

# NIGER

⇒ **NIGER**  
IS AT HIGH RISK FROM  
**DROUGHT, EPIDEMICS,**  
**FLOODS**  
AND **FOOD INSECURITY.**

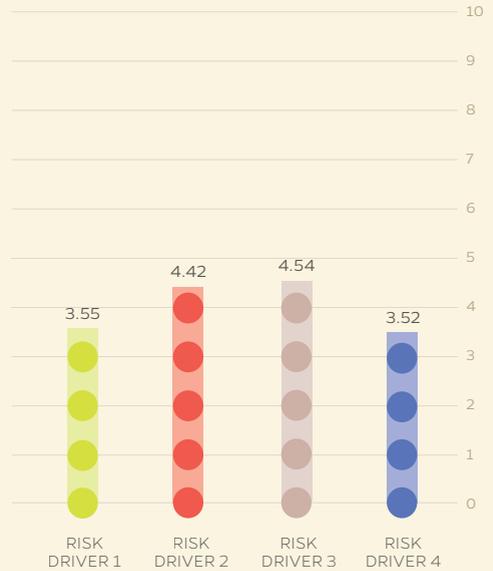
⇒ **EPIDEMICS**  
HAVE RESULTED IN THE HIGHEST NUMBER  
OF **DEATHS,**  
FOLLOWED BY **DROUGHT.**

⇒ **DROUGHT**  
HAS BY FAR AFFECTED  
**THE MOST NUMBER OF PEOPLE**  
ACROSS THE **COUNTRY.**

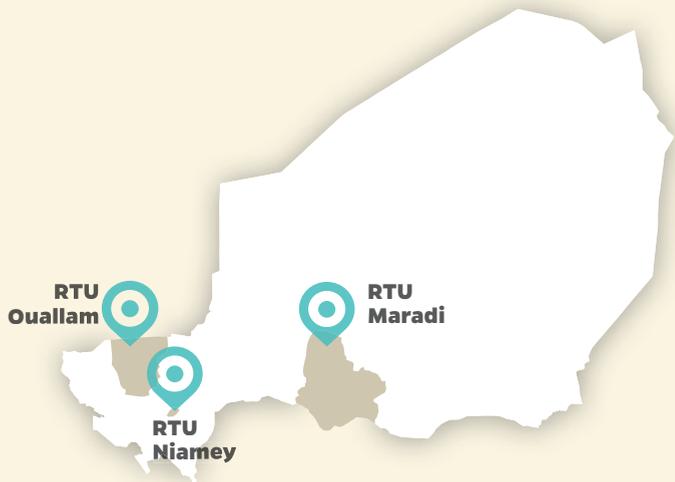
⇒ **LOSSES**  
FROM **DROUGHT**  
HAVE A DIRECT RELATION WITH  
**POOR HARVESTS**  
AND **FOOD INSECURITY.**

⇒ **FLOODS**  
REGISTER THE MOST  
**SIGNIFICANT ECONOMIC**  
**LOSSES.**

NIGER SCORES FROM WEST AFRICA RISK MAPPING



Source: EM-DAT (CRED)



# INSTITUTIONAL Capacity for DRR

## DRR Institutional Setup

### AND LEADERSHIP

Niger has made important, albeit still limited, strides in recent years towards developing its DRR leadership and capacity. The United Nations Development Programme (UNDP) has played a key role in these efforts. The Early Warning and Hazards Management System (SAP) was created by decree in 1989 by the Office of the Prime Minister. In 2002, the National Committee for Food Crisis Prevention and Management was formed, under whose direction are two units devoted to early warning and food security: the Early Warning System Coordination Unit (CC/SAP) and the Food Crisis Unit (CCA). The CC/SAP aims to capitalise on local knowledge of DRR.

Niger benefits from a National Platform for DRR, which was established in 2006 with support from the United Nations International Strategy for Disaster Reduction (UNISDR). The focal point for the national platform is the Office of the Prime Minister, which also houses the Unit for Early Warning Systems. The multi-disciplinary working group, Groupe de Travail Inter-Disciplinaire du Systeme d'Alerte Précoce (GTI-SAP), represents various government sectors. It plays a key role in analysing and forecasting crises and supports the CC/SAP. The government also aims to integrate DRR issues in a number of sectoral strategies. In general, the National Platform focal point has

stated that DRR priorities until 2015 and beyond should include the development of strong early warning systems, national disaster loss databases and climate information for communities.

At the sub-national level, the Regional Committees (CR/PGCA) and Sub-regional Committees (CSR/PGCA) for Disaster Prevention and Management have been created in order to address disaster management at the field level.

*While it appears that the national government recognises the need to increase DRR capacity and resource allocation, at the level of strategy development and action plans there is less political engagement and practice.*

# Strategic

## DOCUMENTS AND PLANS

In assessing its progress against the HFA in its Rapport national de suivi sur la mise en oeuvre du Cadre d'action de Hyogo (2011-2013), Niger reported several important milestones. Limitations to how much progress has been made are also substantial and important to note. In addition to the creation of the National Platform and a national strategy for DRR, efforts at the local level are significant and focused on building capacity for disaster preparedness and addressing vulnerability, usually with the support of international organisations and donors. These include the creation of the Communes et des Systèmes Communautaires d'Alerte Précoce et de Réponses aux Urgences (SCAP-RU), as part of USAID's food security initiative through its Office for Food for Peace. Trainings are also reported, particularly at the ministerial level, in order to raise awareness and share knowledge on the need to better integrate DRR in sector planning. In this sense and in general, institutional engagement has been achieved, but still with important limitations. The most frequently cited limitations are limited financial resources and limited operational capacity. Overall, while the need to increase DRR capacity and resource allocation seems to be recognised, at the level of strategy development and action plans there is less political engagement and practice.

Publicly-financed plans and programmes for DRR are reported, with DRR being partially integrated into development planning. This includes vulnerable urban areas, although only minor progress has been reported. The need for improved drainage is cited, but limited human capacity and the failure to adhere to urban planning legislation has hindered progress in this area. A DRR component is also included in disaster response programming, in particular with relation to livelihoods and

development projects, where environmental impact assessments are carried out; however, limited financial resources pose a challenge. It is also noted that certain development projects pose a threat in terms of increasing the population's vulnerability to risks, such as the construction of quarries, which has increased the risk from flooding.

In terms of data and information-sharing, national data is collected and analysed on hazards and included in development planning, while information is also disseminated through a monthly bulletin. Early warning systems are in place at the national and sub-national levels, mainly through the regional committees. Public education campaigns and workshops are also carried out and directed at populations exposed to hazards; however, constraints pose challenges in terms of the results these can be expected to produce. Also, there is not a line in the national budget for applied research for DRR, where investment remains weak.

Niger's efforts to address underlying risk factors are focused on its national environmental policy, including the National Adaptation Programme of Action (NAPA) and efforts to fight desertification and the Plan National de l'Environnement pour un Développement Durable (PNEDD). Social protection networks to improve resilience of the population are missing, however.

There is a multi-risk national contingency plan in place. Coordination for disaster response is provided for through the Dispositif National de Prévention et de Gestion des Catastrophes et Crises Alimentaires, and through a framework agreement reached between the government and various partners. Each year a plan to support food insecure populations is drafted. Most resources are devoted to food security issues, whereas less attention is given to floods, for example. Limited financial resources are cited as the reason for the failure to address flooding concerns thus far.

