attention to DRR&CCA has moved higher up on the development policy agenda in Ghana, manifest in a set of new innovative donor supported programs and government commitment to the agenda. The most recent World Bank Country Assistance Strategy

13 More than 85% of the budget is for personnel and administrative expenses, according to a review of the 2009 budget presentation. Another example of lack of priority accorded to this field is the fact that the National Action Program to Combat Drought and Desertification (NAPCDD), which was prepared in 2004, only received some funding with the initiation of the UNDP program starting in 2009 (see matrix of donor engagements).

(CAS) (FY08-11) has explicit reference to the need for assisting vulnerable populations, and support measures towards minimizing the impact of climate variability and climate change. This increased attention is evident, for example, in several new UNDP programs, which followed in the aftermath of the recent floods in 2007, and UNDP Annual Work Plan 2009 has a special focus on institutional support to integrated CC and DRR into national development plans. Moreover, the Second Natural Resources and Environmental Governance policy operation (NREG) raises climate risks and climate change adaptation and the need for a new climate change strategy as key issues.

4. KEY DONOR ENGAGEMENTS

Overall, the integration of DRR&CCA in new donor supported programs, some of the most important are listed here, is a clear indication that the "new" development agenda in Ghana has started firmly addressing these cross-cutting fields. The list is not complete.

World Bank and Other Donor Supported Projects in Ghana		
Ongoing Projects and Organizations	**Indicative budget** (where available, details on years covered)	**HFA activity area(s)**
World Bank supported projects		
Ghana North- Sustainable Development, Disaster Prevention, and Water Resources Management (GFDRR)	US $660,000 (2008-2011)	4, 5
Community Co-Management for DRM of Marine Resources in West Africa (GFDRR) (multi-country program; Ghana involved)	US $ 900, 000 (2008-2011)	1, 3, 4, 5
TerrAfrica (Sustainable Land Management – knowledge creation)	(multi-country)	2, 3, 4
Economics of Adaptation to Climate Change (EACC)	(multi-country study) (2009-2010)	2, 3, 4
Natural Resources and Environmental Governance (NREG)	US$ 60 million (2008-2010)	1, 2, 3, 4, 5
Ghana Productive Safety Nets Project	US$ 30-50 million (under preparation)	4, 5
Integrated Water Resources Development and Agricultural Competitiveness Project, Planned (FY10)	US$ 50-100 million (under preparation)	
Ghana Community Based Rural Development Project (CBRDP)	US$ 60 million (ending Dec. 2010)	3, 4
Ghana Urban Water Project	US$ 103 million (2004-2010)	2, 4
Carbon finance project	US$ 30 million (under preparation)	4
UNDP funded projects		
UNDP-Ghana: Mainstreaming DRR and CCA (mainly capacity building)	US$ 700,00 (2009)-	1, 2, 3, 4, 5
UNDP-BCPR: Early Recovery Program for Northern Region	US$ 1,2 million (2009-2010)	1, 2, 5
UNDP-GEF Impacts of CC on Health	US$ 2,0 million (2010-2013)	4
UNDP-UNEP: CC-DARE (for preparation of National CCA Strategy)	US$ 150,000 (2009-2010)	1
UNDP Africa Adaptation Program (AAP)	US$ 2,5-3,0 million (2009-2012)	1, 2, 3, 4, 5

(Cont.)

World Bank and Other Donor Supported Projects in Ghana		
Ongoing Projects and Organizations	**Indicative budget** (where available, details on years covered)	**HFA activity area(s)**
Other donor projects (incomplete)		
Food and Agriculture Budget Support (FABS) and the Agricultural Development Policy Operation (Ag DPO)		4
Ghana Environmental Management Project (GEMP)		2, 3, 4
UNDP-GEF – for sustainable land management (in support of National Action Plan to Combat Drought and Desertification)	(2009-2013)	2, 3, 4

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

Given the substantial number and scale of new donor engagements, including those of the World Bank and UNDP, it is essential to consider the GFDRR support within a broader national framework that ensures a coordinated and harmonized approach. It was thus agreed to develop a *National Program Framework for Disaster Risk Management and Climate Risk Management* which would help ensure a comprehensive and integrated programmatic approach.[14] The World Bank and UNDP agreed to prepare together with Government a program document to this end, under which the UNDP-World Bank/GFDRR projects would be implemented.

The total UNDP-World Bank support for this National Program will be about $ 12 million. Under this national framework program there would be five UNDP supported operations, and the new World Bank/GFDRR "Country DRM Plan" conceptualized as a joint program (See Annex 1 for more details about the joint UNDP-World Bank programmatic approach). The program could later include additional projects, even from other partners.

