

The Republic of The Gambia
National Disaster Management Authority

DISASTER RISK REDUCTION CAPACITY ASSESSMENT REPORT
The Gambia

Assessment conducted by
The Capacity for Disaster Reduction Initiative (CADRI)

Final version
February 2012

CADRI is an inter-agency initiative (UNDP-UNISDR-UNOCHA) whose mission is to expand existing efforts to develop robust and sustainable capacity for disaster risk reduction worldwide.



Empowered lives.
Resilient nations.



Contents

- LIST OF ACRONYMS..... 3
- I. Introduction 4
- II. The CADRI Disaster Risk Reduction Capacity Assessment Methodology 6
- III. Disaster Profile of The Gambia 8
- IV. Results of the Disaster Risk Reduction Capacity Assessment for The Gambia..... 10
 - HFA Priority 1 10
 - HFA Priority 1: Recommendations..... 21
 - HFA Priority 2 23
 - HFA Priority 2: Recommendations..... 25
 - HFA Priority 3 26
 - HFA Priority 3: Recommendations..... 28
 - HFA Priority 4 29
 - HFA Priority 4: Recommendations..... 35
- Annex. List of interviewees..... 36

LIST OF ACRONYMS

CADRI	-	Capacity for Disaster Reduction Initiative
DRR	-	Disaster Risk Reduction
UNOCHA	-	United Nations Office for the Coordination of Humanitarian Affairs
BCPR	-	Bureau of Crisis Prevention and Recovery
HFA	-	Hyogo Framework for Action
UNFPA	-	United Nations Population Fund
NGO	-	Non-Governmental Organizations
CBO	-	Community Based Organizations
UNDAF	-	United Nations Development Framework
TANGO	-	The Association of Non- Governmental Organizations
GBOS	-	Gambia Bureau of Statistics
CFSVA	-	Comprehensive Food Security and Vulnerability Analysis
GAMINFO	-	Gambia Information system
DEVINFO	-	Development Information
VCA	-	Vulnerability and Capacity Assessment
CILLS	-	Inter-State Committee for the Control of Drought in the Sahel
GEF	-	Global Environment Facility
DM	-	Disaster Management
CCA	-	Climate Change Adaptation
ICT	-	Information and Communication Technology
UNISDR	-	United Nations International Strategy for Disaster Reduction
GDP	-	Gross Domestic Product
WWF	-	World Wildlife Fund
GNAIP	-	Gambia National Agricultural Investment Programme
DOA	-	Department of Agriculture
AAITG	-	Action Aid International The Gambia
FEWSNET	-	Famine Early Warning System
IMF	-	International Monetary Fund
GEAP	-	Gambia Environment Action Plan
NDMC	-	National Disaster Management Council
DHI	-	Demographic Health Indicators
NEPAD	-	New Partnership for Africa's Development

I. Introduction

The Disaster Risk Reduction Capacity Assessment for The Gambia was conducted at the request of the National Disaster Management Agency (NDMA) of The Republic of The Gambia by a team of two staff from the Capacity for Disaster Reduction Initiative (CADRI) – Hachim Badji, Senior Coordinator and Ioana Creitaru, Programme Analyst – from 28 November to 2 December 2011 and from 23 to 27 January 2012.

CADRI is a joint initiative of United Nations Development Programme (UNDP), United Nations International Strategy for Disaster Reduction (UNISDR) and United Nations Office for Coordination of Humanitarian Affairs (UNOCHA). CADRI was formally launched in June 2007 at the Global Platform for Disaster Risk Reduction in Geneva, with a mission to increase capacity development for disaster risk reduction (DRR) at global, regional and local levels. CADRI's mandate covers the full spectrum of disaster risk management – preparedness, response, recovery and risk reduction – and is guided by the five priorities identified in the Hyogo Framework for Action (2005-2015), the internationally endorsed strategic and operational framework for reducing disaster risk. CADRI supports countries to make DRR a national and local priority, enables UN and regional organizations to deliver on DRR and provide advisory services to learning and training organizations and practitioners.

The purpose of this Disaster Risk Reduction Capacity Assessment is to identify capacity opportunities and gaps related to disaster risk reduction, understand desired capacities and propose recommendations on how these capacities can be achieved. The results of the Capacity Assessment will inform existing national disaster management and risk reduction frameworks, processes and structures with a view to strengthen the risk reduction and disaster prevention aspects as critical enablers for the development of the country.

One important component of the Disaster Risk Reduction Capacity Assessment focuses on climate-related risks in The Gambia. The exposure to natural hazards, coupled with conditions of vulnerability and insufficient capacity to reduce or respond to damaging consequences, results in disasters and losses. Climate-related hazards – such as drought, floods, sea-level rise and extreme temperatures – have enormous impact on the socio-economic development of a country. Climate change is altering the frequency, magnitude and duration of climate-related hazards. It also leads to gradual changes in the average temperature, sea level, and the timing and amount of rainfall. Climate change is therefore altering the nature of climate risk, and historical experience with climate hazards may no longer be a sound basis for evaluating risk. In addition, risk is determined not only by the severity of a hazard, but also by the levels of exposure and vulnerability of people, livelihoods and assets that exist in a hazard-prone area. This means that varying levels of socio-economic development of societies imply that they experience different levels of risks, even when they are exposed to the same hazard. For this reason, climate-related risks are determined to a large extent by increased exposure of

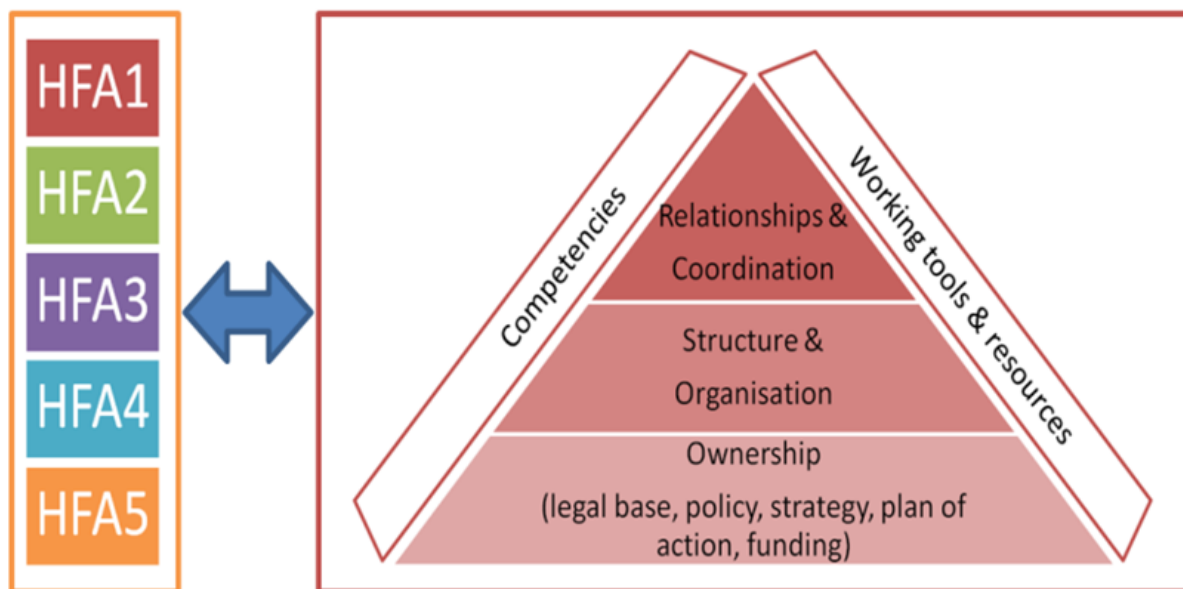
societies to climate-related hazards as well as by their capacity to reduce underlying factors of vulnerability.

In conducting the Capacity Assessment, particular attention has therefore been given to issues related to capacities for managing climate-related risks in The Gambia. Several recommendations stress the importance of reducing and managing existing and future climate risks as critical components of development planning. In this regard, disaster risk reduction, climate risk management and climate change adaptation processes are inter-related enablers of resilient development.

II. The CADRI Disaster Risk Reduction Capacity Assessment Methodology

The CADRI Disaster Risk Reduction Capacity Assessment is based on face to face interviews with government representatives, UN agencies, donors and NGOs and a review of primary data and relevant documentation. The Capacity Assessment uses the methodology developed by the UNDP Capacity Development Group (CDG) and later on adapted for the DRR sector by the UNDP/ BCPR and CADRI. To date, the methodology has been used in 11 countries since 2010.

The Disaster Risk Reduction Capacity Assessment is conducted with a clear focus on national capacities for DRR using the indicators set for the implementation of the HFA. The Capacity Assessment will look into five technical areas of capacity development: (i) ownership, (ii) institutional arrangements, (iii) competencies, (iv) working tools and resources, and (v) relationships.



The CADRI Disaster Risk Reduction Capacity Assessment Tool is structured according to the Hyogo Framework for Action (HFA) Priorities, and evaluates national capacities for DRR against a set of indicators related to five technical areas of capacity development

The Disaster Risk Reduction Capacity Assessment for The Gambia commissioned by CADRI is addressing the HFA Priorities 1-4, while the HFA Priority 5 (preparedness for response) is conducted through a consultancy by the International Development Support Services (The Gambia). The results of that assessment will complement this report.