The Nigerien Government has created the 3N Initiative, “Nigériens Nourishing Nigériens”, to develop a response to Niger’s food insecurity problems due to inadequate annual rains, which climate change could worsen with increasing unpredictability in rainfall. The comprehensive strategy would bolster national food output and enhance the positive impact this would have on levels of food security, nutrition, household welfare and economic activity. The Haut Commissariat des 3N agency was established in 2011 to lead the effort and mobilise state agencies, elected leaders of local communities, donors, NGOs and the private sector in order to foster a coherent and sustained national effort.

Niger’s Poverty Reduction Strategy Paper (2008) notes the close linkage between poverty and vulnerability to disasters. Disasters can negatively affect ongoing poverty reduction activities, redirecting already limited financial resources towards assistance and rehabilitation operations. One of the crucial effects of disasters in Niger is increased food and nutritional insecurity. The PRSP recognises that Niger’s frequent food shortages are directly linked to recurring drought, and lists climatic conditions and natural disasters as constraints on Niger’s performance in accelerating growth and poverty reduction. The PRSP also notes from evaluations of its rural development policies that Niger has poor performance in the area of adequate weather information to warn of risks.

The PRSP makes reference to the HFA and notes that, in the area of disaster management and risk mitigation, the government plans to take three distinct measures: improve the integration of disaster management and risk mitigation into policies, institutions, and the development process; offer related institutional capacity building; and improve and enhance knowledge management and community capacity as relevant.

The 2013 Poverty Reduction Strategy Paper for Niger emphasises the country’s need to improve the resilience of communities against the harmful impacts of climate change and natural disasters in order to increase food security. The Economic and Social Development Plan (PDES) includes as strategic results that Niger strengthen its adaptation measures towards the negative impacts of climate change and reversal of environmental degradation. Also, the 3N Initiative is included as an important program in ensuring food security during food crises and disasters. The PRSP notes that Niger’s capacity for confronting desertification, land and water resource degradation, illegal tree cutting and climate change is weak and lists natural hazards (floods, droughts, animal diseases and plant pests) as one of the risk factors hindering the achievement of the PDES objectives and results. Niger currently has a National System for Disaster and Crisis Prevention and Management (DNPCC), which includes the Early Warning System (SAP) and the Food Crisis Unit (CCA). Under priority programs and activities for increasing Niger’s resilience against food crises and disasters, the government has taken several measures: a multi-risk management plan; rapid information system for natural disasters; improvement of disaster response mechanisms; coordination on a national level for management and prevention of crises; monitoring and evaluation mechanisms; and inclusion in the ARC (Africa Risk Capacity).

Under its NAPA, Niger identified droughts, extreme temperatures, flooding, insect infestations, strong winds, and sand/dust storms as the main climate hazards. The most vulnerable sectors identified in the NAPA include agriculture, cattle breeding, forestry, water resources, wildlife, health and wetlands. The major impacts of these climate hazards on the national economy and most vulnerable sectors include decrease in agricultural

production and fishery productivity, water shortages, groundwater depletion, increased rate of diseases, decrease in biodiversity, reduction of forested areas, and the formation of sand dunes.

In its NAPA Niger also identified fourteen priority adaption projects focused on fodder production improvement, creation of livestock food banks, crop irrigation, peri-urban market

gardening and cattle breeding, income generation activities, water control, production and dissemination of meteorological data, creation of food banks, improvement of health conditions, development of anti-erosion infrastructures, increase of agricultural, forestry and pastoral production, protection of water resources, and capacity building of rural producers.

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## International ENGAGEMENT AND SUPPORT

The international community, in particular the World Bank, UNDP, and various NGOs, has been engaged in various DRR-related initiatives, especially aimed at climate change adaptation, food security and community resilience building. UNDP has been providing financial support for the development of a national disaster prevention and management strategy and action plan, including support for the integration of DRR into development plans and strategies. Niger is also a Track II country under the World Bank's GFDRR, where efforts are also directed at building national capacity to mainstream DRR.

In the area of climate change adaptation, the UNDP Africa Adaptation Programme (AAP) in Niger conducted a study on climate risk management that was used for the development of the National System for the Prevention and Management of Food Crises, provided training on climate risk and opportunities along with strategy support for the acceleration of the integration of climate change into national development plans, and developed a framework for innovative finance and climate change programming. The AAP is being implemented along with other projects and is being closely aligned with the UNDP-

BCPR Climate Risk Management programme and the UNDP/GEF-SGP Community Based Adaptation projects. The latter's "Adapting pastoral and agricultural practices to the realities of climate change" is being implemented in the village of Rombou in the Maradi region of Niger to foster sustainable water management, agricultural, and pastoral practices in order to increase the community's capacity to adapt to climate change.

The World Bank is currently implementing the Community Action Project for Climate Resilience to improve the resilience to climate change and variability of populations and production systems through mainstreaming climate resilience into development strategies at the national and local levels, including integrating climate resilience practices into agro-sylvo-pastoral systems and local populations social protection measures. The World Bank's Niger Basin Water Resources Development and Sustainable Ecosystems Management Project aims to increase regional coordination, development and sustainability of water resources management in the Niger River Basin through improved institutional coordination for regional management and development of water resources, improved performances of rehabilitated hydroelectric plants in targeted areas, improved irrigated agriculture in targeted areas, and improved watershed management in targeted areas.

World Vision is implementing a project to increase the resilience of six communes in the Zinder Region of Niger to reduce the risks of natural events, such as droughts and flooding. The project is creating, training and equipping six local Disaster Risk Reduction Committees to raise awareness and mobilise their communities in order to strengthen their capacity to prevent, prepare for, and manage disasters. The Emergency Capacity Building Project, a formal partnership agreed between CARE, Catholic Relief Services, Mercy Corps, Oxfam, Save the Children, and World Vision, and funded by DFID, is working in Niger to develop a harmonised risk assessment tool.

On the side of food security, the International Fund for Agricultural Development (IFAD) is implementing a project in Niger to combat food insecurity in the most food-insecure areas of Tahoua, Maradi and Tillabery regions through the Emergency Food Security and Rural Development Programme, which was launched as a joint initiative with the OPEC Fund for International Development and the World Bank's Global Food Crises Response Program. This aims to support the Government of Niger's efforts to mitigate the impacts of the major food and pastoral crises caused by the 2010 drought. The programme focuses on restoration of productive assets for food-insecure and other highly vulnerable households, strengthening of irrigated rice production systems and support of the development of rural infrastructure.

# UNDERLYING Risk Factors: Local Perceptions

## RTUs Selected AND SUPPORTING RATIONALE

The RRI in Niger looked at three Representative Territorial Units (RTUs), each of which differs in terms of geographic locations and levels of urbanisation and economic development. The three RTUs attempt

to cover, at least in part, the different types of geography, climate related challenges, natural hazards and risks Niger faces. The rural versus urban locations also provide a more comprehensive picture of the underlying risk factors affecting the people in Niger and the conditions in which they live that make them more or less vulnerable to disasters.