The new program will include two on-going GFDRR funded programs; i) Ghana North: Sustainable Development, Disaster Prevention, and Water Resources Management (2008-2010).[15] The original funding of US$ 660 000 has been agreed allocated as follows; i) US$ 400 000 for the integrated flood prevention and watershed management strategy for the Volta basin with a focus on developing irrigation potentials (about US$ 25 000 has so far been utilized for a scoping mission). The remaining funding would be utilized to: a) advance work under the Country DRM Plan, including the funding of a consultant to prepare a Government program document as an umbrella for the joint UNDP-World Bank funding; and b) to strengthen capacity for planning and implementation of the new SADA; ii) The second GFDRR funded program is a multi-country program with a component in Ghana: Community Co-Management for Disaster Risk Management of Marine Resources in West Africa (US$ 900, 000). The project will strengthen the capacity of coastal and sea-shore communities in marine and coastal resource management in face of local risk factors, effects of climate change and marine resource over-exploitation. The project combines support for local-level resource management strategies with interventions at national policy and institutional levels. The project includes a component for management of marine resources of Lake Volta.

14 This in recognition of the fact that the two agendas of DRR and CCA are interwoven (yet distinct) – one focusing mainly on emergency response, and early recovery, disaster preparedness and reduction of risks – the other mainly on medium- and long-term adjustments to climate change through adaptation and mitigation. But both agendas meet under the objective of addressing climate risks management (CRM).

15 The Ghana specific GFDRR grant, approved in the context of the post-2007 floods, supports three work-streams: (i) support to the development of the Northern Development Initiative (NDI); (ii) development of an integrated water resources and flood management plan for the Volta Basin; and (iii) capacity building for Ghana's national disaster management structures in particular NADMO, and b) The other GFDRR supported project is

It is essential that the new National Program be coordinated closely with the Natural Resources and Environmental Governance (NREG) Development Policy Operation – which is supported by all key bilateral donors and the World Bank – and which constitutes the main coordination mechanisms for program support on the environment and climate change.

On this background, the *indicative* program areas identified for specifically for GFDRR financing – here denoted the GFDRR *"Country DRM Plan"* - are listed in the matrix below, with reference to the sharing of responsibilities between the World Bank/GFDRR and UNDP – but referring only to the allocation of costs for GFDRR funding. The GFDRR program would largely be Government-executed for a duration of three to five years, and implemented under the umbrella of the National Program Framework.

In conclusion, a comprehensive approach to DRM will require national policy coordination for DRR, CCA, poverty reduction, and human development led from the highest political and organizational level with a focus on risk reduction as a means to promote sustainable development in all sectors.[16] Bridging the North-South divide in development requires addressing risk management, combined with a growth and rural poverty strategy, in the Northern regions of Ghana. The approach would place considerable demand on governance systems from national to local level across a set of ministries. A key challenge is for the Government to be able to link national policy and governance frameworks for disaster risk reduction, poverty reduction, and CCA through a new approach to sustainable development.[17] A first mechanism for different agencies to rally around would be the development of a national multi-hazard early warning system linked to communication and contingency plans from the national to the local level, possibly with an initial focus on the North.

Indicative new program areas for GFDRR/World Bank funding under the "Country DRM Plan" for Ghana*	Potential output/ outcomes	Indicative budget for GFDRR funding US $	Partnerships
1. Strengthening national disaster risk management strategies and institutions		**550,000**	**UNDP, ISDR, NREG, ECOWAS**
- Review and finalize new DRR/CRM policy/strategy based on review of existing sectoral policies and new climate change strategy - Establish inter-ministerial coordination mechanism - Validate and publish policy and ensure passage of the revised Amendment Bill - Sensitize key stakeholders on new policy directions, including with the NADMO Committee members - Prepare a government-owned National Program Framework for DRR&CRM under which the joint UNDP-World Bank program will be implemented - Follow up the NADMO capacity assessment with a plan for systematic institutional strengthening at all levels	Policy on DDR/CRM mainstreamed Coordination improved DRM policy and CC strategy integrated	200,000	UNDP will continue to take a lead role in finalizing policy and legal acts and build capacity.

(Cont.)

16 Commission on Climate Change and Development, 2009: Closing the Gaps: Disaster risk reduction and adaptation to climate change in developing countries, Report to the CCDC, info@ccdcommission.org, Stockholm)

17 See 2009 Global Assessment Report on Disaster Risk Reduction: Risk and Poverty in a Changing Climate: Invest today for a safer tomorrow, UN-ISDR, 2009.

