

# THE GAMBIA

⇒ **THE PRIMARY**  
HAZARDS FACING  
**GAMBIA** ARE  
**DROUGHT,**  
**FLOODS** AND **STORMS**

⇒ **FLOODS**  
OCCUR WITH THE  
**MOST REGULAR**  
**FREQUENCY**

⇒ **INSECT INFESTATION**  
IS ALSO AN IMPORTANT  
**THREAT,** PARTICULARLY  
IN TERMS OF  
**ECONOMIC** DAMAGES

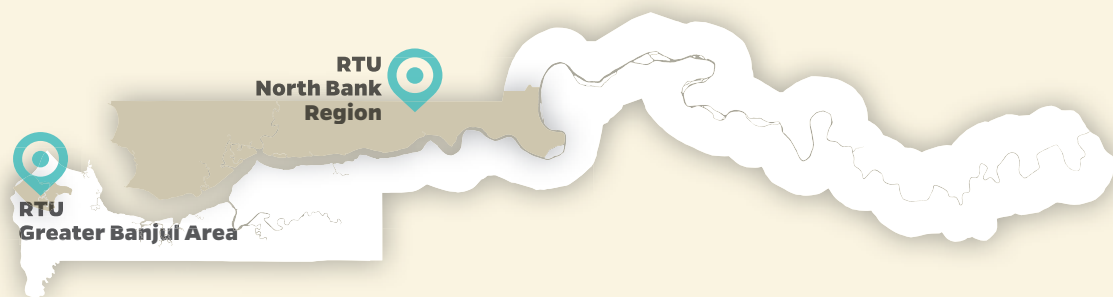
⇒ **DROUGHTS**  
HAVE AFFECTED THE MOST  
**NUMBER OF PEOPLE** BY FAR,  
FOLLOWED BY **FLOODS**

⇒ **EPIDEMICS**  
HAVE RESULTED  
IN THE **HIGHEST NUMBER**  
OF **DEATHS,**  
AGAIN FOLLOWED BY **FLOODS**

GAMBIA SCORES FROM WEST AFRICA RISK MAPPING



Source: EM-DAT (CRED)



# INSTITUTIONAL Capacity for DRR

## DRR Institutional Setup AND LEADERSHIP

Gambia has recognised disaster management as important to its development and has taken measures to build its capacity and resilience in the face of disasters. The Gambia's Vision 2020 strategy, launched in 1996, identified the need for a Disaster Preparedness Plan in order to achieve its development goals, and in 1997, Gambia established the National Disaster, Emergency Relief and Resettlement Committee (NDERRC), led by the Vice President. The National Environmental Protection Agency includes Disaster Preparedness and Contingency Planning as one of its programme areas, and disaster issues were included in the Gambia Environmental Action Plans (GEAP) Phase I and II. Disaster issues have also been included in the Rio+20 Republic of The Gambia National Report 2012 and The Gambia Programme for Accelerated Growth and Employment (PAGE) 2012.

At the national level, Gambia has established the National Disaster Management and food security governing council (NDMC), the disaster management and climate change adaptation platform and the National Disaster Management Agency (NDMA). The NDMC is headed by the Vice President and includes the sector ministries and the Solicitor General.

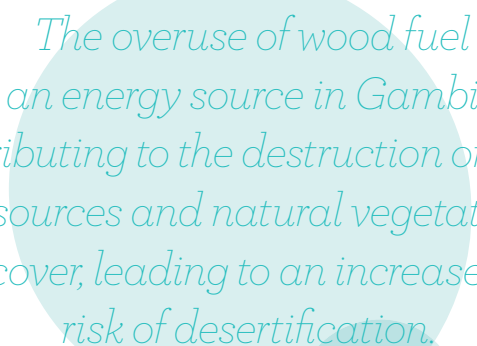
It advises the government on disaster management and develops and ensures the implementation of strategies and policies. Furthermore, it advises the President on aid needs, agreements and state of emergency declarations, and helps determine the number of police force and armed force members to be deployed in the event of a disaster. The NDMA is headed by an Executive Director and acts as the secretariat for the National Disaster Management and food security governing Council. In 2011, the NDMA launched a collaboration portal between the regional staff and main office to increase information sharing and collaboration. The NDMA is responsible for administrative matters related to disaster management and prevention and ensures policies and strategies are implemented at the national and local levels.

The Gambia National Contingency Plan was created in 2011 to enhance the effectiveness of disaster preparedness and risk reduction. Measures include an early warning system; capacity strengthening at the regional, district and community levels; geographic information systems; regional and sectoral contingency plans; and equipment and training at the national, regional and local

levels. Moreover, it includes partnerships, community participation and sustainability as important components to its implementation. The NDMA is responsible for the coordination and monitoring of the Contingency Plan.

In March 2011, The Gambia launched its National Platform for DRR, with the NDMA acting as the focal point and secretariat for the National Platform. The National Platform serves to ensure the implementation of the National Contingency Plan in the various sectors. The Plan also guarantees that disaster risk reduction activities included in the Contingency Plan are streamlined into the development planning activities of the Ministry and the Programme for Accelerated Growth and Development (PAGE).

At the regional level, Gambia has established Regional Disaster Management Committees (RDMC). These committees are chaired by the mayor or governor and are responsible for the implementation of the National Disaster Plan in the region. Regional Disaster Management Coordinators assist the RDMCs with the preparation of the regional disaster management plans. At the district level, Gambia has established District Disaster Management Committees assisted by District Disaster Management Coordinators.