# Niamey

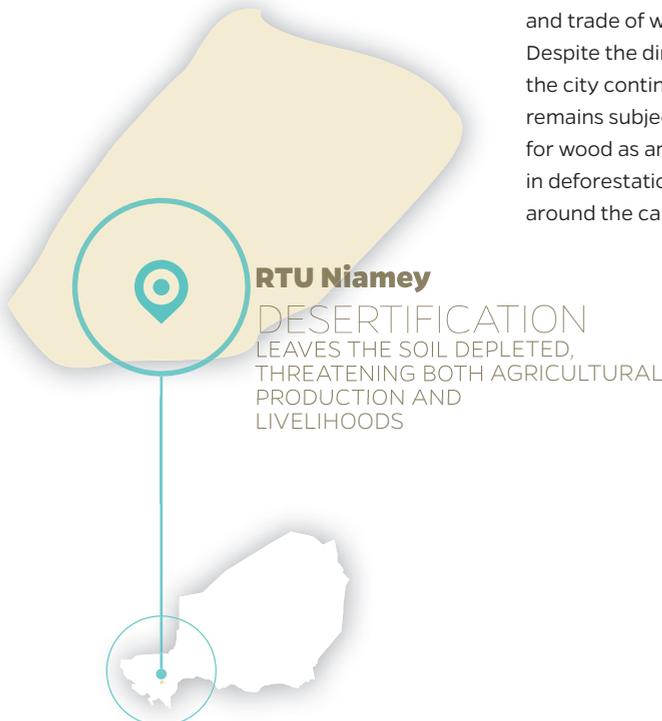
Like many African capitals, Niamey presents a picture of the manifold challenges facing urban centres. These include rapid expansion due to unplanned settlements and zoning issues, high unemployment rates, and high levels of poverty, particularly along the city's periphery. The city of Niamey, built on a plateau, is located on the left bank of the River Niger. The River Niger and its tributaries form the bulk of the water supply in the region of Niamey, and is therefore an important natural asset. Niamey's climate is Sahelian, with high temperatures and summer rain.

Niamey has witnessed rapid population growth in recent decades. One consequence of this demographic growth has been the spatial expansion of the city, particularly after the construction of the Kennedy bridge over the River Niger, which allowed Niamey to

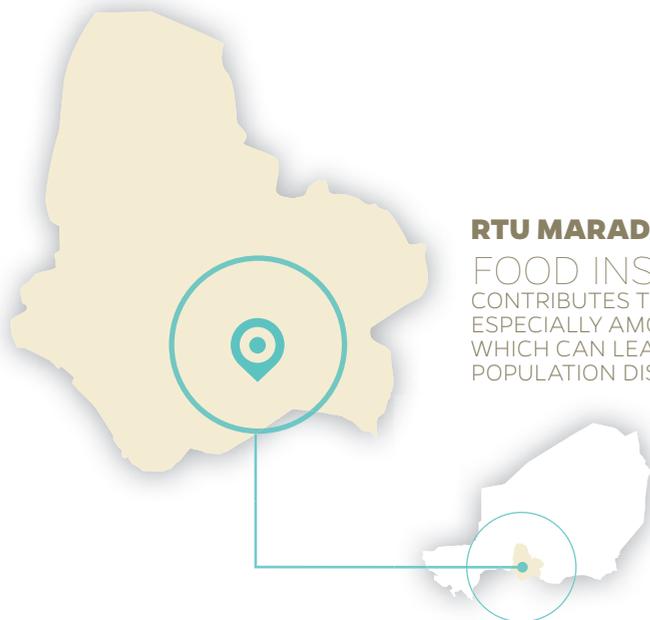
spread on to the right bank. In 1977, Niamey's population was measured at 242,973 residents. The Rural exodus and migration into the city has added to this growth. The population in 2010 was 1,000,000 and is projected to nearly double by 2025.

The demographic explosion, the result of high fertility rates, declining mortality rates, and influx into the city from rural areas, while contributing to Niamey's growth and development, has also created significant pressures on the capital. These include strains on environmental resources and an increased need for services, including in particular energy resources, land for crops, and water for livestock and human usage. The construction of new buildings on the outskirts of the city has also resulted in less land for crop cultivation. The inhabitants of Niamey practice both purely urban activities and what are more traditionally rural activities, such as agriculture, collection and trade of wood, and livestock farming. Despite the diminishing availability of farmland, the city continues to expand, leaving what land remains subject to overexploitation. The need for wood as an energy source also has resulted in deforestation and increased soil erosion around the capital.

NIAMEY  
(NIGER)



MARADI  
(NIGER)



### RTU MARADI

FOOD INSECURITY  
CONTRIBUTES TO MIGRATION,  
ESPECIALLY AMONG YOUTH,  
WHICH CAN LEAD TO UNEVEN  
POPULATION DISTRIBUTION

## Maradi

Maradi is located in the centre and south of the country, on the border with Nigeria. The climate is tropical and humid, with a hot and cold dry season and a rainy summer. Maradi is a semi-urban area with rural zones and is the economic capital of Niger. Because of its proximity to Nigeria, Maradi benefits from flourishing trade. Due to having more regular rainfall than other regions of Niger, particularly in the north, big investments are made in cultivating cash crops. The result is a contrasting agricultural production system that includes both modern and traditional methods. However, despite the rainfall and agricultural investments, Maradi has one of the highest rates of malnutrition.

The most important food crops overall include millet, sorghum and rice. Soil fertility is maintained through a system of crop rotation. This longstanding agricultural production,

which has included investments from many partners, has had the additional benefit of raising environmental awareness among the community. As a result, the region benefits from reforestation activities and projects, resulting in increased density of trees per unit area.

From a demographic standpoint, Maradi has one of the highest population growth rates. This strong population growth combined with a favorable context of agricultural production has resulted in clear challenges related to the availability of land. This in turn has led to the emergence of a new class of landless peasants or farmers. The issue of limited access to land has become an increasing concern for many households as more and more are forced to make their livelihoods from agricultural wages and other non-farm based sources of income.

# Ouallam

Ouallam is a rural area marked by several important characteristics. These include high levels of poverty in relation to other regions of the country, recurring climatic hazards (especially lack of rainfall), and limited agricultural production. Despite this, and perhaps due to the fact that access to land is not limited, the principal activities in the area are agricultural, mainly farming and animal husbandry. Pasture quality is high and excellent for animal raising; however, a low water table poses challenges. The most frequent hazards facing the region include repeated droughts, delays in the start of the rainy season, early stops in the rain, strong winds, and high prices for agricultural products.

Despite Ouallam's proximity to Niamey, the area has suffered from a lack of accessibility, particularly in the rainy season, which affects access to markets. It is anticipated that the

construction of a paved road in 2011 will alleviate the region's isolation. Nonetheless, Ouallam is therefore highly vulnerable due to the combination of low agricultural production and a population dependent economically on agricultural activities, resulting in significant problems related to food security. The practice of market gardening activities also remains marginal despite the proximity to the capital. Other factors increasing the area's vulnerability include low levels of infrastructure and limited provision of government services.

In order to cope with these challenges, residents of Ouallam often resort to migration as a strategy to overcome recurring food shortages. This has led to the practice of young women migrating to the capital in search of seasonal work as maids. The men of the region in turn migrate to neighboring countries such as Ghana, Ivory, Togo and Benin coast in search of employment. One consequence of this dispersion of households has been low school enrollment and attendance rates for children, negative effects on the community's social structure, and an un-ending cycle of poverty.