Indicative new program areas for GFDRR/World Bank funding under the "Country DRM Plan" for Ghana*	Potential output/ outcomes	Indicative budget for GFDRR funding US $	Partnerships
- Establish 9 Regional Platforms for DRR and CRM and develop plan for systematic capacity strengthening - Establish District Platforms for DRM/CRM, initially in the North - Develop Regional and District DRM plans - Support and monitor the implementation of plans - Develop program for capacity strengthening and provide specialized training in DRM/CRM and damage/loss assessment - Develop and test low-cost communication systems (internet, cell-phone) between District, Regional, and National levels within NADMO – linked to community outreach (relates to actions listed under HFA 5 below)	National Platform for DRR/CRM strengthened Regional and District level platforms in operation Efficient communication systems in operation	300,000	GFDRR support will include communication equipment and capacity building (in tandem with UNDP)
- Undertake exchange programs and visits in neighboring countries and consider to establish Platforms for regional coordination - Improve information sharing with neighbors on climate related risks – related to specific program needs - Strengthened networks with sub-regional organizations	Trans-boundary and regional cooperation on DRR/CRM strengthened	50,000	UNDP will take the lead
2. Ensure risk and vulnerability assessments, early warning and contingency planning and financing		**2, 450,000**	**UNDP, WFP, Met. Station**
- Review and update existing hazard assessments and maps - Develop an overview of key infrastructure and assets threatened by hazards - Provide technical support to develop methodology and implementation arrangements for relevant hazard/vulnerability/ risk profiling at district level related to integrated DRM and resource management plans (pilot in hazard prone flood areas and coordinated with the Sustainable Land Management Network/MoFA) - Conduct pilot exercise in urban hazard mapping and urban governance (based on Cities primer) - Training and capacity building for the above	Hazard, vulnerability and risk assessments and relevant maps carried out for all climate related hazards Risk profiling at district level undertaken (on pilot basis)	400,000 200,000	UNDP has funded the initial hazard mapping, while World Bank/GFDRR will take the lead in taking these activities forward

(Cont.)

Indicative new program areas for GFDRR/World Bank funding under the "Country DRM Plan" for Ghana*	Potential output/ outcomes	Indicative budget for GFDRR funding US $	Partnerships
- Undertake an inventory of existing EWS, assessment of future needs, and design of a multi-hazard EWS, including infrastructure/communication needs. A major gap accepted by all parties is the fragmented monitoring and early warning system (EWS) in Ghana. This activity will related closely to the CCA agenda and the work of EPA. - Support to National Meteorological Agency (capacity building and renovation of weather stations) - Technical support and capacity building for EWS and contingency planning - Assess, improve and modernize EWS in communities - Review of existing contingency plans and develop suggestions for new plans that include DRR/CRM at Regional, District and community levels	Early warning systems (multi-hazard) updated, and capacity for management created at all levels Contingency plans for DRR/CRM piloted and scaled up	1,850,000	UNDP will mainly support capacity building, while World Bank/ GFDRR will mainly support logistics and hardware. WFP/MoFA has developed a food security monitoring system that can be built on.
3. Increase and sustain public awareness creation, education, and capacity building		**300,000**	**UNDP, NGOs, UNICEF, ISDR**
- Organize workshops and seminars for policy makers and professional bodies on DRR/CRM - Equip Regions and selected Districts with communication and outreach equipment - Seek to standardize and harmonize communication equipment between NADMO and potential stakeholders - Organize durbars and outreach programs for hazard-exposed groups and civil society organizations - Carry out community-based outreach programs - Develop and distribute handbooks/text books on DRR/CRM to educational institutions - Collaborate with tertiary institutions to develop or provide courses on DRR/CRM	Increased awareness of DRR&CRM, and ways of coping Improved communication networks Improved public education and increased awareness Courses designed at different levels of education		UNDP will take the lead

(Cont.)