*The overuse of wood fuel as an energy source in Gambia is contributing to the destruction of forest resources and natural vegetation cover, leading to an increased risk of desertification.*

# Strategic

## DOCUMENTS AND PLANS

Gambia developed the National Disaster Management Programme Strategic Plan, 2008-2011, to lay out the steps and actions needed to implement the National Disaster Management Policy (2007) and the 2008 National Disaster Management Bill, the National Disaster Management Policy outlines strategies, areas for intervention, and institutional structures and agencies to implement disaster plans. It also includes a strategy for financing. The National Disaster Management Bill established a National Disaster Fund, the National Disaster Management Council and Agency, regional and district disaster management committees, an Executive Director responsible for the administration of disaster management, and the development of disaster management plans at the national, regional, district, and local levels. The National Disaster Management Programme Strategic Plan strives to provide a multidimensional strategy and balance prevention, preparedness, mitigation and response in Gambia's approach to disaster management.

In its 2007 National Adaptation Programme of Action (NAPA), Gambia identified the main climate related hazards as floods, storms, droughts, cold spells, intra-seasonal-drought, heat waves and unseasonal rains. The NAPA includes three key sectors: economic (agriculture, fisheries, energy), natural resources (water and forest resources), and social (health). The NAPA identified the need to address meningitis, malaria, and cholera outbreaks and the creation of surveillance and detection systems for emergent and new diseases. The NAPA also identified the need for early warning systems, infrastructure improvements for drainage, land use zoning, and efficient drought relief. Ten priority projects were listed, including

the Rehabilitation of Early Warning Systems on Climate-Related Natural Hazards and the Reduction of Climate Change Related Diseases, both of which are focused on disaster risk management. The other priority projects address issues related to the ecosystem, climate change, food security and livelihoods, poverty, technology, and inadequate strategies for the incremental effects of climate change.

Gambia's Poverty Reduction Strategy Paper (PRSP II), 2007-2011, acknowledges the exploitation of natural resources, and the need to conserve them, along with the promotion of a well-balanced ecosystem. It also mentions the National Vision 2020 and its identification of the need for the development of a community based disaster preparedness plan as one of the main challenges for Gambia. The PRSP II notes that the overuse of wood fuel as an energy source in Gambia is causing the destruction of forest resources and natural vegetation cover, leading to desertification and the subsequent negative impacts on food production. It also lists soil erosion and decreasing soil fertility as constraints on agriculture.

# International

## ENGAGEMENT AND SUPPORT

The 2012-2016 United Nations Development Assistance Framework (UNDAF) included the establishment of a national climate change and disaster risk reduction information system as one of its country programme outcomes. The World Food Programme (WFP) has supported Gambia through the 2012 Emergency Operation (EMOP) that supported farming communities during the Sahel food crisis (2011- 2012) with food distributions, supplementary feeding for young children and cash transfers. Currently, the WFP is implementing the Protracted Relief and Recovery Operation (PRRO), which supports communities suffering from crop failure and floods by combating malnutrition in children and pregnant and nursing women, rebuilding livelihoods, and enhancing the capacity of the government in emergency preparedness and response. In terms of DRR, the WFP provides support to the government by providing capacity building for contingency planning, emergency preparedness, needs assessment and immediate relief assistance at the central and regional levels. The agency also produces a quarterly Food Security and Market Information Bulletin to provide information to decision-makers on various issues: agricultural

production; food trade and price trends; groups most vulnerable to food insecurity; climate forecasts; and vulnerability trends. Other organisations implementing projects related to disaster management and climate change include the European Union (UE), International Fund for Agricultural Development (IFAD), the World Bank (WB), and the United Nations Development Programme (UNDP). The Drainage, Sanitation, and Waste Management Interventions for Flood Prevention in Gambia, supported by the EU, aims to mitigate the impacts of flooding through improvements to the drainage and sanitation infrastructure in seven urban areas that have been identified as vulnerable. The IFAD is implementing the Participatory Integrated-Watershed Management Project to increase rural communities' capacities to sustainably manage watersheds. It also provides resources for the implementation of watershed management plans. The Adaptation to Climate Change project, supported by the UNDP and the Global Environmental Facility, aims to build vulnerable communities' resilience to climate change impacts on coastal resources.

# UNDERLYING Risk Factors: Local Perceptions

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## RTUs Selected AND SUPPORTING RATIONALE

The RRI in Gambia looked at two Representative Territorial Units (RTUs), each of which differ in terms of risks, geographic location and levels of urbanisation and economic development. The Greater Banjul Area, the capital, is a western coastal urban

area, while the North Bank Region is a rural and subsistence agricultural region. The two RTUs attempt to cover, at least in part, the different types of geography, climate-related challenges, and natural hazards and risks that Gambia faces. The rural versus urban locations also provide a more comprehensive picture of the underlying risk factors affecting Gambians and the conditions in which they live that make them either more or less vulnerable to disasters.

# Greater Banjul Area

The Greater Banjul Area is located in Western Gambia and consists of the City of Banjul and the Kanifing Municipal Council, occupying an area of 94 km<sup>2</sup> (less than 1% of the Gambia's land area). This RTU is in close proximity to the River Gambia and home to a population of 357,000 (26% of the country's population).

Banjul's status as the largest urban city in Gambia is slowly being eroded due to the emergence of Serrekunda, the Kanifing Municipality's capital. Throughout the 1990s and 2000s, the Kanifing Municipality grew to become the most commercial and populous centre in Gambia (since 1963, the population increased from less than 12,000 to 322,700 in 2003), with the country's major hotels and tourism facilities based there.

The rapid pace of urbanisation accompanied by inadequate storm water management systems and drainage facilities has significantly increased the overall vulnerability of this RTU to climate-related hazards, such as flash floods after heavy rains. In the 2010 rainy season, flash floods in the area affected more than 35,000 people, damaged 2,371 houses and impacted an unknown amount of food and cash crops. In addition, increasing urbanisation is putting pressure on basic social services (access to education and health) and economic opportunities (access to land and employment), which in turn has had an impact on the urban poverty rate (57.2% in Greater Banjul Area). With the exception of Banjul, poverty has increased in both rural and urban areas in Gambia between

1992 and 2003.