OUALLAM  
(NIGER)



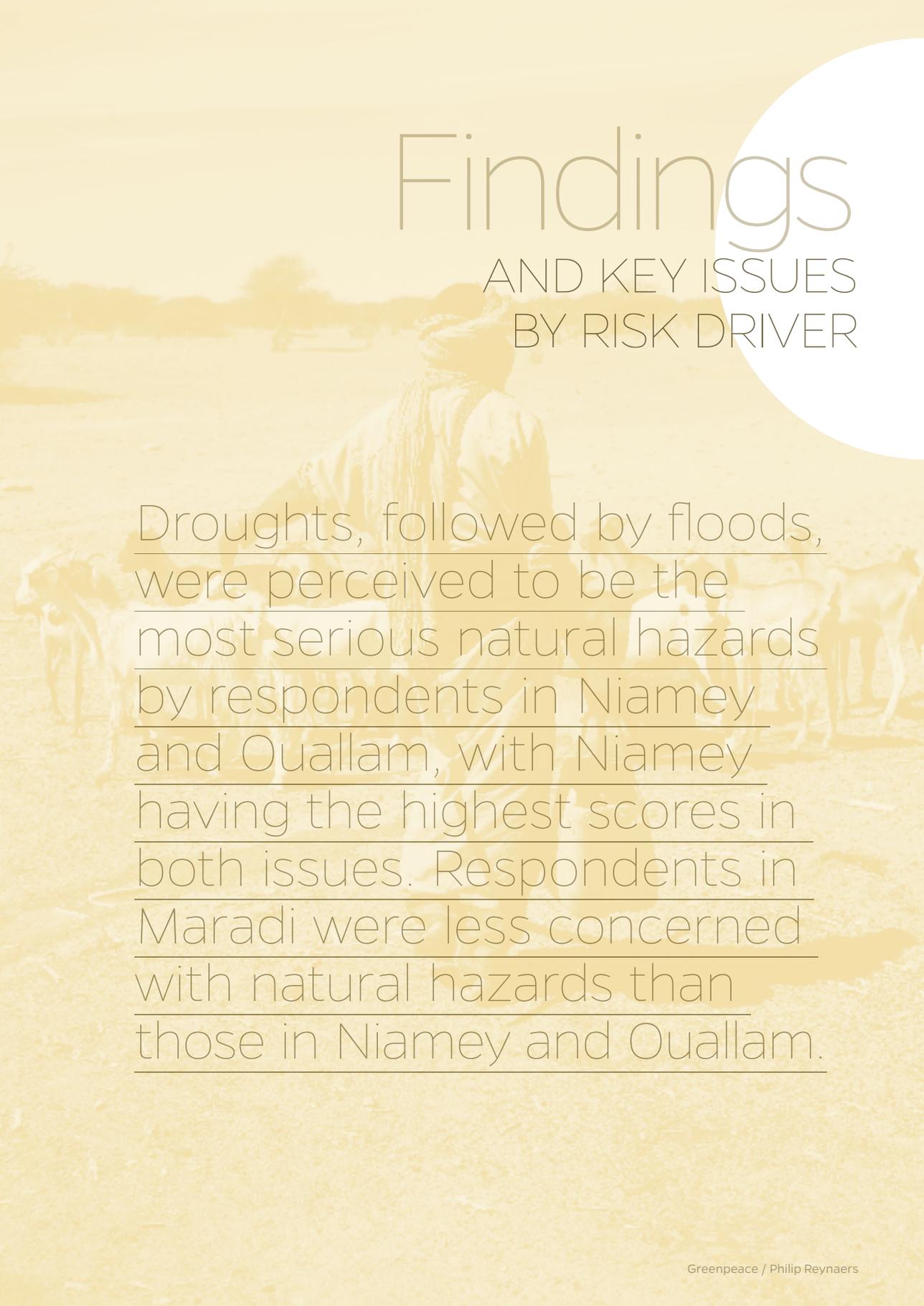
## RTU OUALLAM

PRODUCTIVE  
INFRASTRUCTURE  
FOR AGRICULTURE IS A KEY CONCERN,  
BOTH FOR BEING  
POORLY BUILT  
AND LOCATED IN  
DANGEROUS AREAS.



## NATURAL HAZARDS AND UNDERLYING RISK FACTORS OF SELECTED RTUS

	NIAMEY (URBAN)	OUALLAM (RURAL)	MARADI (URBAN EXPANSION)
<b>NATURAL HAZARDS</b>	DROUGHTS, FLOODS, INSECT INFESTATION	DROUGHTS, FLOODS, INSECT INFESTATION	DROUGHTS, FLOODS, INSECT INFESTATION
<b>RISK DRIVER 1</b> 1	<ul style="list-style-type: none"> <li>• Deforestation</li> <li>• Desertification</li> <li>• Soil erosion</li> </ul>	<ul style="list-style-type: none"> <li>• Deforestation</li> <li>• Desertification</li> <li>• Soil erosion</li> </ul>	<ul style="list-style-type: none"> <li>• Deforestation</li> <li>• Desertification</li> <li>• Soil erosion</li> </ul>
<b>RISK DRIVER 2</b> 2	<ul style="list-style-type: none"> <li>• Food insecurity</li> <li>• Unemployment</li> <li>• Poverty</li> <li>• Prevalence of infectious diseases</li> <li>• Low levels of literacy</li> </ul>	<ul style="list-style-type: none"> <li>• Food insecurity</li> <li>• Unemployment</li> <li>• Poverty</li> <li>• Out-migration</li> </ul>	<ul style="list-style-type: none"> <li>• Food insecurity</li> <li>• Unemployment</li> <li>• Poverty</li> <li>• Low levels of literacy</li> </ul>
<b>RISK DRIVER 3</b> 3	<ul style="list-style-type: none"> <li>• Housing in dangerous locations</li> <li>• Critical public facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Housing in dangerous locations</li> <li>• Poorly built productive infrastructure</li> <li>• Productive infrastructure in dangerous locations</li> <li>• Poor drainage/ water disposal</li> </ul>	<ul style="list-style-type: none"> <li>• Limited access to water supply</li> <li>• Overcrowded conditions</li> </ul>
<b>RISK DRIVER 4</b> 4	<ul style="list-style-type: none"> <li>• Limited financial capacity</li> <li>• Corruption</li> </ul>	<ul style="list-style-type: none"> <li>• Limited financial capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Limited financial capacity</li> <li>• Corruption</li> </ul>

A person wearing a headwrap and a patterned shawl is herding a group of cattle in a dry, dusty landscape. The scene is captured in a warm, golden-yellow tone. The person is in the center, facing away from the camera, with several cows scattered around them. The background shows a flat, open plain under a bright sky.

# Findings

## AND KEY ISSUES BY RISK DRIVER

Droughts, followed by floods, were perceived to be the most serious natural hazards by respondents in Niamey and Ouallam, with Niamey having the highest scores in both issues. Respondents in Maradi were less concerned with natural hazards than those in Niamey and Ouallam.

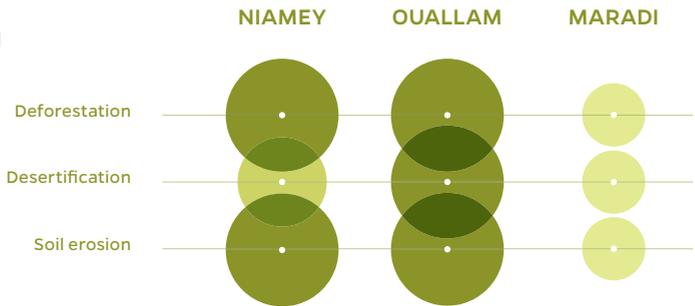
# Local Perceptions on Risk Driver 1

## Environmental and Natural Resources

In all three RTUs (Niamey, Ouallam and Maradi), the key environmental issues selected were soil erosion, deforestation and desertification.