For the **HFA Priority 1**, the Capacity Assessment focuses on national ownership as a basis for creating the enabling environment for DRR, in order to guarantee the sustainability of the

capacity development process. It analyses the overall institutional arrangements and legal base for DRR in the country, as well as the level of financial resources allocated for DRR.

For the **HFA Priorities 2-4**, the Capacity Assessment looks at capacities related to institutional arrangements, competencies, working tools and resources, and relationships for DRR.

For each of the HFA Priorities, a set of clear and concrete capacity development recommendations are proposed to address any gaps and challenges identified. The level of proposed actions will take into consideration the country's real capacity to implement them within three to five years.

III. Disaster Profile of The Gambia

The Gambia is situated on the west coast of Africa between the Equator and the Tropic of Cancer. It is the smallest country in continental Africa forming a narrow strip of land on either side of the River Gambia which varies in width from 24 to 48 kilometers over an area of 11,295 square kilometers. Bordering with Senegal, it is almost an enclave except for the western border to the Atlantic Ocean. The Gambia has an estimated population of 1.7 million inhabitants with an annual growth rate of 2.7 per cent (UNFPA, The State of the World Population, 2010).

Gambia has a Sudano–Sahelian climate characterized by a short rainy season from June to October. The mean annual rainfall varies from 900 mm in the South West to about 500 mm in the North East. Like the rest of the sub-region, mean annual rainfall suffered drastic reductions over the past 30 years or so when compared to quantities received in the 1960s. Temperatures vary from 14° C to 40° C with means ranging from 25°C to 28° C, and generally higher in the eastern part of the country could be higher.

According to the Detailed Post Harvest Assessment, in 2011 The Gambia was affected by drought due to late, unevenly distributed and erratic rainfall during the rainy season with an overall deficit of 10% below normal and 37% below 2010 levels. Particularly affected was most of the North Bank Region with average rainfall being recorded at over 76% below normal in May-June and over 35% below normal in the period of July - October as well as Lower River Region at 82% and 41% below normal respectively? On average, production has significantly decreased for all major crops compared to 2010-2011 agricultural season, in particular upland rice (-79%), groundnut (-67%) and early millet (-53%) while there was no significant increase in area under cultivation. The findings of the Assessment suggest that a total of 520,583 people (of whom 208,233 are children under 15) living in the rural areas are seriously affected by the poor harvests. In addition, approximately 192,850 people living in the poorest urban areas are at risk to food insecurity due to the combined effects of rising food prices, ongoing recovery from and recurrent exposure to environmental shocks (i.e. floods) and additional economic pressure exerted from most affected rural areas.

Between 2002 and 2006 there were 65 flood related disasters and 45 incidents of fire in the western region only which mostly are highly populated and urbanized. The severe floods in 1999 and 2003 in Upper River and Central River Regions and in many parts of the country affected 13.1 per cent of the population. The largest human loss in terms of people killed has been recorded during the 1978 epidemic (200 people killed), while the largest human loss in terms of affected people was caused by the drought of 1980 (500,000 people affected).

Country-wide locust invasions during the 1980s, 1990s and in 2003 affected most farmers in the country. The influx of refugees in Western Region and bush fires in Lower River Region also had negative consequences on economic development of the country. Other major cases were the Serrekunda market fire disasters, kanifing East Estate fire incident in 2006, the Ebo Town floods

in 2002, 2005 and 2007 causing loss of lives, huge properties and contributed to food insecurity. Recent floods in 2009 and 2010 affected over 48,000 people.

Climate change is gradually altering average temperature, sea level, and the timing and amount of rainfall, as well as contributing to more frequent, severe and unpredictable climate-related hazards such as droughts, floods and heat waves. Climate change acts as a magnifier of existing climate-related hazards, which for The Gambia imply unevenly distributed and erratic rainfall, more unpredictable or severe flash floods, more unpredictable return period of drought, aridity and sea level rise. By 2075, mean temperature of The Gambia is projected to increase by 3°C to 4.5°C. The projected impact of climate change on precipitation is less clear; models suggest that rainfall could either decrease (by 59 percent, 17 percent or 15 percent) or increase (by 29 percent or 15 percent) by 2100 compared to the 1951 to 1990 average rainfall amount (First National Communication, 2003).

Vulnerability to disasters in The Gambia is accentuated by unregulated urban and rural planning. The impact of floods (especially flash floods) on local populations is aggravated by improper land-use planning and unmaintained drainage and sewage systems. Interviewees have pointed out that in most cases, it is the stagnant water in failing drainage systems that cause damage, and not necessarily the quantity of precipitation.

IV. Results of the Disaster Risk Reduction Capacity Assessment for The Gambia

HFA Priority 1

Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation

Overall, there is clear political commitment at the highest level of national authorities to engage in disaster management and risk reduction and reinforce preparedness for response in The Gambia. The Vice-President, well conversant with disaster risk reduction and climate change concepts, is chairing the National Disaster Management Council (NDMC) that includes various line ministries. The fact that the President of the country is also serving as the Minister of Agriculture can be seen as an indication of the importance of food security issues for The Gambia.

Despite the political commitment to reducing disaster risk and enhancing resilience, the main limitation to effective disaster management in the past has been the government's dominant focus on post-disaster response, rather than on prevention. At the national level, disaster management, including prevention elements have gradually being given more attention in planning processes. In 2008, the government of The Gambia promulgated the National Disaster Management Act and Policy, operationalized through the National Disaster Management Programme – Strategic Action Plan (2008-2011). Various other national policy documents comprise references to disaster management, such as the Long-Term Development Framework Vision 2020 Strategy, the National Environment Management Act (1994), the first and second GEAP and desertification conventions, and the National Disaster Emergency Relief and Resettlement Committee.

The results of the capacity assessment regarding HFA 1 indicate that the high-level political commitment of the government of The Gambia for disaster management needs to be substantiated by a thorough approach to disaster prevention and risk reduction.

1. Legal framework

The government of The Gambia promulgated the National Disaster Management Act in 2008, complemented by the National Disaster Management Policy and Strategic Action Plan. Through the National Disaster Management Act, the National Disaster Management Agency (NDMA), the National Disaster Management Council (NDMC) and regional, district and village Disaster Management Committees have been established. The National Disaster Management Act provides for an integrated and coordinated disaster management, focused on prevention, preparedness, response, mitigation and recovery from disasters or emergency situations.

While the Disaster Management Act mentions “prevention” and “mitigation”, it does not mention the necessity to engage in disaster risk reduction or risk management, and nor does it explicitly refer to the contribution of risk reduction to long term development planning. The Act is very much oriented to disaster response and explaining the roles and responsibilities of the national authorities for operational coordination.

In addition to the disaster-specific legislation embodied by the National Disaster Management Act, legislation regulating sectors such as the agriculture, land-use planning, education, etc., if observed, contribute to reducing disaster risks (although not mentioned explicitly). To facilitate the effective implementation of existing disaster management legislation, and to potentially give more prominence to risk reduction in the legislation, it is important that national authorities at the highest level are informed about the concepts of disaster risk reduction, the economic benefit of DRR interventions to the long-term development of the country, and systematically factor the disaster aspects into all areas of development planning.

2. Structure and Organisation

The **National Disaster Management Council** is chaired by the Vice-President and comprises various sector ministries (interior, defence, finance, health, environment, local government, agriculture, water resources, justice, chamber of commerce), the executive director of NDMA and one representative of NGOs in Gambia. The Council is charged to:

- i. advise the Government on all matters relating to disaster preparedness, response, mitigation and recovery, and the preparation and formulation of a National Disaster Plan, including the coordination of activities of Government and non-Government agencies;
- ii. develop strategies and policies for the prevention of, preparation for, response to, mitigation of and recovery from disasters;
- iii. ensure that the strategies and policies it develops are implemented by the National Disaster Management Agency, other government agencies and non-government agencies;
- iv. advise the President on the need for aid to counter the effects of a disaster and on any agreement proposed to be entered into by the Government in relation to such aid;
- v. advise the President on the declaration of a state of emergency; and
- vi. subject to the approval of the Inspector General of Police and the Chief of Defence Staff, to determine the number of members of The Gambia Police Force and Gambia Armed Force respectively are to be deployed in the prevention of, preparation for, response to, mitigation of and recovery from a particular disaster;
- vii. make available resources to the regional disaster coordinators for the purposes of responding to disasters in the regions.

The secretariat to the Council is embodied by the **National Disaster Management Agency**. The NDMA is managed by an Executive Director and is located in the Office of the Vice-President. The Agency is assisted by the National Technical Advisory Group, which comprises technical experts from within and outside the civil service. The NDMA is the coordinating body for all disaster

management and risk reduction activities in The Gambia. Its functions are related to the following responsibilities:

- i. carry out disaster management responsibilities.
- ii. lead the country's efforts to prepare for, respond to, recover from, and mitigate the risks of natural and man-made disasters.
- iii. act as the central planning, coordinating and monitoring institution for disaster management and post-disaster recovery reconstruction.
- iv. advise and brief the NDMC from time to time on progress and major problems in disaster management, and if appeal for international assistance is required.
- v. prepare, update, maintain, implement and monitor the National Disaster Plan.
- vi. lay down guidelines for the Regional Committees and District Committees in drawing up the Regional Disaster Plans and District Disaster Plans, as well as advise the sector Ministries on disaster-related issues;
- vii. approve the disaster plans prepared by the Departments of State, Regional Committees and District Committees;
- viii. foster public awareness and education on disaster management issues.
- ix. give advice on disaster management to Regional Committees and District Committees;
- x. coordinate requests for aid, and to control and direct the allocation of aid provided by government and non-government agencies;
- xi. establish and maintain relations with international relief organisations in order to facilitate accessing of their resources in the event of a disaster.