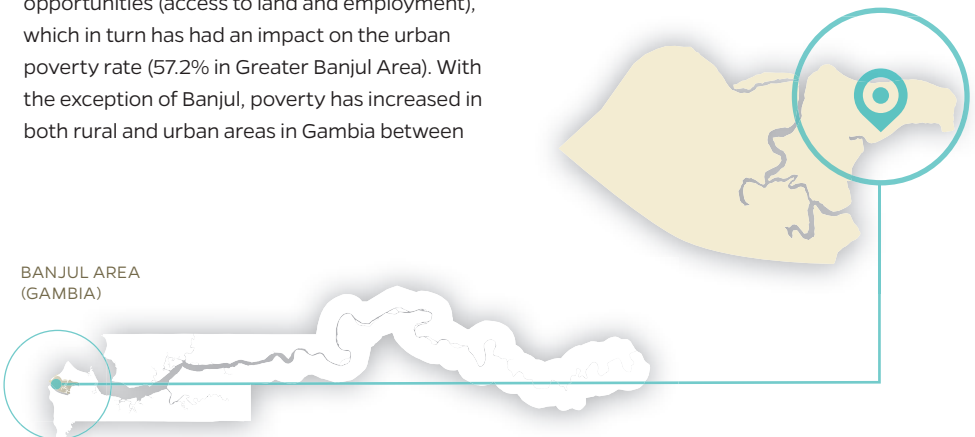
The Greater Banjul Area is primarily low-lying and sea level rise and coastal erosion present serious long-term challenges to development. Groundwater is at risk of increased salinisation, and shallow coastal aquifers could diminish, which would affect fresh water supplies and peri-urban agriculture. In some areas of the Greater Banjul Area, the beach has been retreating at a rate of 1-2 meters per year due to coastal erosion. The impact of sea level rise and coastal erosion has potentially negative effects on the tourism industry, the artisanal fisheries sector and associated livelihoods. These are critical to the economy of the country as Gambia possesses only a minimal manufacturing sector and limited commercial mineral resources.

## RTU Greater Banjul Area

### HOUSING IN DANGEROUS LOCATIONS

INCREASES PEOPLE'S EXPOSURE TO FLOODS AND LANDSLIDES, WITH THE POTENTIAL FOR LOSS OF HUMAN LIVES AND ECONOMIC ASSETS IN URBAN AREAS

BANJUL AREA  
(GAMBIA)



RTU NORTH BANK REGION  
(GAMBIA)

## RTU North Bank Region

DEFORESTATION  
CONTRIBUTES TO A GREATER  
RISK OF FLOODING AND  
SOIL EROSION, AS WELL AS  
REDUCED PROTECTION FROM  
WINDSTORMS

# North Bank Region

This RTU is located on the Northern Bank of the River Gambia and is comprised of six districts with a total population of 174,835. Until the expansion of the ferry services to Barra and the construction of the bridge across Mini Minyang Bolon at Kerewan, the North Bank Region suffered from a lack of access to Banjul.

Agriculture is the primary source of livelihood in the country. It employs more than 68% of the workforce, accounts for approximately 40% of Gambia's export earnings and makes up around 26% of the GDP. In the North Bank Region, agriculture is predominantly subsistence and rainfed, with farmers relying on traditional shifting cultivation and livestock management practices. Grains (millet) and groundnuts, and to a lesser extent maize and rice, are the main crops cultivated. Horticulture, extensive livestock farming (especially small ruminants and poultry), charcoal and salt production, and firewood selling are other economic activities. Challenges around the marketing of farm produce often pose serious problems, especially for female vegetable growers. The main constraints in sustaining their production efforts are the lack of proper storage facilities, poor timing of production, long distances to the nearest market and the lack of reliable means of transportation.

The North Bank Region is experiencing extreme forest and soil degradation and a steady decrease in natural resources. Cropland area has increased from less than 100,000 hectares to over 300,000 at the expense of natural woodland and wetland ecosystems. Over the last 50 years, increasing numbers of livestock, in combination with soil degrading farming practices, have put pressure on the lands available for food and fodder production, forcing farmers and herders to encroach on forests to extend farmlands and grazing areas. Furthermore, clearance for settlements and infrastructure development in forest areas occurs without appropriate environmental consideration. Uncontrolled felling for timber and collection of firewood, as well as unsustainable harvesting of forest products for domestic use is common in this RTU.

Gambia's climate is semi-arid with a relatively short rainy season and erratic rainfall, causing periodic but frequent droughts and vagaries of climate. In the North Bank Region, the rainy season is especially poor, both in terms of total amount and spatial distribution, and yields are thus generally low. The rainy season in 2011 and 2012 ended earlier than normal, which led to widespread crop failure. Serious floods followed in many parts of the country during the 2012 harvesting season, further aggravating food insecurity and poverty conditions in Gambia. The country's poverty rate averaged 63.3% in rural areas. Households headed by females and located in rural areas are most likely to be poor. Female-headed households make up 18% of all rural households, with about 63% falling below the poverty line, compared to 48% of male-headed households.



NATURAL HAZARDS AND UNDERLYING RISK FACTORS OF SELECTED RTUS

	GREATER BANJUL (URBAN)	NORTH BANK (RURAL)
NATURAL HAZARDS	FLOODS	NONE SELECTED
RISK DRIVER 1	<div>1</div> <ul style="list-style-type: none"><li>• Coastal erosion</li><li>• Deforestation</li></ul>	<div>1</div> <ul style="list-style-type: none"><li>• Deforestation</li><li>• Soil erosion</li></ul>
RISK DRIVER 2	<div>2</div> <ul style="list-style-type: none"><li>• In-migration</li><li>• Limited access to land</li><li>• Poverty</li><li>• Unemployment</li></ul>	<div>2</div> <ul style="list-style-type: none"><li>• Food insecurity</li><li>• Low levels of literacy</li><li>• Out-migration</li><li>• Poverty</li><li>• Prevalence of infectious diseases</li><li>• Unemployment</li></ul>
RISK DRIVER 3	<div>3</div> <ul style="list-style-type: none"><li>• Housing in dangerous locations</li><li>• Overcrowded conditions</li><li>• Poorly built housing</li><li>• Poor drainage/water disposal</li></ul>	<div>3</div> <ul style="list-style-type: none"><li>• Housing in dangerous locations</li><li>• Poorly built housing</li><li>• Poor drainage/water disposal</li></ul>
RISK DRIVER 4	<div>4</div> <ul style="list-style-type: none"><li>• Corruption</li><li>• Limited financial capacity</li></ul>	<div>4</div> <ul style="list-style-type: none"><li>• Corruption</li><li>• Lack of human capacity</li><li>• Lack of accountability</li><li>• Limited financial capacity</li></ul>