These three issues received particularly high scores in Niamey and Ouallam, and on par with scores given to unemployment and poverty in the next risk driver. Clearly, land and soil issues are important challenges to be addressed. Soil erosion was less of a concern in Maradi, where the climate is notably different than in northern regions of the country.

ENVIRONMENTAL CHALLENGES IN NIAMEY, OUALLAM AND MARADI.



### DEFORESTATION

Forests play a crucial role in soil retention, soil formation and nutrient recycling.

Deforestation, as respondents observed, increases water runoff, thus leaving the soil exposed by washing away the upper layers, and also exposing the soil to wind erosion. Respondents in Maradi linked deforestation with an increased risk from floods, due to the diminished water retention capacity of the soil and the subsequent increased water runoff which contributes to increased flooding.

Respondents in Maradi associated deforestation with the expansion of land for agricultural production, while respondents in Niamey and Ouallam associated deforestation with reduced agriculture and pasture productivity. Communities also identified the reduction of available wood stocks as a result of deforestation, which in turn increases the distance that must be covered to fetch wood, and subsequently the workload for those tasked with this duty, generally women.

Increased deforestation is also linked with high unemployment rates, due to the increased pressure this can place on resources.

In Niamey, families are moving towards the usage of alternative sources of energy other than wood, such as gas, which should reduce the pressure on natural resources. Those with no access to alternative energy sources are rationing wood consumption. In both Niamey and Maradi, respondents informed that they were involved in reforestation activities with local species, and considered them to be very effective. In Maradi, the community is taking measures towards forest protection, with the view of protecting their heritage. Community members in Maradi also mentioned the increased use of improved stoves.

Efforts on the part of the local government in Niamey to fight bushfires were seen on average to be somewhat effective by respondents. These activities are supported by national institutions, but were criticised by respondents for the low monitoring of their implementation.

The national government and international organisations have both implemented reforestation interventions, including tree planting, which were considered to be somewhat and very effective due to their having been supported by awareness raising activities that have increased community participation and ownership of the activities. In Niamey, respondents affirmed that regulations against cutting down trees are in place and considered them to be extremely effective, correctly implemented and linked with awareness raising activities. Assisted Natural Regeneration has been implemented in Niamey and Maradi in collaboration with international organisations and was assessed as somewhat effective. Although the practice was criticised in terms of lack of monitoring, it is valued positively because of its impact on soil retention and fertility, as well as for obtaining community ownership. In Ouallam this same type of intervention was rated more highly and viewed as very effective. Forest protection measures have also been put in place in Ouallam and valued as very effective as well.

International organisations, in collaboration with local governments, have provided seeds for regeneration programmes, which respondents assessed as somewhat effective. However this is dependent on beneficiaries having sufficient technical and economic capacity. Respondents also noted the promotion of gas consumption in place of wood as an energy source in Niamey. While this was viewed as somewhat effective, related awareness raising activities on gas usage undertaken by international organisations were considered to be not effective at all by respondents, mainly due to a lack of funding.

## DESERTIFICATION

Respondents identified desertification as a key issue namely because of its affect on the soil, which is directly related to their agricultural dependence and livelihoods. Desertification increases soil aridity through desert encroachment, which, when combined with high intensity winds, leaves the degraded soil more exposed to erosion processes. The overall degradation of natural resources was cited in connection with desertification, as well as the long term consequences of reducing agricultural productivity, and reducing biodiversity. The depletion of wood stock that is necessary for heating and cooking, especially in rural areas, was also cited as a direct result. In addition, the negative effect is compounded, wherein desertification leaves the soil so depleted that it makes it very difficult to regenerate and reforest. The impact is more severe when combined with the hazard of frequent droughts.

Respondents in Ouallam participate in land restoration activities that are part of development projects. In Maradi, communities have collaborated in tree planting, pasture sanitation and delimitation, and soil enrichment activities, all of which aim to decrease the rate of land degradation. In Niamey and Ouallam, communities are involved in the construction of wind breakers and the planting of acacia trees, assessed as very effective for protecting both soil and settlements.

The national government has implemented afforestation activities in collaboration with international organisations, which have been complemented by the development of community management committees to ensure their correct implementation. Rated as somewhat effective, respondents mentioned that the technical capacity was adequate and that there had been good awareness campaigns, including media and theater

# Local Perceptions on Risk Driver 1

## Environmental and Natural Resources

campaigns. Other interventions listed were the zoning of land for different uses and the establishment of live fences on farm land and land restoration interventions, which were assessed as very effective. To reduce desert encroachment, activities undertaken by the national government to promote dune stabilisation and those by the international community to construct protective dikes have been implemented. However, respondents pointed out that these types of interventions required advanced technical expertise.

### 3 SOIL EROSION

Soil erosion was identified as a main concern particularly in Niamey and Ouallam. In all three RTUs respondents linked soil erosion with reduced farmland productivity, as a consequence of the reduced nutrients in the soil due to soil leaching and excessive infiltration. Soil erosion leaves the soil bare and exposed to external agents, generating soil crusting (Ouallam and Maradi) and glacis (Maradi), and decreasing the soil's potential to regenerate. According to respondents in Niamey and Ouallam, in the rainy season there is an excess of water runoff due to soil erosion. This creates gullies and affects houses, tracks and riverbanks, causing collapse in some cases. Because of the reduced soil capacity for water retention, Maradi respondents observed that in the event of heavy rains, soil erosion could increase the risk of floods.

In all three RTUs, respondents mentioned soil restoration activities through the use of organic and mineral fertilisers, which are sometimes part of development projects. The limited scope of these activities was noted by respondents in Ouallam, however. In order to promote further soil regeneration, communities in Ouallam leave

some lands fallow. In Maradi, communities are collaborating with Assisted Natural Regeneration and with bench terracing to reduce soil erosion. Soil restoration activities undertaken by communities have been assessed as very effective, particularly for including the most vulnerable, but respondents indicated that a wider scope for these activities is necessary.

In Niamey and Ouallam, the national government has undertaken water conservation and soil restoration projects (CES/DRS: Conservation des eaux et du sol/ Défense et restauration des sols), which were assessed as somewhat effective, in particular for employing physical restoration techniques such as bench terracing and digging medium-sized holes (or zais). Respondents explained that these interventions have been effective because of the community's awareness and ownership of the activities. In Niamey, the government has also promoted good practices in irrigation.

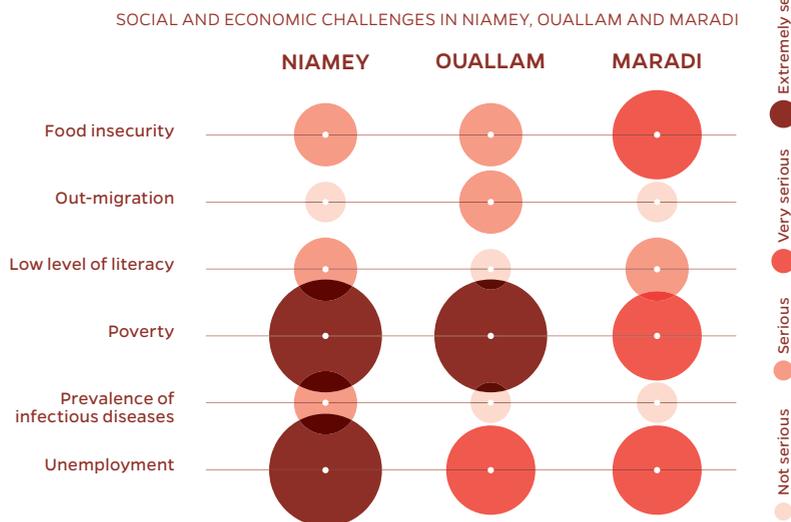
In Maradi, international organisations have collaborated with communities to support tree planting interventions. This has been viewed as very effective. Bench terracing using a cash for work/food work model has also been realised. In Niamey and Ouallam, international organisations have been involved in soil restoration activities that respondents rate as somewhat effective as they employ appropriate technical capacity. In Niamey, agricultural inputs provided by international organisations were assessed as very effective, especially for including the most vulnerable. Nevertheless, perceptions regarding anti-erosion projects differed significantly. Respondents in Niamey viewed these as only minimally effective due to the lack of monitoring, whereas in Ouallam they were found to be extremely effective, the reasons for which were not provided.