Under the National Disaster Management Act, every region in Gambia is required to establish a Regional Disaster Management Committee (RDMC), charged with the responsibility of implementing the National Disaster Plan in its region. The region's mayor or governor, who has freedom to make appointments to the Committee, chairs the RDMC. Five Regional and two Municipal Disaster Management Committees have been restructured since 2006. The RDMCs are assisted by Regional Disaster Management Coordinators who contribute to the preparation of regional disaster management plans. In the event of a disaster being declared in the region, the Executive Director may assume responsibility as national coordinator from the Regional Coordinator. Each District also has a District Disaster Management Committee, chaired by the chief and supported by District Disaster Management Coordinators who are local government officers. In the meantime, due to resource constraints, these are volunteers

In addition to the specific disaster management structures, several national institutions have a role to play in disaster management and risk reduction efforts in The Gambia:

- National Disaster Management Agency
- Ministry of Agriculture
- Department of Physical Planning and Housing
- National Environment Agency
- Ministry of Fisheries and Water Resources and Responsible for National Assembly Matters: Department of Forestry, Department of Fisheries, Department of Hydrometeorology

- Ministry of Finance and Economic Affairs
- Women's Bureau
- Gambia Bureau of Statistics
- National Roads Authority
- Ministry of Health and Social Welfare
- Ministry of Basic and Secondary Education
- The University of The Gambia
- Gambia National Platform for Disaster Risk Reduction and Climate Change Adaptation

The **Ministry for Women's Affairs, Women's Bureau** and the **National Women's Council** constitute the formal national structure in charge of gender and women's empowerment. In addition, gender focal points are placed in all line ministries. The National Gender and Women's Empowerment Policy comprises 8 priority areas, including one related to environment and disasters. The Women's Act is focused on the economic empowerment of women. Two bills are in the consultation phase, one on gender-based violence and the other on sexual offence. Gender empowerment receives support at the highest political level, as the Vice-President of The Gambia is also the Minister for Women's Affairs. Regarding the impact of disasters on women, the main challenge is women's critical role in the rice production sector. Soil intrusion into the rice fields is the most common risk, and women need to be involved in risk reduction activities in terms of food security and sensitized on issues related to climate risk management and change adaptation.

In June 2011, the **Gambia National Platform for Disaster Risk Reduction and Climate Change Adaptation** was set up with the support of ECOWAS. It is chaired by The Gambia Food and Nutrition Association (GAFNA) and the Vice-chair, the University of the Gambia. The National Platform has 6 thematic working groups, including on DRR and climate change adaptation. The functions of the National Platform are to (i) advocate for DRR and its mainstreaming into development policies, planning and programmes and humanitarian assistance; (ii) coordinate efforts among its members; (iii) serve as a catalyst for national consultations and consensus building for the implementation and monitoring of DRR programmes and response activities; (iv) provide opportunities for NGOs and CBOs to support DRR efforts in the context of local development; (v) facilitate information sharing, knowledge sharing and technology transfer. The activities of the National Platform are increasingly being re-focused on disaster prevention and building resilience, as well as climate change adaptation. However, the National Platform lacks the financial resources required to implement DRR activities. In addition, there is a need to continue to sensitize its members to DRR and climate change adaptation concepts and good practices.

The Gambia as part of the African Union, and in collaboration with the NEPAD Secretariat has developed the **African Regional Strategy for Disaster Risk Reduction**. This Strategy was endorsed by the 10th meeting of the African Ministerial Conference on the Environment and was favorably noted by the 2004 African Union Summit, which called for the formulation of the programme of action for the implementation of the Africa strategy (2005-2010).

3. National policy and plan of action

The Government's **National Disaster Management Policy** of 2008 recognizes the need to shift from disaster relief and recovery to disaster prevention, "Until recently, disaster management was considered a post-disaster activity focusing mainly on rescue, relief and rehabilitation with an emphasis on state-centric approaches. In the face of challenges posed by the paradigm shift from rescue and relief operations to disaster prevention and preparedness, the policy paper makes a significant case for deliverable development objectives". The National Disaster Management Policy is operationalized through the National Disaster Management Programme – Strategic Action Plan (2008-2011). The strategic plan of action was still very much oriented to response. However, the aim is to use the results of this assessment to elaborate a new disaster risk reduction strategy and plan of action for three to five years that will include emergency preparedness and response elements.

The policy aims to achieve "Safer and resilient communities in which the impact of hazards would not hamper development and the ecosystem and the provision for a better quality of life through effective emergency and disaster services". The strategic objectives of the policy are to:

- i. Integrate disaster risk reduction into sustainable development policies and planning;
- ii. Develop and strengthen institutional mechanisms and capacities to build resilience to hazards;
- iii. Systematically incorporate international, regional, national and local disaster risk reduction strategies and approaches into the implementation of emergency preparedness, response and recovery;
- iv. Achieve a comprehensive, all hazard, all agencies approach by achieving the right balance of prevention, preparedness, mitigation, response and recovery;
- v. Prepare communities to ensure that they are fully equipped to anticipate and respond to disaster events.
- vi. Promote a transparent, systematic and consistent approach to disaster risk assessment
- vii. and management ;
- viii. Ensure a multi-stakeholder participatory approach including community participation at all levels;
- ix. Develop a database and information exchange system at national and international levels.

The priority areas for disaster management set out in the policy document are the following:

Priority Area 1: Development of institutional framework and structures capable of preventing, preparing for and responding to disasters at National, Regional and Local levels.

Priority Area 2: Integration of disaster risk reduction into sustainable policies and plans. (Interventions focused on mainstreaming disaster management and risk reduction into National policies and Plans through the development of national platform for disaster management, sensitization, and awareness creation on disaster management, capacity building and introduction of disaster risk reduction into the school system.

Priority Area 3: creation of a body of knowledge that is useful to support government, humanitarian organizations and other partners; to anticipate, plan for and manage disasters effectively

Priority Area 4: Create broad and effective partnership among government, humanitarian organizations and other partners, to engage in disaster risk reduction activities and addressing the underlying factors in disasters.

Priority Area 5: Develop an efficient response mechanism to disaster management and make available the necessary resources.

Priority Area 6: To strengthen national capacity in the timely detection, prevention, control, investigation and reporting of Avian Influenza and other diseases within animal and human populations

Priority Area 7: Introduction of regional and international best practices in disaster and risk reduction management.

Disaster management is an explicit strand in Gambia's **Long-Term Development Framework Vision 2020 Strategy**, with commitments to initiate disaster relief strategies and programmes to combat and alleviate the cost of disasters.

The Gambia's new national medium term development plan – **Programme for Accelerated Growth and Employment (PAGE) 2012-2015** – succeeds the Poverty Reduction Strategy Programme II (PRSP II) and aligned with the Millennium Development Goals (MDGs). The objective of PAGE is to accelerate growth and employment in order to sustain The Gambia's economic achievements. PAGE comprises 5 thematic pillars: (i) Accelerating and sustaining economic growth; (ii) Improving and modernizing infrastructure; (iii) Strengthening human capital stock and enhancing access to social services; (iv) Improving governance and increasing economic competitiveness; (v) Reinforcing social cohesion and mainstreaming cross-cutting issues, including environment, disaster risk reduction and climate change. PAGE emphasizes that there is a need to shift from managing crisis to managing risks and vulnerabilities through disaster risk reduction. In terms of DRR, among the objectives of the government's Programme the following can be mentioned: mainstreaming DRR into development programmes (agriculture (food security), formal and informal education system, health sector, infrastructure, building codes and land use planning); addressing DRR interventions in fourteen disaster hotspots in the country through infrastructure and drainage system, proper waste management and disposal and enhanced advocacy by the end of 2012; integrating DRR with climate change adaptation; strengthening DRR at the local level.

In terms of sectoral policies relevant for disaster management and risk reduction, the agriculture sector is guided by the **Gambia National Agricultural Investment Programme (GNAIP)**. The GNAIP is the medium-term (2011-2015) strategic plan of the Government of The Gambia towards achieving the vision for the agricultural and natural resources sector and food security in the country within the framework of the New Partnership for Africa (NEPAD) Comprehensive Africa Agriculture Development Programme (CAADP). The GNAIP is aligned with the national goals of Vision 2020, and supports the realization of main national strategic programmes, including the Poverty Reduction Strategy Paper II (2007-2011) and the

Agricultural and Natural Resources Sector Policy (2010). Total programme costs are estimated at USD 296.7 million. Taking into account existing projects and programmes implemented by Government or outside the Government that will directly support GNAIP, the estimated financing gap over the five-year period amounts to USD 201 million.