# Findings

AND KEY ISSUES  
BY RISK DRIVER

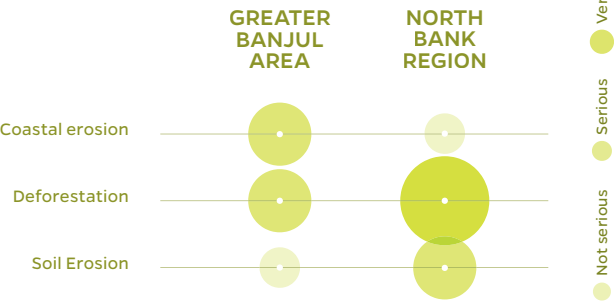
In the Greater Banjul Area respondents identified floods as the main natural hazard they face. In the North Bank Region, respondents did not score natural hazards as being particularly serious, with roughly equal but only moderately serious scores given to floods, wildfire and insect infestation.

# Local Perceptions on Risk Driver 1

Deforestation was found to be the main environmental challenge in the North Bank Region, followed by soil erosion. In the Greater Banjul Area, coastal erosion was highlighted as a main environmental concern as much of the territory is surrounded by the River Gambia. Within the Greater Banjul RTU, deforestation was considered a concern specifically in the Kanifing Municipality, which is a major commercial area with industrial development initiatives taking place.

## Environmental and Natural Resources

ENVIRONMENTAL CHALLENGES IN GREATER BANJUL AREA AND NORTH BANK REGION



### 1 COASTAL EROSION

Coastal erosion was identified by respondents in Greater Banjul Area as one of the consequences of deforestation, resulting in diminished coastline vegetation that is integral in protecting the coast from rain and wind storms. Sand mining practices have also exacerbated erosion, changing the natural coastal sedimentation-erosion dynamics. Coastal erosion has also been identified as a threat to the buildings located along the coast, which in turn increases the area's economic vulnerability and negatively impacts the tourism industry as it affects the stability of beaches, hotels and transport infrastructure. Thus, the livelihoods of some families are threatened, and in some cases they are forced to relocate.

Through support from the government, communities and NGOs have developed sensitisation campaigns on the dangers and impacts associated with coastal erosion and how to improve community coping capacities. The National Environmental Agency (NEA) has forbidden sand mining activities in some areas to allow for natural regeneration. Other initiatives such as mangrove planting have also been promoted by local and national authorities and supported by families from the local areas. These were rated as somewhat effective by respondents. A coastal protection project was also put in place by the national authorities, which received high levels of participation from the communities. The project was considered to be effective but was also criticised for its low quality and the limited funding available.

## 2 DEFORESTATION

Many respondents in the North Bank Region pointed to wildfires as the most significant cause of deforestation. Respondents agree that reduced soil fertility and lowered agricultural production are often direct results of deforestation. Other consequences identified were the effects on the local rainfall patterns and the reduced protection from windstorms, increasing flooding and erosion.

Households in the Greater Banjul Area and the North Bank Region are engaged in tree planting activities through small-scale initiatives, including coconut and mangrove tree planting along riverbanks. In partnership with NGOs, communities in the North Bank Region have also organised themselves to monitor wildfires and promote sensitisation sessions to raise awareness on the negative impacts of environmental degradation and sustainable options to use firewood, such as improved cooking stoves.

Local authorities have enacted by-laws to control forest management and illegal logging. Tree planting activities have been put in place in both RTUs, and have been provided with additional funding and expertise. These activities were valued as very effective. Interventions led by the national government have included the provision of seedlings for reforestation activities. These were valued as somewhat effective but criticised for the reduced allocation of human resources to monitor the activities. The Gambian government enacted a Forestry Act to regulate protection and forest management, which has been valued by respondents as minimally effective due to reduced funding and incomplete enforcement. This is directly related to the limited degree of community participation. Respondents found the Anti-Wildfire Programme to be very effective because of the high degree of community organisation, which was seen as critical to the success of the programme.

## 3 SOIL EROSION

Respondents in the North Bank Region are aware of the direct relationship of soil erosion with deforestation. Soil erosion leads to soil infertility and low production as nutrient-rich top soil layers are washed away. To promote soil retention, farmers are adopting best agricultural practices such as crop rotation and strip cropping (planting crops in strips across the slope), as well as tree planting.