# Local Perceptions on Risk Driver 2

## Socioeconomic Conditions

Poverty, unemployment and food insecurity were the main issues commonly selected in all three RTUs. Niamey respondents were the only ones to select prevalence of infectious diseases as a key concern, while in Ouallam respondents identified out-migration as an important challenge. Low levels of literacy was selected as a key issue in both the capital and Maradi, but was less of a concern in Ouallam, a rural area.



### UNEMPLOYMENT

Respondents in all three RTUs listed unemployment as a major concern. High unemployment rates were directly linked to poverty and pressures placed on one family member to provide for many. College graduates are also vulnerable due to the limited job market. In Ouallam, respondents associated unemployment with an increase in crime, migration rates, and the loss of family assets, all of which increases their vulnerability. In Maradi, respondents linked unemployment with food insecurity and social tensions.

To overcome the lack of income created by the high unemployment rates, households seek out income generating activities, such as gardening and small businesses, which in some cases lead to the establishment of associations and advocacy organisations. Other families

with little or no resources find out-migration to be their only solution.

Respondents cited public service recruitment as the main intervention undertaken by the government to reduce the unemployment rate. However, this was assessed as minimally effective due to insufficient funding. Job insertion projects to promote employment for youth and women were also mentioned and considered to be somewhat effective for reaching a wider share of the population. Another intervention by the government and supported by international institutions is the introduction of HIMO activities (High intensity labour works or Haute intensité de main d'oeuvre). These were considered to be very effective measures as they address those most vulnerable.

## 2 POVERTY

Respondents in Ouallam linked poverty with recurrent droughts, which also contribute to food insecurity and malnutrition. Communities are thus limited as to what they can do to improve agriculture production. Respondents in Niamey cited an absence of savings and reduced purchasing power as particular concerns, increasing external and internal dependence (high number of family members depending on one sole worker) and potentially creating household tensions and reducing families' resilience. Respondents feel that these issues lead to an increase in the immigration rate, either from rural areas to urban settings or to other countries.

At the community level, solidarity networks exist amongst households and food for work systems that operate within the communities. Some families with ample capacity establish income generating activities (e.g. selling sand and clay) and others cope with poverty by migrating.

Government interventions to regulate prices have been viewed as very effective by respondents from Niamey, who nonetheless recognised the government's limited resources and high external dependence. The national government has developed a reference framework to fight poverty with support from international institutions in the execution of certain activities. This was evaluated as somewhat effective by respondents, but criticised for being too top down. There are national safety nets in place and cash for work systems, both considered very effective for including those most vulnerable.

Support for income generating activities has come from the national and local government as well as from international institutions. Respondents consider these activities to contribute to the improved living conditions by allowing households to generate enough income and thus be able to deal with hazardous situations, for example by reducing families' vulnerability during the

dry season /lean period. Opinions differed, however, with respondents in Ouallam viewing these interventions as very effective, whereas respondents in Maradi valued them as only minimally effective given their limited financial resources and scope in targeting people.

International organisations have supported the implementation of irrigation agriculture for growing off-season crops. This was assessed as very effective by respondents for attempting to provide a solution to food crises, and increasing farmers' capacities and their resilience.

## 3 FOOD INSECURITY

Food insecurity was identified as a result of low agriculture productivity; it also increasing the rate of malnutrition among the population.

Food insecurity contributes to migration, especially among youth, and leads to an uneven distribution of the population between overpopulated urban areas and underpopulated rural areas. Respondents observed an increase in the occurrence of food-borne diseases, also lowering their resilience in the event of a major disaster. At the household level, food insecurity is thought to create tensions within families.

To cope with food insecurity, families often reduce their number of daily meals, and as a last resort sell their productive assets to buy food, thus becoming even more economically vulnerable. Fishing, collection of wild fruits and gardening (*marâchage*) are alternative strategies that households employ to reduce their vulnerability to food insecurity. Communities as a whole have established solidarity networks between families with average resources and those with fewer assets. Additionally, in order to improve productivity in the long term, communities have engaged in soil restoration projects.

In Niamey and Maradi, the national government and international institutions have undertaken food distribution through

# Local Perceptions on Risk Driver 2

## Socioeconomic Conditions

targeted emergency programs, which respondents assessed as somewhat effective due to the government's admittedly insufficient resources and high foreign dependence for program implementation. In these two RTUs, the government has also worked on irrigation development that was rated as being very effective for its thorough implementation, but is still in need of a including a wider scope. To reduce the vulnerability of families to external markets, the government has regulated food prices (*ventes à prix modérés*), an intervention that respondents found to be somewhat effective. In all three RTUs, the national government, with support from international organisations, has implemented cash for work and food for work models to execute projects such as soil restoration. Respondents see these as very effective as they address the needs of those most vulnerable and provide financial means to face disaster risks. In Niamey and Ouallam, the provision of improved seeds and fertiliser was assessed as very effective for its complete implementation.

International organisations oversee the 'lean period' warehouses (*banques de soudure*), which have been viewed positively by respondents in Niamey and Ouallam as they are effective in reaching those most vulnerable. In order to reduce communities' vulnerability during the lean period, respondents cited that international organisations are fostering the cultivation of off-season crops as a food security measure. This is viewed as a very effective intervention. In addition to supporting income generating activities in the three RTUs, international organisations have put in place social safety nets of which the cash transfer programmes are specifically mentioned and valued by respondents as being somewhat effective.

### 4 PREVALENCE OF INFECTIOUS DISEASES

Respondents in Niamey alone cited this issue as a major concern. They also linked the high rate of infectious diseases with the communities' increasing vulnerability as morbidity and mortality rates increase, especially among infants. This heightens pressure on health facilities and lowers workers' productivity in the long term. Respondents also mentioned that unsanitary conditions have led to the spread of disease. With the support of international organisations, communities have developed awareness activities on hygiene and health, which respondents considered to be very effective for the sufficient technical capacities devoted to these programmes.

The national government is providing free healthcare and medication for children less than five years of age, a measure that was very positively assessed for reaching the most vulnerable and for its complete implementation. In addition, with support from international organisations, the government has put forth a program to fight malaria, including mosquito net and malaria kit distribution, which has produced very positive results. Respondents assessed this as very effective for its complete implementation and link to the communities' degree of awareness on this topic. Also with external support, massive vaccination campaigns have taken place and received the same positive opinions.

## 5 LOW LEVELS OF LITERACY

Respondents in Niamey and Maradi felt that the illiteracy level is high, especially amongst women, thus reducing the population's capacity to access different sources of income. As a consequence, respondents in Niamey associate low levels of literacy with low participation in development processes and dialogues. Maradi's respondents link low levels of literacy with a lack of awareness of natural hazards, thus limiting the population's prevention and preparedness capacity in the case of hazards. In both RTUs, respondents explained that communities have developed sensitisation activities on the subject.