The overall goal of GNAIP is achieving an increased contribution of the ANR sector to the national economy by improving productivity through commercialization and active private sector participation predicated on a sound national macroeconomic framework aimed at enhanced growth and poverty reduction. To meet this goal, the development objective of GNAIP is increased food and nutritional security and household incomes including for vulnerable households through increased ANR production, productivity and marketed output, based on sustainable use and management of natural resources in support of national goals of poverty reduction and improved livelihoods. The GNAIP has six strategic programmes:

- Improved Agricultural Land and Water Management;
- Improved Management of the Other Shared Resources;
- Development of Agricultural Chains and Market Promotion;
- National Food and Nutritional Security;
- Sustainable Farm Development;
- GNAIP Coordination, Monitoring and Evaluation.

The **Lowlands Agricultural Development Programme (LADEP)** was the first eight-year phase of a 20-year programme for sustainable community-driven reclamation and development of lowland areas to improve traditional rice production, using simple technologies and self-help labour. From 1997 to 2004, LADEP cost approximately US\$8 million. The long term development objective was the sustainable improvement of traditional rice production as a means of enhancing food security for impoverished households. The priority target group was traditional swamp and tidal land rice growers, mainly women. LADEP reached 24,684 farmers (90 per cent of them – a total of 22,216 – were women) and reclaimed a total of 7,481 ha of land.

Following the completion of LADEP, the **Participatory Integrated Watershed Management Project (PIWAMP)** (2005-2010) was co-funded by the Government of The Gambia and The African Development Bank on behalf of the Nigeria Trust Fund and The International Fund for Agricultural Development (IFAD). The target beneficiaries in the lowland areas were mostly women, whilst in the uplands the target beneficiaries were mostly men based on the cultural responsibilities of crop cultivation in the Gambia. At completion, the interventions of the project benefitted more women and the number of beneficiaries of 20,000 households exceeded the targeted 12,000 households with over 52% of the project beneficiaries being female. According to the project completion report, the interventions under PIWAMP increased access to markets and social amenities such as schools and health facilities, and opened up areas for cultivation in the lowlands. Various capacity building interventions were conducted for field staff, communities and grass root structures such as Village Farmer Associations and

District Farmer Associations. The impact of these measures translated into the reduction of soil erosion, enhanced access to cultivation and increased production.

The **Sustainable Land Management Project (SLMP)** is an incremental financing for PIWAMP, funded by GEF (4,4 million USD) (2010-2014). SLMP is designed to have nation-wide coverage of the low and high lands that are used in agriculture production in the Gambia. It seeks to address interlinked problems of rural poverty, food insecurity and land degradation. The lowland and upland sustainable crop, livestock, forestry and eco-tourism activities that will be supported are expected to result in a significant increase in the returns from such livelihood activities at the community and individual household levels. This in turn will have a positive impact on food security at various levels.

The commitment of The Gambia to tackling the effects of climate change is reflected in a series of documents: the **First National Communication to the United Nations Framework Convention on Climate Change (2003)**, the **National Adaptation Programme of Action (NAPA) (2007)**, the **Poverty Reduction Strategy Paper (PRSP) II (2006)** and the **second Gambia Environmental Action Plan (GEAP) (2008)**. In 1992, the Government of The Gambia created a National Climate Committee, responsible for awareness-raising on climate change, producing inventories of sources of greenhouse gas emissions, and assessments of climate change impacts and options for adaptation.

Even though The Gambia has conducted little or no research on how climate change impacts natural and societal systems, anecdotal evidence suggest that the combined effects of global warming, increased concentrations of carbon dioxide in the atmosphere, and the rise in sea levels—with or without more aridity—are likely to cause the number and vitality of species to decline. They are also likely to reduce the diversity of terrestrial, wetland and aquatic ecosystems; impair ecosystem goods and services; and provoke the spread of invasive species and vector-borne diseases. Other detrimental impacts of climate change include threats to livelihoods, more respiratory diseases, inadequate water security, and less food security (PAGE 2012-2015).

There are three main institutional actors having mandates related to climate change in The Gambia. However, an overarching coordination mechanism is lacking.

- The Department of Water Resources within the Ministry of Fisheries and Water Resources and National Assembly Matters, which plays a lead role on monitoring and prediction of climate change; the Director of the Department is the focal point to the UNFCCC and chairs the NCC;
- The Ministry of Forestry and Environment, which is responsible for policy issues related to climate change; and
- The National Environment Agency, which has the mandate to coordinate all activities that relate to environmental issues, under the oversight of the National Environmental Management Council; NEA is in charge of the implementation of the GEAP.

A number of recent projects and initiatives related to climate change and coastal adaptation measures have been or are being implemented in The Gambia:

- Adaptation to Climate Change. Responding to Coastline Change in its human dimensions in West Africa through Integrated Coastal Area Management project (regional project by UNDP-GEF, 2011);
- Adoption of Ecosystem Approach for Integrated Implementation of MEAs at National and Divisional Level project (UNDP-GEF, 2008-2012);
- Demonstrating and Capturing Best Practices and Technologies for the Reduction of Land-sourced Impacts Resulting from Coastal Tourism project (regional project by UNEP and UNIDO - GEF);
- Strengthening of The Gambia's Climate Change Early Warning Systems (UNEP – GEF, 2011-2013).

A **National Policy for the Advancement of Gambian Women** (NPAGW 1999-2009) was formulated and provided a legitimate point of reference for addressing gender inequalities at all levels of government and all stakeholders. The Gender and Women Empowerment Policy 2010-2020 aims to mainstream gender in all national and sectoral policies, programmes, plans and budgets to achieve gender, equity, equality and women empowerment in the development process. One of the priority areas of the policy is focused on gender and the environment, which aims to ensure equal participation of men and women in environment management, protection and mitigation of both natural and human disasters. Since 2011, NDMA has reinforced its collaboration with the Ministry of Women's Affairs. A National Women Councilor is also a member of the National Platform for DRR. At regional level, women affairs representatives are also members of the disaster management committees.

While neither the **Education Policy**, nor the Strategic Plan 2004-2015 do not include explicit DRR measures, the sub-sections of the policy refer to the issue of location of schools and building design in terms of mitigating weather risks. Additionally, the provision of sanitation and water access for all schools is specified in the policy.

The **Water Policy** highlights the issues of climate change adaptation and mitigation measures in relation to water resource management. The concept of integrated water resource management to reduce the risks associated with the impact of climate change on water is also mentioned.

Overall, the findings of the assessment point out to the fact that the sectoral policies and programmes indirectly contribute to disaster risk reduction. However, their scope and effectiveness could be enhanced through a more systematic cross-sectoral consultation and coordination. For instance, with the increasing occurrence of floods and drought in the country, a more responsive and flexible institutional mechanism for the coordination of various institutions should have positive spin-offs for food security.

4. Other stakeholders

As the government of The Gambia is clearly showing an interest in engaging in disaster management and risk reduction, there is a need to support the UN agencies get more familiar with concepts of DRR in their areas of expertise in order for them to better support the government.

In terms of the **UN system**, the focus is very much on emergency preparedness and response with a well established coordination mechanism (UN Disaster Management Group) under the lead of the **World Food Programme (WFP)**. According to the Final Review of the **2007-2011 United Nations Development Assistance Framework (UNDAF)**, the UN was successful in mobilizing resources to provide support to vulnerable groups affected by the floods in 2009 and 2010 at the request of the government of The Gambia. WFP has provided NDMA with support to boost their operational and technical capacities particularly in emergency assessments, contingency planning, vulnerability and risk assessments, logistics and food distribution, monitoring and reporting.

The **2012-2016 UNDAF** comprises one Outcome on “Environmental Sustainability and Disaster Risk Reduction systems and services” (with a specific Output on DRR and climate change).

The **Food and Agriculture Organisation (FAO)** country programme focuses on food security and improved livelihoods, with the aim to support the Government in increasing agriculture productivity, marketed output and income of farmer-based organisations and small scale agro-processors.

In terms of the **United Nations Development Programme (UNDP)** engagement to the government’s commitment for DRR, it has provided project support in the form of a National Disaster Management Programme. The capacities and institutional memory developed during the programme implementation were used to establish NDMA. The UNDP programme also assisted the government in the development of a national hazard/disaster profile, restructured regional disaster committees and undertook training and capacity building country-wide in addition to the development of a comprehensive National Action Plan for Avian and Human Influenza. However, the UNDP engagement in DRR since 2009 has been very limited.

The **United Nations Children’s Fund (UNICEF)** has supported the Ministry of Basic and Secondary Education in strengthening the capacity of its staff in emergency preparedness, focusing on needs assessment and disaster response. In 2006, UNICEF assisted the Regional Education Office in Brikama to undertake needs assessment to determine the total number of refugee children affected by the Cassamance (Senegal) crisis. The assessment covered 31 villages and identified 436 children affected. A sensitization campaign was conducted in these villages to raise awareness of the families about the opportunities for their children to be integrated into the school system in The Gambia. The new UNICEF Country Programme 2012-2016 comprises references to mainstreaming DRR into the education sector.

In addition, UNICEF provided significant support to NDMA through its partner, Department of Water Resources in the provision of sanitary items such as bleach, soap, water containers and

water purification tablets to disaster affected communities country wide in the 2009 and 2010 floods.