Indicative new program areas for GFDRR/World Bank funding under the "Country DRM Plan" for Ghana*	Potential output/ outcomes	Indicative budget for GFDRR funding US $	Partnerships
4. Reduce underlying risk and vulnerability factors		**200,000**	**UNDP, WFP, ISDR, ECOWAS, TerrAfrica**
- Sensitize stakeholders across sectors and within civil society on the need to integrate DRR&CRM into planning and program design - Establish focal points in all sector agencies (MDAs) and – encourage key sector ministries to prepare sectoral DRR/ CRM strategies and integration in programs (linked to CC agenda) - NADMO to engage with key sector programs including with NREG on environment, forestry and mining - NADMO to engage with Savannah Accelerated Development Authority (SADA) and the Northern Development Initiative which has adopted an integrated DRR perspective in the development plan for the North. - Revitalize the Technical Advisory Committees (TACs) - Identify and sensitize women on DRR and CRM - Train and resource women in vulnerable communities in viable economic activities to build assess and coping capacity - Train and resource youth groups and other CBOs	Improved collaboration and integration of DRR & CRM into sector planning and programs Sector ministries more aware of DRR & CRM linkages Community-based DRM pilot projects established for women and other vulnerable groups	200,000	Joint UNDP and World Bank/ GFDRR engagement UNDP to take the lead
5. Improve emergency preparedness and response		**1,800,000**	**UNDP, UN-OCHA, ISDR, ECOWAS**
- Develop a program for systematic strengthening of NADMO in emergency preparedness and response - Organize regular consultative and coordination meetings with key stakeholders through Platforms at all levels and inter-ministerial committee – strengthen coordination by NADMO - Establish MoU with relevant stakeholders related to contingency plans and emergency response - Update inventory of logistics and equipment of NADMO and stakeholders for rapid deployment and support - Identify and improve warehouses at strategic locations - Finalize the data preparedness work for appropriate post-disaster needs assessments - Assess training needs and provide specialized training for rapid response and early recovery - Equip NADMO Operations Room with digitized risk/hazard maps and key communication equipment for effective hazard monitoring, outreach and response - DRM technical advisor in NADMO for design and implementation of emergency preparedness and response	Improved capacity of NADMO and key stakeholders to respond to emergencies and integrate DRR/CRM in preparedness Improved logistics for emergency supplies and data readiness	1100,000	Major area for GFDRR support. UNDP has supported capacity building of NADMO, including support for ICT in three Districts in the North (UNDP/ BCPR Early Recovery Project).

(Cont.)

Indicative new program areas for GFDRR/World Bank funding under the "Country DRM Plan" for Ghana*	**Potential output/ outcomes**	**Indicative budget for GFDRR funding US $**	**Partnerships**
- Conduct study to propose optimal institutional arrangement, logistics and funding for decentralized rapid response and recovery (linked to EWS, contingency plans, warehouses for prepositioning, logistics) - Support design and implementation of integrated multi-sectoral monitoring, early warning, contingency plan – linked to the new EWS – based on a programmatic approach and piloting of community-based DRM - Design community-based DRM pilot exercises and sensitize vulnerable communities on DRR/CRM, hazard monitoring, mapping and contingency planning to engender volunteerism - Introduce systematic training of Disaster Volunteer Groups (DVGs) and provide minimum equipment and support - Review and simulate community-based contingency plans for effective response at all levels based on an examination of various mechanisms for risk transfer and risk financing.	Improved capacity at community level of DRM approaches and strengthened capacity among DVGs to respond to and prepare for disasters	700,000	World Bank will work closely with UNDP/ BCPR
Total *new* GFDRR funding		**5,300,000**	

* Note: This matrix represents key priorities put forward by NADMO for a comprehensive program on DRR & CRM – with a few adjustments. Given the limited GFDRR funding, not all of these activities can, obviously, be fully covered or carried out.

ANNEX 1

A joint World Bank-UNDP framework program

The World Bank and UNDP agreed to prepare together with Government a National Program Framework for Disaster Risk Reduction and Climate Risk Management under which the UNDP-World Bank/GFDRR projects would be implemented.

The total UNDP-World Bank support for this National Program will be about $ 12 million. Under this umbrella there will be five UNDP supported operations, and one new World Bank/GFDRR program (which would include the two on-going GFDRR program – one Ghana specific and one multi-country program on coastal/marine resources management). The combined support from UNDP and the World Bank/GFDRR would help ensure that the work of lead government agencies become linked, integrated and coordinated with the view to exploit synergies between them.

The coverage of these six programs in relation to the two main agendas – DRM & CCA – and along the five priority areas of the Hyogo Framework of Action (HFA) would be as in the matrix below.

Coverage of World Bank/GFDRR and UNDP supported programs across Disaster Risk Management (DRM) and Climate Risk Management (CRM)/Climate Change Adaptation (CCA)

HFA/ Project	GFDRR[18]	BCPR	UNDPa[19]	AAP	CC DARE	UNDP-GEF (health)	UNDPb
Funding Mill. $	**5,900**	**1, 200**	**0,350**	**2,500**	**0,150**	**0,350**	**0,350**
HFA1	x	x	x	x	x	x	x
HFA2	x	x	x	x			x
HFA3		x	x				x
HFA4	x	x	x			x	x
HFA5	x	x	x	x			x

18 While the lion share of GFDRR funding would be for DRM, a substantial amount would be for the CCA/CC agenda related to HFA 2 on hazard assessment and early warning system, to accompany the AAP and the NREG projects, for example. The EWS would be national in scale and support also agencies such as EPA and GMet and the CC agenda.

19 The UNDP Annual Work Plan 2009 has, for illustrative purposes, been divided equally between DRM and CCA – and denoted UNDPa and UNDPb respectively in the matrix.