The national government has a literacy program in place that has created literacy centers with specific interventions targeted to women. This is supported by international institutions and assessed by respondents as somewhat effective but criticised for not having enough resources from the state. Interventions specifically targeted towards women were rated as very effective. In the education sector, respondents mentioned there is a specific ministry of literacy. In fact, there are three ministries related to education: the Ministry of Vocational, Technical Training and Literacy; the Ministry of National Education; and the Ministry of Secondary Education, Technology and Health. International institutions have developed training activities for the management teams of literacy centres and have implemented adult courses, all of which were rated as very effective.

## 6 OUT-MIGRATION

Respondents in Ouallam stated that two of the main causes of migration are food insecurity and regional conflicts. Migration increases land abandonment in rural areas and reduces the available workforce, lowering productivity in rural areas. Respondents pointed out that those women who are left behind are insecure and exposed.

Households have set up income generating activities to try to reduce their economic vulnerability and ultimately stem youth migration flows. Additionally, with the support of international organisations, communities have organised themselves to undertake sensitisation activities, which were considered as very effective by respondents.

The national government is providing support to set up income generating activities towards employment creation, which was assessed as very effective both for potential employment creation and for strengthening local capacities. Other models that the government has implemented in collaboration with international institutions are cash for work and food for work models. These were rated as very effective as well, as participants receive some sort of compensation for contributing to development projects such as land restoration, and young people are involved in long term solutions for increasing land productivity.

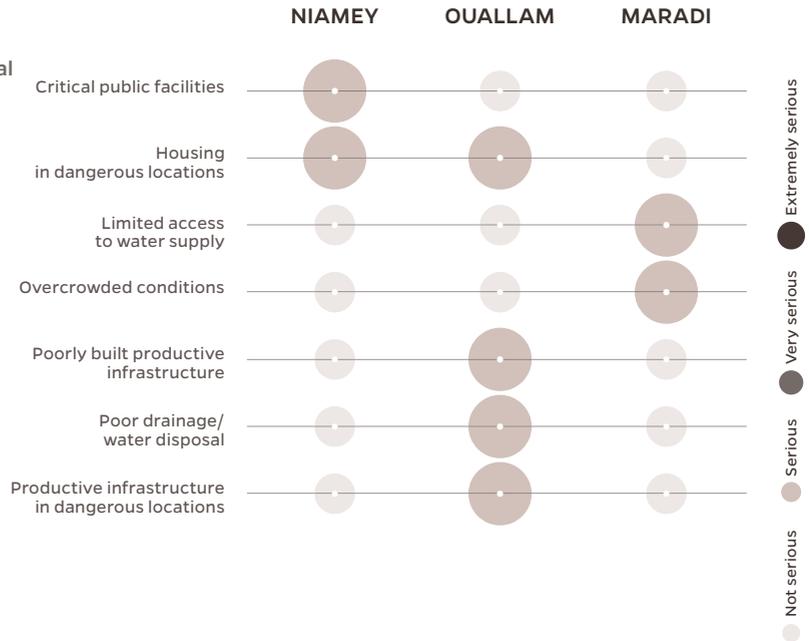
# Local Perceptions on Risk Driver 3

In contrast with other rural RTUs that were included in this study, respondents in Ouallam selected several key issues under risk

driver 3. Productive infrastructure, both poorly built and in dangerous locations, was a particular concern, as was poor drainage/water disposal systems. Respondents in both Ouallam and Niamey selected the issue of housing in dangerous locations, while only in Niamey was critical public facilities a key concern. Despite its rural location, or perhaps because of it and the isolation the region experiences, for respondents in Ouallam infrastructure presents a significant challenge. In contrast to other West African capitals, on the other hand, Niamey's respondents did not consider issues under driver 3 to be particularly serious. For Maradi, the two most pressing concerns were limited access to water and overcrowded conditions.

## Land Use and Built Environment

LAND USE CHALLENGES IN NIAMEY, OUALLAM AND MARADI



### HOUSING IN DANGEROUS LOCATIONS

Respondents cited the location of houses in flood prone areas as a key issue, especially low lying areas of Niamey where unplanned settlements are often found. This situation has increased the risk of houses collapsing. The government has at times followed through on regulations to evict people from these areas. In the case of loss of housing, populations are forced to relocate, losing both their home and belongings, thus further increasing their economic vulnerability.

Building and rehabilitation usually takes place with locally available materials such as clay and

seccos, a practice used to make fencing and house walls from weaved dry stems or canes. In order to protect existing settlements located in dangerous areas, the population has built temporary infrastructures, such as sand bag dikes to prevent water from flooding houses in the event of heavy rains.

The national government was the only actor mentioned as having undertaken interventions in this area. Mapping of flood prone areas was listed as one important preventative measure that has been carried out. In addition, the national government has worked to identify exposed areas with the objective of regulating urbanisation or land

parceling in zones at risk. This was viewed as only minimally effective, mainly due to its incomplete implementation and the lack of enforcement of building restrictions in areas exposed to hazards. The government has also built dikes to reduce the impacts of floods, which respondents considered to be somewhat effective. Other types of interventions to reduce the population's exposure that were cited include resettlement programs and eviction interventions, which were assessed by respondents as minimally effective due to a lack of funding to adequately carry them out.

## 2 CRITICAL PUBLIC FACILITIES

Respondents in Niamey linked critical public facilities with a perceived increase in the population's exposure to hazards. In addition, the lack of accessibility to public facilities on the part of the general population was cited as a concern. Public facilities are frequently built with locally available materials. In the event of a disaster, schools are generally used as temporary shelters.

The national and local governments, with the support of international organisations, have provided equipment for schools. This was assessed as very effective by respondents who thought that the intervention was thorough in its implementation. The national government has developed school rehabilitation projects, which were rated as somewhat effective by respondents who explained that there is still need for further funding for these types of activities. Respondents in Niamey also mentioned other activities undertaken by international organisations, including the construction of sheds and the rehabilitation of water points, all of which were viewed as being extremely effective for having been completed and for their usefulness to the community.

## 3 LIMITED ACCESS TO WATER SUPPLY

The issue of access to water was a key issue in Maradi, where respondents felt that the water supply network is not extensive enough, especially in the city's outlying areas. The issue is also a concern in the city centre where access to safe drinking water is likewise limited, thus increasing the population's exposure to waterborne diseases. Sanitation facilities are also viewed as inadequate.

Communities are involved in hygiene and sanitation awareness-raising activities. The local government has worked to improve water access through the drilling of wells, viewed as somewhat effective by respondents. Also, the national government has established water points, which, although rated as somewhat effective, are not thought to be sufficient nor broadly inclusive of vulnerable segments of the population.

## 4 OVERCROWDED CONDITIONS

Overcrowded conditions were a particular concern in Maradi and were linked to both the high birth rate and high population density, creating land availability issues as well. This is further compounded by the low purchasing power of the population.

In response to overcrowded conditions, communities have implemented sanitation actions and are trying to regulate the amount of space allotted between houses. In order to help control urbanisation processes, local authorities have started zoning in urban areas to regulate land for different uses. This measure has been positively viewed by respondents as somewhat effective and in line with the city's sanitation framework. However, the economic and technical capacity allocated is considered to still be insufficient.