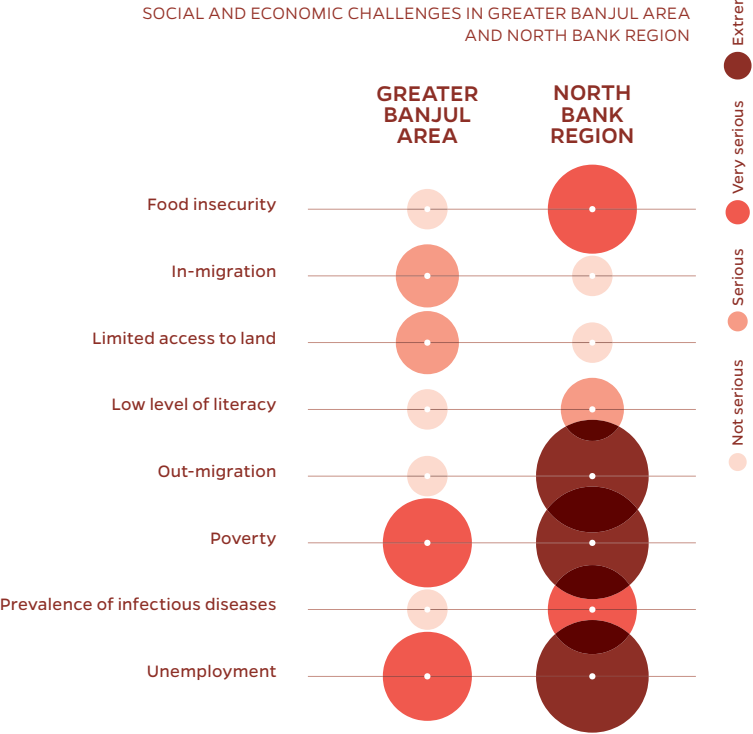
Local authorities are encouraging farmers to practice contour ploughing to help prevent erosion, especially in the event of rainstorms. Contour bunding is associated with the ploughing and placing of stones around the contours of slopes. This has achieved positive results and is rated as effective. Both tree planting and contour bunding have been introduced through agricultural extension education programmes led by the national government.

At the national level, the government is promoting tree planting; however, low soil fertility and high degrees of deforestation have hampered effectiveness. Further measures to improve fertility will be needed before reforestation can be successful. The Participatory Integrated Watershed Management project (PIWAMP), funded by IFAD and the African Development Bank (AfDB), was launched in 2006 by the national government with the objective of increasing sustainable land productivity in Gambia. It was the initiative that respondents most positively valued.

# Local Perceptions on Risk Driver 2

**P**overty, unemployment, limited access to land, and in-migration are the main socioeconomic challenges in the Greater Banjul Area. Comparatively, unemployment, poverty, out-migration, food insecurity, low levels of literacy, and the prevalence of infectious diseases are the challenges identified in the North Bank Region. Unemployment and poverty were the key socioeconomic concerns highlighted in both RTUs.

## Socioeconomic Conditions



### 1 FOOD INSECURITY

Respondents in the North Bank Region linked food insecurity with malnutrition, infertility and subsequently a weak labour force. They also viewed forest encroachment as a consequence of the need to increase agricultural land to meet demand. To reduce vulnerability to food insecurity, families grow their own crops (early maturing crops if possible), diversify food production and rear livestock. Other strategies employed by families are small income-generating activities to increase the family income.

The national government has distributed seeds (early growing millets) and agriculture inputs such as fertilizer, while also promoting upland rice cultivation. Both measures have been viewed positively and were considered very effective interventions. Another initiative to reduce food insecurity was 'Operation Feed Yourself', launched in 2003 to encourage young Gambians in urban areas to return to rural areas to cultivate. This would in turn decrease dependence and control urban growth. The campaign was positively accepted and considered as effective by respondents,

although a lack of technical capacity from the government was highlighted. Other interventions such as skill development on vegetable production and new farming techniques were also identified.

## 2 IN-MIGRATION

In-migration in Greater Banjul was identified by respondents as a direct cause of high crime rates and increased pressure on food and shelter, as people are forced to relocate to dangerous and unsanitary areas. Respondents also indicated that the trend has reduced their employment opportunities and puts extra pressure on social services such as health and education.

To address this issue, communities are discouraging youth from relocating to urban areas. This fits into the larger tendency of “decentralisation”, a development policy that aims to reduce overcrowding in capital cities while guaranteeing better access to social services throughout the rest of the country, which is mostly rural. Decentralisation initiatives have been positively accepted by respondents, who consider them to be somewhat effective and a good way of alleviating pressure on social services. In urban areas, local authorities of Banjul are also providing housing for displaced people, a decision considered to be very effective.

## 3 LIMITED ACCESS TO LAND

Limited access to land is affecting access to farmland, which subsequently impacts food security. Social infrastructure projects such as schools and hospitals are also affected, resulting in reduced social welfare in overcrowded areas in Greater Banjul. The lack of access to land is pushing people toward disaster-prone areas and causing overcrowding in existing neighbourhoods.

National institutions have introduced low-cost housing schemes, which have been deemed minimally effective by respondents due to insufficient funding. The central government’s decentralisation initiatives are considered to be somewhat effective as they could help reduce pressure on social services in the cities.

## 4 LOW LEVELS OF LITERACY

Respondents in the North Bank recognised low levels of literacy as an obstacle for communications on risk prevention, thereby increasing vulnerability as written materials for DRR campaigns would be ineffective. Communities have engaged in adult learning and literacy programmes with the support of international organisations. These have been considered as somewhat effective by respondents as the programmes have helped build schools and increased coordination amongst actors.

The national government has also put in place adult learning programmes for functional literacy, with the aim of training Gambians to manage daily living and employment tasks that require reading skills beyond a basic level. These initiatives were valued as very effective by respondents. The government has established skill training centres that provide qualified training for youth, and local governments have developed cross-sectorial training programmes. These measures were also highly valued by respondents.

# Local Perceptions on Risk Driver 2

## Socioeconomic Conditions

### 5 OUT-MIGRATION

In the North Bank, out-migration is linked to the lack of labour opportunities for young people in rural areas, affecting the workforce and causing a decline in local production and capacity. In collaboration with international organisations, the communities are advising people, especially the youth, on the dangers associated with out-migration through awareness campaigns. Horticulture training programmes have also been developed to encourage farming in this rural RTU.

Through the 'No Back Way to Europe' campaign, the government, in collaboration with the country's immigration department and police force, provides farmers with different agricultural inputs and loans for government land. It aims to discourage young farmers from illegally emigrating by providing them with tools to increase agricultural production. This project was valued as minimally effective by respondents as they believe that there are still major regional challenges that the project fails to address. International organisations are also facilitating youth enterprise development. This was valued as a very effective intervention as most of the trainings have resulted in an increase in job opportunities.

of unemployment and commented that the communities in this RTU are highly dependent on the government. In response, they are embarking on community-based interventions to reduce poverty, such as the establishment of women-led vegetable gardens. These were considered to be very effective as they reduce community vulnerability to volatile food prices.