As the government of The Gambia is clearly showing an interest in engaging in DRR, there is a need to support the UN agencies with technical expertise on DRR. However, many programmes implemented in The Gambia by UN agencies do include elements of risk reduction and early warning although they are not framed as disaster risk reduction programmes.

The **Association of Non-governmental Organisations (TANGO)** is an umbrella organisation coordinating the activities of all NGOs present in The Gambia (totaling 73 members). TANGO provides its members with guidance on policy, planning and programming issues. Members of TANGO are clustered according to the following five thematic groups: (i) Gender and poverty ; (ii) governance and human resources development ; (iii) climate – environment-agriculture ; (iv) education and life styles ; (v) youth-children-health and population. TANGO has also provided extensive technical support to build capacities of NGOs in terms of emergency relief and has offered a platform for coordination in times of disasters. It also represents the NGOs in the National Disaster Management Council headed by the Vice-President and it is part of the National Platform for DRR. The Gambia Red Cross is also engaged in DRR at community level.

The Strategic Plan of TANGO for 2012 includes support to capacity development of its members in the areas of DRR and climate change, and the implications for building resilience and alleviating poverty. At present, these concepts are new to the TANGO staff and to most of its member organisations (an exception is Children for Children Organization, which is engaged in community based DRR activities). Several NGOs members of TANGO are involved in climate change adaptation initiatives that take into account disaster risks and/ or contribute to disaster risk reduction; however, these activities are not recognized and labeled as DRR measures. In recognizing the linkages and mutual benefits between climate change adaptation and DRR initiatives, these activities can be better aligned to the National Disaster Management Policy and Programme.

The **private sector** in The Gambia is a key partner of the government for food security. For instance, the Government ensures that the private sector has at any given time a buffer stock for 3 months for the entire country. In times of drought, the private sector is requested to scale up its buffer stock to 6 months. However, the private sector plays a marginal role in emergency relief and rehabilitation. In addition to spontaneous gestures of solidarity to the victims, private companies are not necessarily aware of the important role they can play not only in post-disaster recovery, but also in disaster prevention.

The **European Union (EU)** is supporting the government of The Gambia and other infrastructural works on flood risk management with a new project proposal for cleaning drainage systems in 7 hot spots throughout the country.

5. Financial resources

The Government of Gambia allocates yearly 5,200,000 Dalasis for the NDMA. In addition, the NDMA operates an emergency relief fund of over 20 million Dalasis. At present, there is no specific budget or funding mechanism for disaster risk reduction. However, the government is currently establishing a planning unit in each ministry and made operational in 2012. The Ministry of Finance indicated that each planning unit will be trained on mainstreaming disaster risk reduction in their respective areas of expertise and could therefore receive funding for disaster risk reduction.

HFA Priority 1: Recommendations

1. Regularly sensitise national authorities, including parliamentaries on disaster risk reduction, climate risk management and climate change adaptation concepts and practices in order to build ownership and further engagement in DRR for resilient development in the long term.
2. Regularly sensitise mayors and technical teams on urban risk management concepts and practices, including on the importance of climate-related risk reduction and climate change adaptation for urban planning, and advocate for the adoption of the UNISDR campaign on “Safer Cities”.
3. Advocate for a explicit integration of disaster risk reduction into the National Disaster Management Act at the next possible opportunity, as well as into the sectoral legal framework (e.g. agriculture, water resources, land-use planning, etc.).
4. Revise the National Disaster Management Policy and Strategic Action Plan to better reflect disaster risk reduction aspects, with a focus on climate-related risks, and in relation to the needs of the most vulnerable groups (women, children, elderly, etc.). The process of revision will need to define the timeframe, type of participation envisaged from central and local governments and civil society, and the dissemination strategy of the Policy and Action Plan.
5. Create an Inter-Ministerial Commission in charge of disaster risk reduction and climate change adaptation issues in The Gambia. The Commission should ensure the streamlining of all disaster risk reduction and climate change adaptation activities and initiatives in the country.
6. Organise regular trainings for the members of the Gambia National Platform for Disaster Risk Reduction and Climate Change Adaptation regarding their mandate, roles and responsibilities, as well as on various aspects related to disaster risk reduction, climate risk management and climate change adaptation. The National Platform should be the body that would regularly follow up on the implementation of the National Disaster Management Strategy and Plan of Action.

7. Reinforce the capacity of the NDMA in terms of staff, competencies, tools and equipment in order for it to engage further in advancing DRR at national level.
8. Advocate for 1 per cent of the national budget to be used for risk reduction activities.

HFA Priority 2

Identify, assess and monitor disaster risks and enhance early warning

There is no up-to-date and comprehensive disaster risk profile for The Gambia. Data collection is considered as a challenge due to lack of tools, funding, staff and competencies. Therefore, most data collection is initiated as part of specific projects carried out by NGOs or International Organisations. Data collection is often halted once the projects end, and in most cases it does not constitute a nation-wide effort. According to the Gambia Bureau of Statistics (GBOS), various tools and methodologies are in use, meaning that there are varying sets of data produced for any given topic. Most important surveys are conducted every 5 years but the level of disaggregation of the data is limited to the region, and do not always go down to district level. The current priority is the new population census that will be conducted in 2013 which can provide an opportunity to factor in disaster risk indicators.

For the past 3 years, GBOS has been using a form to collect information from various ministries on disasters and their impacts. So far, data is available about damages caused by storms and floods, but not on drought. The information is limited to the number of people affected, the death toll, and damages to infrastructure, but not in financial terms. No other methodology for systematically capturing information on past disaster damages and losses is available in addition to this particular form. GBOS also has limited knowledge of the Post Disaster Needs Assessment (PDNA) methodologies. Without a proper tool for capturing disaster losses and damages, it would be difficult to present the evidence and make the case to national authorities for making DRR a national priority, and for factoring in disaster concerns into the economic development planning, and for allocating resources to DRR. However, when it comes to UN agencies such as WFP and FAO, there are experiences in the recent past years in evaluating damages and losses related to floods, droughts and food insecurity.

On risk information related to food security, in 2010 the WFP has stepped up its support to The Gambia by introducing the Vulnerability Assessment Methodology (VAM). VAM provides tools for various evaluations (market prices, vulnerability, coping strategies, agricultural production), for monitoring food insecurity trends and mapping vulnerable areas and populations), for mapping of food insecurity pockets, and for food security analysis. Since August 2011, WFP has providing analysis on food security issues to the national authorities through the bulletin called "Daa Nyeeno". In January 2011, WFP has conducted the first baseline study on the extent of food insecurity and vulnerability in The Gambia (see CFSVA). Since April 2011 WFP is providing technical assistance to the authorities and partners on food security monitoring through the joint publication of the food security and market information bulletin. This has enabled the establishment of a forum for stakeholders to exchange information and inform decision makers about the latest food security trends (see Daa Nyeeno). This forum constitutes the basis of a comprehensive food security monitoring system which has been recommended by the government's 2008 Food Security Task Force.

WFP has signed an agreement for enhancing the capacities of the NDMA for data collection and analysis, and for the use of various methodologies for food security. A training was already conducted in 2011 on food market analysis and prices. In addition, WFP has supported the revision of data collection tools and methodologies, and a software was provided to NDMA for the collection and analysis of data on beneficiaries for emergency response situations. Flood risk assessment missions were conducted by WFP and NDMA, which also provided an opportunity to train government staff on valuation techniques. At the same time, there is limited data regarding food security in the urban areas. It is estimated that 58% of the population in The Gambia live today in urban areas and are exposed to fluctuations of food prices given Gambia's dependency on food imports (50% of cereal needs).

The GAMINFO online repository was recently set up in The Gambia, and it is a customised version of the DEVINFO. The GAMINFO is a software tool developed by UN agencies to enable user-friendly access to development related data. The tool enables the visualisation of the progress towards achieving the MDGs on a map. However, the tool comprises regional-level data, not district level, which means that it might be difficult to use it as a risk observatory for The Gambia. WFP and UNICEF are developing StatPlanet, a tool that would serve for making data more accessible and transparent at district level. It might serve as an entry point for a national agency as a tool for data collection, presentation, M&E, especially related to mapping of hazards. The tool has been awarded the winner prize for the development applications by the World Bank.

The Capacity Assessment has also highlighted the unclarity regarding the distinction between risk assessment and hazard mapping. Risk assessment is a multi-disciplinary process that enables governments to identify, quantify and understand the nature, extent and impacts of the disaster risks on their societies associated with extreme events and underlying vulnerabilities.

In The Gambia, there are limited capacities in government technical units to produce and analyse data that would contribute to a proper risk assessment. The existing limited data that is generated randomly is not necessarily shared among institutions, or not shared with the institutions where it matters for decision making. While there is a need to beef up the capacity of the units to generate risk information, there is also an urgent need to reinforce collaboration between various units through a well established mechanism for information sharing. There is a need to develop capacities and methodologies for the collection and analysis of risk information, and for presenting it to decision makers.

The Gambia Red Cross conducted (GRC) a Vulnerability and Capacity Assessment (VCA) in collaboration with all technical agencies of the government in 1998. That VCA was used to produce the GRC 5-year Strategic Plan and was also useful to many government agencies. Since 1998, the GRC has conducted regularly regional and local level VCA to adjust its programmes.