In the Greater Banjul Area the local government has created credit facilities through microfinance projects, which have been assessed as effective, but are criticised at the same time given the increasing unemployment rate. National institutions have also developed several projects under their employment creation policies. These include skill development centres focused on youth and female self-employment, microfinance services, enterprise development and livelihoods projects. Respondents see these as somewhat effective as they have received political commitment and adequate financial and technical resources. In the North Bank Region, respondents valued the presence of international organisations engaged in microfinance projects, which they view as very effective. Additionally, people mentioned government interventions, such as the provision of improved production methods and the implementation of a rural finance framework, as somewhat effective and highlighted that these initiatives were beneficiary inclusive.

### 6 POVERTY

When addressing hunger and living standards, respondents stated that their basic needs are not fully met. They highlighted that the recent food crisis and flooding in Gambia has affected the poorest sections of vulnerable communities, rendering them even more vulnerable and exposed to risk in both rural and urban areas. Respondents in the North Bank Region link poverty levels to the high rates

## 7 PREVALENCE OF INFECTIOUS DISEASES

Infectious diseases are seen in the North Bank Region as a factor that affects farmers' productivity, increasing their vulnerability to food insecurity in the long-term. Communities use preventive methods such as prophylactics and bed nets to avoid infection.

International organisations such as the Global Fund against HIV/AIDS, Malaria and Tuberculosis and the Ministry of Health and Social Welfare are providing communities with bed nets. This is seen as a very effective measure targeting a specific problem. International organisations have also implemented sensitisation campaigns on environmental conditions that increase disease transmission. The national government is providing clean drinking water, which is considered to be a very effective intervention; however, further technical capacity and funding is believed to be needed.

At the local level in both RTUs, skill training centres have been created, but respondents assess them as minimally effective due to the exclusion of the most vulnerable, inefficient use of funds, and the inability to find jobs after training given the small size of the job market.

The national government, in collaboration with NGOs, has developed activities towards youth training on enterprise development; however, these are considered to be minimally effective given the need for further funding and broader outreach to youth. The PRSP and the EU- funded PAGE are in place 'to address unemployment and poverty'. Both are considered to be somewhat effective and dependent on political commitment. The Gambia Priority Employment Programme (GAMJOBS), funded by the UNDP, aims to create an enabling environment for employment creation. The programme was assessed by respondents as minimally effective, highlighting the need for further funding and community participation.

## 8 UNEMPLOYMENT

Respondents in the North Bank Region affirmed that unemployment is causing a high rate of out-migration, forcing youth to relocate to the capital city. In the Greater Banjul Area, however, one of the most frequently mentioned consequences of unemployment is the increased crime rate.

To overcome the high unemployment rate, families engage in small business and gardening and try to access microfinance sources to diversify income and reduce economic vulnerability. Communities also seek support from the government, NGOs and remittances.

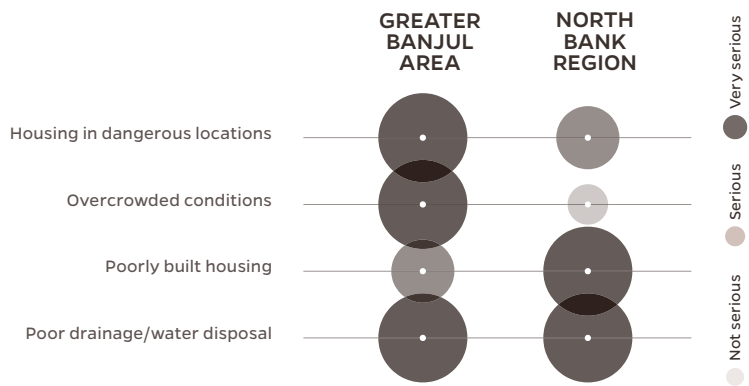


# Local Perceptions on Risk Driver 3

## Land Use and Built Environment

In both RTUs, the main land use and built environment challenges are poor drainage or water disposal and housing that is poorly built and/or in dangerous locations. Overcrowded conditions were also highlighted in the Greater Banjul Area.

LAND USE CHALLENGES IN GREATER BANJUL AREA AND NORTH BANK REGION



### HOUSING IN DANGEROUS LOCATIONS

Building houses in dangerous locations, such as waterways and ditches, increases exposure to floods and landslides. During the rainy season many households in both RTUs experience flooding, causing some structures to collapse, risking human lives and increasing economic vulnerability. Many families repair their houses every year for the rainy season; however, this is only possible if there is a social network that provides support to the families. Those living in irregular settlements must often move temporarily to safer locations.

To address this issue, local councils have been raising awareness on the dangers of building in exposed areas, and the national government has implemented relocation policies and provided more solid materials, such as cement blocks, for reconstruction purposes. This has been valued by respondents as minimally effective, as some people are reluctant to move to a different setting with different conditions for their families.

The materials provided have been criticised for not being produced locally, which would strengthen the economy. Additionally, relocation policies need additional funding in order to reach more beneficiaries, especially the most vulnerable.

Building codes do exist and the government has enacted a Planning Act. Some respondents, however, see these measures as minimally effective due to a lack of financial and human capacities needed for the effective enforcement of both regulations. A few respondents mentioned the eviction from unauthorised settlements, pointing out that the measure had been coherent with the approved legal framework. Additionally, sensitisation campaigns on the need to respect building codes have also been assessed as minimally effective. This is largely due to families' reduced access to technical and financial resources, as well as the low capacity of the Physical Planning Unit and other major stakeholders to enforce such policies on the ground.

## 2 OVERCROWDED CONDITIONS

Overcrowding in the Greater Banjul Area is generating increased pressure on roads and other congested transportation infrastructures. It is also increasing vulnerability to communicable diseases, mainly caused by the pressure on the already poor sanitation facilities. An additional consequence is the escalating crime rate.