TANGO, regrouping 73 different NGOs across the country, has been generating data related to vulnerabilities and capacities of populations to cope in different situations including disaster

risks at the local/ community level. However, no mechanism for sharing this information between the NGOs and the government technical units exists.

In terms of early warning, a multi-sectoral working group that regularly follows the situation and discusses potential threats of drought and famine is in place. The Hydro-Meteorology service has 10 weather stations across the country, and collaboration with regional institutions such as Agrymet and CILSS is in place. However, the Hydro-Meteorology services have limited capacities in terms of equipment, data collection and analysis software, and trained staff. For instance, there is only one forecaster in service at a given time, instead of five, and only two staff are trained to conduct data analysis. In addition to the weather stations, farmers have been equipped with rain measurement devices that were patented in Mali. However, the information collected by farmers is not communicated easily, and therefore has a limited contribution to the overall analysis. In terms of early warning, the Hydro-Meteorology service provides information 40 days before the start of the rainy season. In case of a potential drought or flood, TV and radio programmes are broadcast. However, the limitation of this approach is that the broadcast is in English, whereas the population mainly speaks local languages at the community level. The Hydro-Met services are now working on a new project with GEF on early warning, especially for climate-related hazards.

HFA Priority 2: Recommendations

1. The Government, through NDMA, needs to consider developing a National Risk Assessment Framework, and to provide an overall guidance and harmonised methodology for disaster risk assessment (including climate risk assessment).
2. Conduct training on a harmonised methodology for disaster risk assessment for all relevant technical units of line ministries.
3. Conduct a National Disaster Risk Assessment and produce a National Risk Profile for The Gambia.
4. Establish a National Disaster Observatory, which is an institutional structure for systematically collecting, storing, analyzing and interpreting disaster-related data for decision-making for disaster management and risk reduction. The Statplanet tool under development by WFP and UNICEF can be used for data collection for food security and other development sectors (health, education, etc.).
5. Organise training courses/ awareness sessions to disseminate findings of the National Risk Profile for The Gambia for decision-making at national, regional and district levels.
6. Develop and disseminate a study on traditional early warning mechanisms, especially on drought, that have proven efficient in the past/ in other countries with similar risk profiles and identify means of replication in The Gambia, as appropriate.

HFA Priority 3

Use knowledge, innovation and education to build a culture of safety and resilience at all levels

Disaster risk reduction is emerging as a priority area for the government of The Gambia, particularly due to the increasing occurrence of floods in recent years, and against the background of food security concerns in the Sahel region. The Office of the Vice President and various line ministries (agriculture, finance, planning, water resources, women's affairs, etc.) are aware of the need to step up disaster risk reduction measures at the national level.

While risk reduction is recognised as a crucial element for long-term development, a majority of interviewees agree that the challenge remains at the operational level ("how to"). There is a disconnection between the high-level discussions on disaster risk reduction, as well as climate change adaptation, and the concrete interventions at local level. This situation is indicative of the government's limited capacity (in terms of technical, human and financial resources) to implement DRR activities. There is a growing concern regarding a new generation of technicians that needs to be properly trained on DRR issues. In addition, retention of existing staff is also a concern.

NDMA has a regular radio antenna spot every Friday to raise public awareness on disaster management and risk reduction. In addition, the Department of Physical Planning and Housing had a radio programme for 3 months on issues related to land-use planning. At times, TV time is also secured to show 10 to 15 minutes spots, for example on flood risk. The NDMA regional coordinators have annual work plans that include advocacy activities in collaboration with community based radio stations. Trainings were also organised for the 5 regional disaster management committees on DRR. Activities were also conducted during the International Day for DRR on October 13th of each year. NDMA has recently organised various workshops to sensitise authorities, parliamentarians and the media on DRR concepts. As a result, the national assembly is planning to set up a sub-committee on DRR. However, there is a need to enhance NDMA's capacity to be able to provide trainings and conduct awareness campaigns within the government and also to provide technical and advisory services to NGOs via TANGO. The need for a country-wide public awareness and education strategy for DRR and climate change issues is emerging.

Drought and recurrent periods of food shortage and locust infestations are part of the daily life of Gambians. The population has learnt to read different signs of food shortage periods and have thus developed with the existing knowledge survival mechanisms that have more or less worked over decades. This has gradually created silent resilience over generations, which has allowed Gambians and Sahelians in general to adapt to this continuous risk. The culture of risk related to drought is constant in peoples' minds even though it is not often voiced out explicitly as a problem. However, local populations often lack the knowledge and awareness on the consequences that some of the traditional practices have on long-term development. For

example, in the case of logging and destruction of the mangroves, the practice is related to short-term economic gain that leaves no space to think about consequences on the ecosystems and on livelihoods.

Concepts and measures of flood risk are not generally well understood by the population. Rainfall shortage within the last decades has narrowed the perception of potential flood risk. As a consequence many houses were built on flood prone areas along rivers during drought periods. A lot remains to be done in raising awareness on flood risk as existing efforts are insufficient to inform and sensitise populations on land-use planning regulations.

Local-level DRR interventions can be used to sensitise vulnerable communities. Given that The Gambia is a small country, good DRR practices implemented in any corner of the country can be replicated in other regions of the country. At the same time, certain development practices increase risk, and there is a need to build the awareness of communities on alternative, risk-reduction development practices. This approach needs to be supported through appropriate human and financial resources. Local-level examples of successful DRR practices should also be integrated into the government' training programmes.

Prevention and the disaster risk concepts are not part of the school curriculum in The Gambia and no effective discussion on the integration of risk prevention within the curriculum has been conducted. However, there is a good conducive environment in The Gambia to introduce the culture of prevention and safety into the school curriculum as the education system in Gambia has had previous good experiences in "peer to peer" education, especially regarding HIV/AIDS and malaria (the methodology developed in The Gambia was replicated in Sierra Leone). This can be done in collaboration with Life Skills Unit of the Ministry of Education. In collaboration with the Ministry of Education, NDMA is now developing a new youth programme, "Young Ambassadors of DRR".

The Gambia Red Cross has been conducting awareness raising activities on fire safety and schools evacuation drills in risk-prone areas. In addition, the local level disaster management committees, with various tools developed by the NDMA, have often held sessions in schools about disaster issues, especially about floods (the new threat) and fires.

In terms of higher education levels, The University of Gambia offers a one-semester course in disaster management (Preparedness and Response) as part of its development studies programme of the department of social sciences. The University has requested support to revise the curriculum and there is an interest to integrate DRR, as well as climate change, in the disaster management course and also in other courses where necessary. In addition, there is a need to continue training its faculty on disaster management/ DRR topics.

HFA Priority 3: Recommendations

- 1.** Develop a strategy for a national public awareness campaign on disaster risk reduction and climate change adaptation in different local languages, which will include an effective use of the media (radio, newspaper and television) and ICT, and involve all the member organizations of the National Platform. In order to influence behavioural changes, the awareness campaigns should also propose alternative solutions to certain existing development practices to minimise risk.
- 2.** Conduct public awareness activities for DRR, such as the International Day for DRR (13 October).
- 3.** Develop the capacities of NDMA and TANGO in terms of technical, human and financial resources to provide regular trainings on DRR to various national institutions, NGOs, private sector, etc. For instance, TANGO has clearly requested support to build its capacity in terms of knowledge products and training materials to be made available to its member organisations. TANGO also considers that its training programmes need to include public awareness aspects as the level of risk understanding within the public is low.
- 4.** Organize a dissemination campaign of UNISDR terminology related to DRR for all technical units of the government that are likely to be involved in DRR.
- 5.** Organize regular national events with the Ministry of Education and municipal authorities to share best educational practices, tools and materials in the country, and agree on a plan of action to integrate DRR into school curriculum.
- 6.** Enhance collaboration with The Gambia University in order for it to reinforce its curriculum in Disaster Management including disaster risk reduction and climate change adaptation (update of course material, access to latest resources on DM/ DRR/ CCA, training of faculty).

HFA Priority 4

Reduce underlying risk factors

Part of the Sahel region, The Gambia is particularly vulnerable to drought, floods, locust infestation and epidemic diseases. Its vulnerability is mainly linked to its Sahelian climate type which presents high variability alternating drought periods and heavy rainfalls, as well as to the existence of an important water system linked to The Gambia River with its affluents. This physical vulnerability is amplified by socio-economic and environment related factors such as:

- The main drivers of **economic growth** for The Gambia are the agriculture sector and tourism industry. Against the backdrop of the global financial crisis and the impact on tourism, real GDP growth in 2009 was reduced to 4.5 per cent. Despite the negative impact of the global economic crisis on tourism receipts, remittances, and foreign investment, overall growth increased from 2009 to 2010. The Government estimates that real GDP grew by 5.5 percent in 2010. This means a higher exposure of national assets and livelihoods resulting from this growth to natural hazards.
- **Poverty** in The Gambia remains deep and endemic with a DHI rank in 2010 of 151 out of 169 countries. The 2010 UNDP Human Development Report shows that 34 per cent of the population lives on less than USD 1.25 a day, and 57 per cent lives on less than USD 2 a day, most of whom live in rural areas. In The Gambia as in many developing countries, poverty is a predominantly rural phenomenon. However, there are significant urban poor due to urban migration and unemployment.
- The rate of **unemployment** is a major cause of concern especially for women and youth, with 40 per cent of the youth unemployed, and 70 per cent of women engaged in low productivity subsistence agriculture.
- Deficient **land-use planning** allows population settlements in flood prone areas. A high demographic growth and rapid urbanization have led to the settling of low income families, of poor people from rural and urban areas into flood or other hazard prone areas.
- **Environmental damage** represents a major risk as well as a vulnerability factor. The Gambia is characterised by land and coastal degradation, deforestation, loss of biodiversity and habitat, improper disposal of solid waste.
- An increase in the **saltiness of the Gambia River** has been recorded, which constitutes a potential threat to the economy as the Gambia river represents a major source of income for the country.