Some respondents noted that the national government is making attempts to decentralise development. This measure could help reduce overcrowding in urban areas if the provision of social services and facilities were more widely spread throughout the country, especially reaching rural areas. However, the provision of public services in rural areas is still ineffective, and some respondents mentioned that further funding is needed in this respect.

## 3 POORLY BUILT HOUSING

Respondents in both RTUs stated that many houses are built with poor and unsuitable building materials and in dangerous locations. This is largely due to weak control mechanisms for buildings and a lack of coordination amongst the relevant authorities. Poor building materials lead to the overheating of houses as they often lack insulation. Furthermore, these poorly built houses are more susceptible to collapse during flooding, especially if they are located in dangerous locations.

Local governments have only recently started to monitor the location of houses in hazardous areas. Respondents, however, viewed this as only minimally effective. Local councils have also collaborated in the evacuation of victims in the case of emergency, which was again valued as minimally effective due to a lack of resources. To address hazard protection, the national government, with the support of international organizations, has established building codes along with the National Planning Act, which regulates housing amongst other activities. Yet these regulations lack appropriate enforcement, which, in the view of respondents, is linked to insufficient funding and the inefficiency of those responsible for their enforcement and monitoring. Finally, the national government is providing victims with financial aid to improve the

quality of houses, or relocation in some cases. However, respondents stated that there is no real coordination between the relevant authorities behind the initiative.

## 4 DRAINAGE/ WATER DISPOSAL

The current drainage system in the Greater Banjul Area is said to be poorly planned and not properly maintained, causing flooding every year and leading to erosion and disease outbreaks. Other consequences are the flooding of main roads and water contamination.

North Bank communities are lobbying to get support from the government and other organisations on this issue, since communities lack the necessary technical capacity. In both RTUs, the communities have organised themselves to build local drainage systems as a temporary solution, but these are recognised to be minimally effective as this infrastructure needs further technical capacity for long-term sustainability. They have also organised regular cleaning exercises of the draining system to avoid mosquito breeding and to mitigate the potential risk of flooding. Pumps to drain water from compounds have been used and community sensitisation activities carried out on the need to avoid dumping garbage into the drainage system. These were assessed as very effective measures.

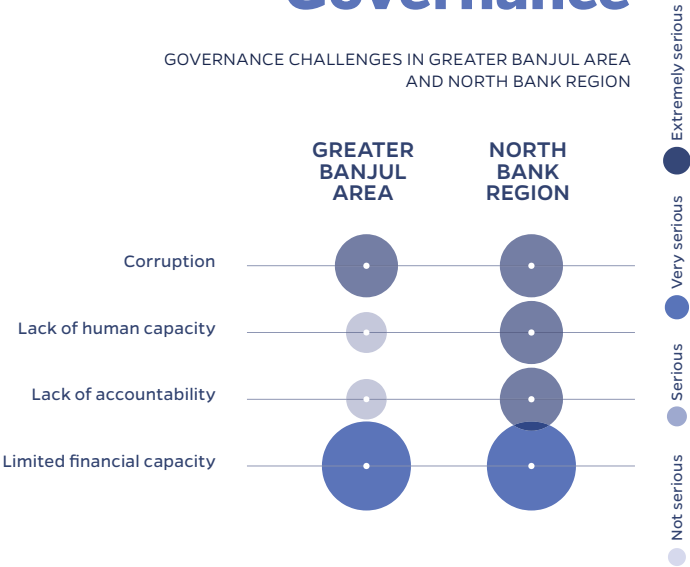
In the Greater Banjul Area, the national government is diverting water flows and using concrete slabs to build new waterways and drainage systems, while existing and new roads are being equipped with drains to avoid flooding. Although considered as somewhat effective, this measure requires further maintenance and integration into urban and rural planning. Additionally, the government is rehabilitating existing drainage. In general, these actions are considered to be effective, but respondents stated that further sensitisation is required for long-term sustainability of the infrastructure so that residents increase their sense of ownership and are concerned about the implications of their actions. Respondents also note that additional funding is required to maintain the infrastructure, along with the implementation of a waste management system, so that people have a sustainable alternative to dispose of their household waste.

# Local Perceptions on Risk Driver 4

## Governance

GOVERNANCE CHALLENGES IN GREATER BANJUL AREA AND NORTH BANK REGION

Limited financial capacity and corruption were the two key issues selected in both RTUs. In addition, in the North Bank region, lack of accountability and human capacity were also considered to be relevant challenges.



### 1 CORRUPTION

Respondents in the Greater Banjul Area and the North Bank Region understood corruption as a misuse of government funds that are not adequately accounted for and not spent in the right way, requiring further transparency and accountability from the government. Corruption increases communities' vulnerability as the diversion or misuse of funds prevents activities from being implemented, or causes activities to be delayed, poorly implemented or not completed in some cases.

In 2004, the national government created an Anticorruption Commission, which was valued positively as somewhat effective. The Commission was launched as part of the anti-corruption campaign "Operation No Comprise." Respondents link its effectiveness to the existence, reform and reinforcement of specific regulations enacted to fight against

corruption such as the annual auditing exercises of public accounts and the legal trials of public officials who have had to face commissions of enquiry.

### 2 LACK OF HUMAN CAPACITY

North Bank respondents affirmed that the lack of human capacity is related to an insufficient workforce, leading to delays, inefficiency, or even project failure.

The local government manages scholarships and training programmes for youth, and while they are positively valued, respondents recognised that they lack technical know-how and funds. The national government has invested in the capacity-building of government departments and has supported the training of staff from District Assemblies. Both of these initiatives were found to be effective, as they have increased and



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strengthened human capacity at the local level. However, respondents claimed that adequate funding is needed for expansion and greater impact.

### 3 LACK OF ACCOUNTABILITY

Lack of accountability is intimately related with corruption. North Bank respondents specifically referred to the carelessness in governance of some institutions, which, amongst other consequences, can cause delays in project implementation.