- In some areas, **infrastructure** (roads, dams, bridges) can be high vulnerability factors to natural hazards such as floods.

1. Environmental and natural resource management

Environmental concerns in The Gambia revolve around deforestation, desertification, and water pollution. Deforestation due to recurrent bushfires remains a serious problem. Although sanitation has improved, contaminated water supplies remain responsible for many life-threatening diseases that contribute to high infant and child mortality rates. The unsustainable use of fragile ecosystems such as mangroves for human habitation and other human activities has increased the incidence of floods in both rural and urban areas. In addition, chemicals discharge, fertilizer dumping and electronic waste are seen as hazardous activities detrimental to the environment.

Environmental sustainability is a key sector in the national development strategy. The National Environment Agency is mandated to implement The Gambia Environmental Action Plan, focused on the sustainable environmental and natural resource management. There is a national policy on environmental sustainability that contributes also to DRR. There is an Environmental Inter-Agency working group that meets regularly. The Gambia Environmental Assessment report was published in 2010. However, while a lot is mentioned about environmental issues, the link between disasters and their impacts on the environment is not extensively analysed.

Forests in The Gambia play an important role in livelihood and the economy in general. The national policy objective of the forestry sector is to maintain 30 per cent of the total land area of The Gambia under forest cover and to manage 75 per cent of the land under forest cover for environmental and socio-economic development. There are sound policies and a legal base in terms of forest management. Forest fires are a serious problem but less frequent due to general sensitisation programmes that use to be part of tree planting programmes. However, logging is becoming a serious issue in The Gambia, as people are increasingly reverting to logging for selling wood and charcoal as an economic coping mechanism (GNAIP estimates that 90% of cooking fuel is made of wood and charcoal). Several tree planting initiatives exist, but are insufficient to eradicate the illegal logging practices. Mangrove reforestation programmes are currently run by WWF.

One important gap however seems to be the fact that natural resources management does not seem to involve local communities. There is a lack of community ownership for natural resources. The government estimates that with the actual rapid population growth, 30% of the forest should be managed properly and out these 30%, all 75% should be managed by local communities. This is not the case, it is all left to the government technical staff to manage and there are no sufficient competent staff nor equipments and logistic means to do this. More studies need to be done in The Gambia on the vulnerability of the ecosystem as well as public

sensitisation. The good news is that some communities are starting to invest in eco-tourism and in re-stocking of the wild life aswell.

Clearly, there is limited knowledge on how environmental issues and ecosystems play a role in DRR. Very little technical staff would really know how to mainstream environmental sustainability concepts into their planning. There is also a lack of will to integrate environmental sustainability elements into planning unless it is clear that funding will be available to implement them. There is also no capacity in terms of response to environmental emergencies. There are no contingency plans for environmental disasters.

2. Social and economic development practices

Food security is a national priority for The Gambia. The national Food Security Committee is chaired by the Vice-President of the country, and was established in 2008 during the food crisis. The President of The Gambia is the Minister of Agriculture.

Agriculture is the main economic sector in The Gambia accounting for 29% of GDP and its share of the country's total export standing at 70% in 2009, thus constituting a major source of foreign exchange earnings. According to the IMF, it is accounted for being one of the main drivers of recent economic growth, averaging 6.5% in 2008-2011. While it provides employment to 75% of the country's working population, mainly resource poor small-holder farmers, it only meets 50% of national cereal requirements, with the remainder being sourced through food imports. Agricultural production is rain-fed and highly seasonal with only 1% of arable land being under irrigation. Own produce serves an average farming household's consumption about 6 months into the post-harvest period (November-May) while the remainder of the year is usually known as the lean or 'hungry' season (June-October) (Joint Rapid Food Security Assessment, DoA/GBOS/FAO/WFP/AATG, October 2011).

About 51 percent of the population is concentrated in the urban and peri-urban areas while 49 percent is living in the rural areas. Agriculture is the sole means of income generation for the majority of rural households, in particular those below the poverty line. According to the PRSP II (2006), 63.3% of the rural population and 57.2% of the urban population live in poverty, while 72% of the extremely poor source their income mainly from agriculture. Groundnut farmers in the rural areas are among the poorest in the country with a poverty rate of 76%. While over 78% of women are engaged in the agricultural sector, reportedly only one third receives cash income compared to 43% of men (Detailed Post Harvest Assessment, The Gambia, 2011).

Food security in The Gambia is conditioned by two major factors: (i) **climate variability** and (ii) **fluctuations of food prices** on the international markets combined with The Gambia's high dependency on imported food and low purchasing power by the majority of the population.

In terms of **climate variability** factors, in 2011 The Gambia was affected by crop failure due to late, unevenly distributed and erratic rainfall during the rainy season with an overall deficit of 10% below normal and 37% below 2010 levels. On average, production has significantly

decreased for all major crops compared to 2010-2011 agricultural season, in particular upland rice (-79%), groundnut (-67%) and early millet (-53%) while there was significant increase in area under cultivation. The findings of the Assessment suggest that a total of 520,583 people (of whom 208,233 are children under 15) living in the rural areas are seriously affected by the poor harvests. In addition, approximately 192,850 people living in the poorest urban areas are at risk to food insecurity due to the combined effects of rising food prices, ongoing recovery from and recurrent exposure to environmental shocks (i.e. floods) and additional economic pressure exerted from most affected rural areas.

Regarding **fluctuations of food prices**, world prices had a strong decrease in all export markets at the end of 2011. However, monthly average trends show that international rice, wheat and maize prices in November 2011 were above the previous year's levels (+19.9% for rice, +2.6% for wheat, +16.3%). Coarse grain prices (millet, sorghum and maize) in the Sahel and Gulf of Guinea have shown significant increase since November 2011. Millet prices reached unusually high levels for the period with increases in November: 38% in Ouagadougou, 18% in Bamako and 10% in Niamey (Afrique Verte, November 2011). The unseasonal increases and the high price levels reflect sharply reduced cereal outputs, due to delayed and insufficient rains during the cropping season, coupled with pest infestations. (Detailed Post Harvest Assessment, The Gambia, 2011). The current market anomalies have raised widespread concerns over household food access in the region. It is likely that food prices will increase in the following months as demand increases from traders, groups rebuilding national security stocks, cereal banks, and soon from households who will have exhausted their own stocks (FEWSNET, 2011).

The government encourages private sector involvement in the economic development of the country, particularly for food security. For example, the government provides investment incentives such as no importation tax on agricultural hardware and no export tax on agricultural products, or duty waivers on fuel for use in the agricultural sector. In order to face food production shortages, the interviews conducted for this assessment indicate that the government's strategy is to ensure that the private sector has at any given time a buffer stock for 3 months for the entire country. When drought is looming, the government would ask the private sector to scale up its buffer stock to 6 months. The government has an informal agreement with large traders to keep food prices at acceptable levels. Often, the private sector is afraid that too many products on the market may cause a drop in prices and subsequently cause a profit loss. Engaging the market is not a long term sustainable and viable mechanism to cater for shocks, as controlling free market forces is not possible. It is therefore important that capacities are enhanced at country level to integrate risk reduction measures and climate change adaptation measures as part of the agriculture policies that are more sustainable than relying on the private sector imports.

At national level, the government has also seed banks in various locations at community level. Seeds are purchased from the farmers during the harvest time as a measure of precaution. Usually seeds are kept for 3 to 4 months and re-sold to the farmers when the planting season comes. Store capacity is becoming a challenge.

The institutional setup for recovery in The Gambia is not clear. This situation stems from a lack of understanding of the concept of recovery, as it is perceived as being limited to emergency response/relief operation. Regarding the economic capacities for disaster recovery, Gambian workers' remittances abroad are of high importance. Their part is estimated to exceed the national GDP and naturally has a tendency to normally increase during crisis/drought periods. However the economic situation in many of the countries where Gambian migrants work is quite difficult and this will be probably felt in case the country faces severe drought situation in the coming years. This mechanism should be well protected and improved as it represents a major asset in strengthening the resilience of the population and also for recovery after potential disasters such as food shortage or floods. There are no disaster risk insurance products offered in The Gambia at the moment.

The concept of post-disaster recovery is still related to relief operations that tend to be dragged over many years. Recovery is not necessarily perceived as part of return to a normal developmental process that contains concepts of "building back better".

3. Land use planning and other technical measures

In The Gambia, vulnerability to disasters is accentuated by unregulated urban and rural planning. The impact of floods, and especially of flash floods on local populations is aggravated by improper land-use planning and unmaintained drainage and sewage systems. Building codes and regulations are not regularly updated and often not enforced, and therefore exposure and vulnerability of the population are artificially created.