Respondents perceive the auditing process of the administrative and financial management of public accounts as effective. The creation of the Public Accounts Committee of the National Assembly reflects the government's willingness to address this issue. Respondents mentioned that strict measures have been taken on decisions lacking accountability; however, institutional weakness remains a challenge. Roles and responsibilities within the Committee are clearly defined, signaling that there are

internal technical capacities available to hold accountable those responsible for decisions related to spending and resource allocation.

### 4 LIMITED FINANCIAL CAPACITY

Limited financial capacity is seen as a major challenge for the implementation of plans. It causes delays and impedes on institutions' ability to address people's vulnerabilities in a more complete and sustainable manner.

The national government is currently supporting families through the provision of loans. While it has been reported that the low level of loan repayment is jeopardising the long-term sustainability of this funding source, the initiative has been very positively valued. The national government has thus solicited financial aid from international institutions, which might prove to be a temporary and effective solution. Nevertheless, further efforts from the government to reach more sustainable and longer-term solutions will be needed.

# Recommendations from



## INCREASING KNOWLEDGE AND AWARENESS ON ENVIRONMENT AND NATURAL RESOURCES



## BUILDING SOCIOECONOMIC RESILIENCE



## IMPROVING LAND USE AND THE BUILT ENVIRONMENT



## IMPROVING GOVERNANCE

### GREATER BANJUL

- Involve communities in **MULTI-HAZARD RISK AND VULNERABILITY ASSESSMENT** exercise
- **STRENGTHEN POLICIES** on sand mining and cutting of mangroves
- Promote **TREE PLANTING** and mangrove conservation activities
- **RAISE AWARENESS** on environmental issues

- Establish and strengthen existing **SKILLS CENTRES**
- Create **MICRO FINANCE OPPORTUNITIES**
- Enhance **ECONOMIC ACTIVITIES** especially for young people
- Review and update existing **POLICIES AND LAND USE REGULATION**

- **RELOCATE SETTLEMENTS** exposed to flooding risks
- Make provision of **AFFORDABLE HOUSING**
- Construct **PROPER DRAINAGE SYSTEMS**
- Reinforce **BUILDING REGULATION AND CODES**

- Create an agency to **FIGHT AGAINST CORRUPTION**
- Strengthen the **PUBLIC ENTERPRISES COMMITTEES (PAC/PEC)** of the National Assembly to improve accountability
- Decentralise **PLANNING AND BUDGETING**

# the RTUs

## NORTH BANK

- Identify **VULNERABLE GROUPS** and assess **LIVELIHOODS AT RISK**
- Promote **TREE PLANTING** activities involving households at the community level
- Enforce **ANTI-LITTER REGULATIONS**
- Strengthen policies to **DISCOURAGE USE OF FIRE**

- Establish skill centres on **ECOLOGICAL AGRICULTURE PRACTICES**
- Facilitate **MARKET OPPORTUNITIES** for farm produce
- Mobilise funds to **IMPROVE ACCESS TO HEALTH** services
- Provide **EARLY CHILDHOOD DEVELOPMENT (ECD) TRAINING CENTRES** and adult literacy classes
- Raise awareness on the importance of **LITERACY**

- Perform **MAPPING OF RISK AREAS**
- Construct **PROTECTIVE DYKES AND BUNDS**
- **RELOCATE SETTLEMENTS**
- Make provision of **AFFORDABLE HOUSING**
- Construct **PROPER DRAINAGE SYSTEMS**

- Raise awareness and promote **PROPER PUBLIC RESOURCE MANAGEMENT**
- Strengthen **HUMAN CAPACITY OF THE LOCAL AUTHORITIES**
- Strengthen the **PUBLIC ACCOUNTS COMMITTEE / PUBLIC ENTERPRISE COMMITTEE** (PAC/PEC) to ensure a proper public accounting system

# Key

## CHALLENGES

Through the data collection process and workshops held in Gambia, participants in the Greater Banjul Area and North Bank Region shared their perceptions on the key challenges they face:

- There are a number of urgent priorities for building DRR capacity in Gambia that should be fast-tracked, notably in relation to the development of storm water management in the Greater Banjul Area, and the development of integrated land use plans for wetland ecosystems. Floods and storm water runoff are most common in urban areas and increase exposure to malaria and other waterborne and water contact diseases. Inadequate storm water management systems and the lack of adherence to land use zoning regulations have increased the frequency and severity of flooding in this RTU. Thus, priority should be given to rehabilitating and upgrading the drainage systems.
- Disaster risk screening should be built into future development and planning at all sectors and regional levels in Gambia. Thus, to help mitigate impacts of coastal erosion and sea level rise, national efforts should be given to develop a strategic plan focused on protecting vulnerable areas along the beach, a legal framework to protect the remaining mangroves and other critical coastal habitats, and a program of action to protect urban infrastructure and populated areas.
- In the North Bank Region where crop and livestock production is totally dependent on the availability of rain, drought hazards are negatively impacting any gains obtained by crop diversification practices and other improved agricultural technologies. DRR strategies should focus on reducing the dependency on rainfall through irrigation activities and protecting ecosystems at risk from other natural or anthropogenic hazards that accompany droughts, such as wildfires, saltwater intrusion, and land use practices.
- There are specific DRR activities that are currently in place in the North Bank Region, but improvement is needed. These include controlling the use of fire and preserving the remaining woodlands from conversion to croplands or over-exploitation; promoting reforestation efforts as a way to regain lost cover; investing in research and development to broaden livestock- based livelihoods, such as salt-tolerant varieties of crops to help maintain productivity as salinity increases. Other relevant strategies on DRR and CCA that should be considered are the introduction of early maturing crop varieties to address drought-related problems; the promotion of irrigation for horticultural crop production, especially upland crop and other short cycles of crops such as peanuts; and the introduction of aquaculture for the supply of required protein.