In terms of land use planning and urban planning, a master plan for the country exists since 1985. It was prepared for a period of 15 years, i.e. until 2000 (the plan was revised once in 1989). With the population that has doubled since the early 1990s, and authorities soon declaring 11 new growth centers in the country, there is a clear need to have a new national master plan. The Department of Physical Planning and Housing has a key role in disaster management and risk reduction but lacks the technical tools to produce a new master plan.

The review, enforcement and monitoring of land-use planning regulations (residential and agricultural), infrastructure planning regulations and building codes is seen as a critical requirement for disaster management and risk reduction. Many of the constructions are initiated without building permits and there seems to be no systematic penalty mechanism in place to reduce non compliance. In some situations authorities do not even have information about construction works in their cities and the government technical units do not have the necessary logistics and financial means to undertake monitoring and evaluation activities. Many of the technicians working on urban planning do not have an understanding of disaster management and risk reduction concepts and may not systematically take into account disaster risks in urban planning activities.

An updated country-wide disaster risk profile is missing, and so is an assessment of the current state of housing, including documentation of house collapse (generally due to high levels of

moisture). The development of a proper early warning system for floods, awareness and outreach on disaster-proof construction methods and tools, and programmes for voluntary relocation of vulnerable communities have also been highlighted as a priority by the government. Capacity development is clearly needed on disaster risk reduction and its implications for land-use planning, especially in the urban areas.

In order to eradicate floods in urban areas, the European Union has funded a study on 7 hot spots of flooding in urban and rural areas and is about to initiate a project for cleaning some of the drainage systems that are often causing floods in towns. In addition, there are a few institutions that understand DRR concepts and are already implementing small programmes at community level. For example, The Gambia Red Cross mentions the following activities: installing solar pannels in schools that would avoid risk of fire due to defficient electrical systems, building up drainage systems in rural areas that would reduce risks of floods and enhance agricultural productivity, building wells in villages and elevating/protecting old wells from being contaminated during the floods season, and planting 5,000 trees in 2010.

The Strategic Plan for Health is currently being revised. There is also an expressed need to undergo an assessment of existing health facilities, which were built before Gambia's independence, as well as to strengthen health advocacy and education (health facilities are old and some even in ruins according to an assessment conducted 3-4 years ago). The government has been supported by the UN in various areas related to health; for instance, the Pandemic Plan for Human Influenza (contingency plan) has been supported by UNDP, the ISDR campaign for Safer Hospitals has been organised in The Gambia; health and water sanitation projects are carried out at community level by UNICEF. In 2007 UNICEF refocused the interventions on cholera and waterborne disease risk targeting vulnerable communities. Safe water suply and improved sanitation were improved in cholera risk areas. However, health authorities mention that they have not been heavily involved in DRR activities. The national health policy is being reviewed and it will need to take up issues of risk reduction into consideration.

In terms of school infrastruetue, the Committee for Standards in School Building is collaborating with the Department of Physical Planning and Housing in ensuring that school safely mechanisms are in place. However, at present only schools in disaster-prone areas benefit from school refitting programmes. There is a need to continue to work with the Ministry of Education on the safety of all schools as more and more storms are reported due to climate variability. In addition, there is a need to ensure that the schools are adeqatly build to also serve as community safety places in times of disasters such as floods. At the moment, there is an ongoing assessment of the school infrustructure conducted by WFP and UNICEF.

HFA Priority 4: Recommendations

- 1.** In collaboration with the Ministry of Finance, NDMA should establish a regular training programme on mainstreaming DRR into development planning targeting the planning units which will be set up in various line ministries in 2012.
- 2.** Review various sectoral development plans in order to evaluate their contribution to reducing underlying risk factors (agriculture, environment, etc.) in terms of financial investment for disaster risk reduction in The Gambia.
- 3.** Organise training of trainers and provide training tools to TANGO to support the mainstreaming of DRR into community based programmes implemented by member NGOs.
- 4.** Reinforce the capacities of the the Department of Physical Planning and Housing (staff, competencies, equipment and financial resources) to ensure that future investments in infrastructure in the country respect land use planning and building regulations. The Department of Physical Planning and Housing should also reinforce its capacities for monitoring and evaluation of the enforcement of building codes.
- 5.** Promote the UNISDR campaigns on “Safer Schools” and “Safer Hospitals” and develop programmes to implement recommendations of these campaigns.
- 6.** Initiate and disseminate a study on traditional risk reduction practices (including from other countries in the region) and identify means of replication.
- 7.** Promote partnership opportunities between the private sector, the government and NGOs for DRR.
- 8.** Initiate a discussion at National Platform regarding the adoption of risk insurance schemes in The Gambia.
- 9.** Promote re-forestation programmes using indigenous species, restoration of mangroves for coastal protection and fisheries, as well as eco-tourism initiatives that contribute to creating local livelihood options and poverty alleviation.

Annex. List of interviewees

**Interviews conducted from 28 November to 2 December 2011 and from 23 to 27 January 2012
Banjul, The Gambia**

	Agency	Interviewee	Email address
Government			
1.	Republic of The Gambia	H.E. Aja Dr. Isatou Nije-Saidy, Vice-President and Minister of Women's Affairs	njiesaidy@ovp.gov.gm
2.	Bureau of Statistics	Alieu Ndow Statistician General	asmndow@yahoo.com
3.	Bureau of Statistics	Wally Ndow	Wahadre1@yahoo.com
4.	Department of Physical Planning and Housing	Momodou F.K. Kolley, Principal Development Control Officer	msskolley@yahoo.com
5.	Department of Physical Planning and Housing	Amadou Batchilly, Principal Development Control Officer	Amadoubatchally10@hotmail.com
6.	Department of Water Resources	Bernard Edward Gomez, Assistant Director and PR with WMO	be53gomez@yahoo.co.uk
7.	Ministry of Fisheries and Water Resources and Responsible for National Assembly Matters	Amadou Saine, Permanent Secretary	Ab_saine@yahoo.com
8.	Ministry of Agriculture	Ada Gaye, Permanent Secretary	Addagaye@yahoo.com
9.	Ministry of Agriculture	MrFafanding Fatajo	fsfatajo@yahoo.com
10.	Ministry of Health and Social Welfare	Sanna Dahaba, Permanent Secretary	sannabairo@gmail.com
11.	Ministry of Health and Social Welfare	Mr Karim Sonko, Deputy Permanent Secretary	
12.	Women's Bureau	Omar Kanteh, Assistant Director	omarkanteha2031@yahoo.com
13.	Department of Forestry	Mr Sajo Fatajo, Assistant Director	
14.	Ministry of Basic and Secondary Education	Musa O. Mendy, Senior Principal Officer	Musa1959mendy@yahoo.co.uk
15.	Ministry of Finance and Economic Affairs	Mr Mambureh Njie, Minister of Finance	mnie@mofea.gov.gm
16.	Ministry of Finance and Economic Affairs	Alagie Fadera Director of Planning	Alagiefadara@yahoo.co.uk
17.	Ministry of Finance and Economic Affairs	Samba B Jallow, Principal Planner	sbjallow@yahoo.co.uk
18.	Natiional Platform for Disaster Risk Reduction	Mr Albert Cox, Executive Director GAFNA	gafna@ganet.gm

19.	National Disaster Management Agency (NDMA)	Essa Khan, Executive Director	Khanessa2000@yahoo.com
20.	National Disaster Management Agency	Mr Lamin S Tamba, Programme Officer	istamba@hotmail.com
21.	National Environment Agency (NEA)	Momodou B.S. Kanteh, Director Technical Services Network	momodoucanteh@yahoo.com
22.	National Roads Authority	Bai Bittaye, Human Resources Manager	bayebittaye@live.co.uk
23.	National Roads Authority	Mr Momodou Sey Operation and Safety Engineer	Momodousey@Gmail.Com
24.	National Roads Authority	Mr Joof Finance & Admin Director	
Non-Governmental Organisations			
25.	International Development Support Services (IDSS)	Ahmad Tijan B. Jallow, Chief Executive Officer	Tijan.jallow@gmail.com
26.	International Development Support Services (IDSS)	Siga Fatima Jagne, Director	sigajallow@yahoo.com
27.	TANGO	Tabu Sarr, Programme Officer Training	psarr@tangogambia.org
28.	TANGO	Lucietia Georve, Programme Officer for Information and communication	lgeorve@tangogambia.org
29.	TANGO	Herdrammeh Sidibeh, Accountant	hsidibeh@tangogambia.org
30.	Gambia Red Cross Society	Buba Darboe Disaster Management Coordinator	bubadarboegracs@yahoo.com
31.	Gambia Red Cross Society	Fatou Gaye, Programme Officer	Fatou.gaye@redcross.gm
United Nations Country Team			
32.	UNDP	Mr Abdou Touray, Programme Specialist	tourayabdou@yahoo.co.uk
33.	UNICEF	Meritxell Relano Arana, Deputy, Representative	mrelano@unicef.org
34.	WFP	Vitoria Ginja, Representative	Victoria.ginia@wfp.org
35.	WFP	Darko Petrovic, VAM Consultant	Darko.petrovic@wfp.org
UNIVERSITY OF THE GAMBIA			
36.	University of The Gambia	Dr Pierre Gomez, Senior Lecturer	pgomez@utg.edu.gm
37.	University of The Gambia	Naffie Hydra	