# Local Perceptions on Risk Driver 3

## Land Use and Built Environment

The national government, in collaboration with international organisations, has implemented sensitisation actions to promote birth rate control. However, respondents thought the measure was only minimally effective due to the fact that the interventions are not widespread enough and need further complementary activities to be effective.

### 5 POOR DRAINAGE/ WATER DISPOSAL

Respondents in Ouallam cited the lack of drainage systems as a key issue, directly linked to increased unsanitary conditions, mosquito breeding, water pollution, and the rate of water-borne diseases. Furthermore, with the onset of heavy rains, poor drainage systems increase the risk from flooding, leading to the destruction of farms and agricultural land. As a coping capacity, some households practice *nomadisme agricole*, migrating in search of new farm lands as necessary.

The national government is the only actor cited by respondents as being active in addressing this issue. Drainage construction and the extension of the existing drainage network is underway. These measures are thought to be only minimally effective, however, due to insufficient funding and resource allocation. Although indirectly linked to this issue, respondents listed the government's efforts to distribute mosquito nets, which they viewed as very effective for its complete implementation and inclusion of the most vulnerable.

### 6 PRODUCTIVE INFRASTRUCTURE (POORLY BUILT AND IN DANGEROUS LOCATIONS)

Respondents in Ouallam cited productive infrastructure as a key concern, both for being poorly built and located in dangerous areas. In explaining why, however, the focus of their answers was on agricultural production. The lack of quality infrastructure was thought to be linked with reduced agricultural production, leading to increased food insecurity. The presence of productive infrastructure in dangerous locations, namely areas that are flood-prone, was also linked to a potential decrease in agricultural production and thus increased food insecurity.

The national government has been active in land recovery programs, while international organisations have provided watering equipment and irrigation materials. In both cases the interventions were assessed as very effective for their implementation. The construction of protective dikes was also mentioned as an intervention that has been undertaken.

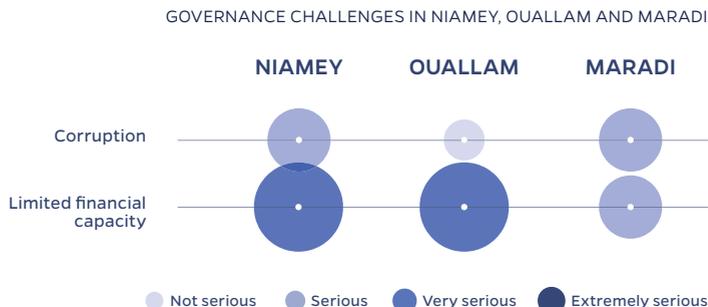
The isolation and inaccessibility of Ouallam is also worth noting, despite its proximity to the capital. Productive infrastructure could be a concern in this region due to its absence. The recent construction of a paved road linking Ouallam to Niamey is a positive development in this respect.



# Local Perceptions on Risk Driver 4

## Governance

Limited financial capacity was the only governance issue selected across all three RTUs, while corruption was a key concern in Niamey and Maradi.



### CORRUPTION

Respondents in Niamey identified corruption as one of the factors that increases poverty levels of the most vulnerable. Diversion of public funds obstructs the fulfilment of public objectives and complicates access of the most vulnerable to social services. Respondents in Maradi cited the inappropriate management of public funds as the source of misallocation of public contracts and reduced state resources.

Communities are raising awareness on transparency and democratic values through consultations, advocacy and public demonstrations, in conjunction with civil society organisations and unions. However, some respondents feel that there is a certain submissiveness on the part of local communities to traditional leaders and authorities that hinders progress in this area.

The national government has created the HALCIA (High Authority for the Fight Against Corruption and Related Offences), which respondents in Niamey and Maradi viewed as minimally effective and criticised its insufficient

technical capacity and funding. Implementation needs to be improved and further training and sensitisation activities are required. The government has reinforced certain capacities by recruiting police agents and judges, which respondents thought to be extremely effective for its thorough enforcement and for promoting accountability (authorities and citizens). The national government created “the green line” (*La ligne verte*) to denounce situations of corruption in the justice system. Perceptions on the effectiveness of this programme differed, with respondents in Niamey considering it to be minimally effective due to insufficient technical capacity allocated, while respondents in Maradi considered it to be somewhat effective.

National and local authorities, with support from international organisations, have implemented awareness campaigns in the media (radio and television), which have been assessed as very effective for achieving a wide outreach and having sufficient funding allocated.

## 2 LIMITED FINANCIAL CAPACITY

Limited financial capacity was the key governance concern across all three RTUs. Respondents associated it with high poverty rates, limited development, and lack of production means (financial, human and logistic). In addition, the issue hinders the level of performance of public services, leading communities to manage certain services themselves, making the state ineffective and increasing social instability. It also restricts the implementation of disaster risk reduction activities.

In order to compensate for the limited financial capacity of the government, communities create self-employment through income generating activities, using their own local means of production, as well as rural exodus and out-migration. The local government in Ouallam has established synergies with development

actors that respondents there rated as very effective for having sufficient technical capacities.

The national government is working on the reinforcement of financial management capacities, which respondents assessed as somewhat effective. Prioritisation and spending strategies are two other strategies that the national government has implemented thoroughly and which were viewed as very effective by respondents. To complement national income, the government has requested funding from international partners in the form of grants to be invested in micro-projects, micro-credits and to support the creation of a microfinance institute. These were all thought to be somewhat effective interventions for their adequate technical capacity, inclusion of vulnerable groups and complete implementation.



# Recommendations from

## NIAMEY

1

**INCREASING KNOWLEDGE  
AND AWARENESS  
ON ENVIRONMENT  
AND NATURAL RESOURCES**

- Promote **LAND RECOVERY, TREE PLANTING, REFORESTATION** and **AFFORESTATION, DUNE STABILISATION**
- Raise **AWARENESS ON GAS USAGE** instead of wood.

2

**BUILDING  
SOCIOECONOMIC  
RESILIENCE**

- Expand the social safety net through
  - **FREE FOOD DISTRIBUTION**
  - **PRICE ADJUSTMENTS**
  - Distribution of **QUALITY SEEDS**
  - **JOB CREATION**
  - **INCOME-GENERATING ACTIVITIES**
  - **MICROFINANCE INITIATIVES**
  - **SMALL-BUSINESS OPPORTUNITIES**
  - **SEWING PROJECTS FOR YOUNG WOMEN**
  - **TRAINING AND LITERACY PROGRAMMES**

3

**IMPROVING  
LAND USE  
AND THE BUILT  
ENVIRONMENT**

- **RELOCATE AND RESETTLE EXPOSED POPULATIONS**
- **MAP FLOOD ZONES**
- **REHABILITATE DEGRADED INFRASTRUCTURE AND WATER SOURCES**
- **RE-BUILD SCHOOLS**

4

**IMPROVING  
GOVERNANCE**

- **MOBILISE FUNDS**, subsidies and grants
- Create a committee to **FIGHT AGAINST CORRUPTION**
- Promote **GREATER TRANSPARENCY AND ACCOUNTABILITY** measures

# the RTUs

## MARADI

- Promote **AFFORESTATION AND TREE PLANTING, SOIL RESTORATION, DUNE STABILISATION**
- Raise awareness on **GAS USAGE**
- Support **AGRICULTURAL INPUTS**

- Expand the social safety net through
  - **FREE FOOD DISTRIBUTION**
  - **PRICE ADJUSTMENTS**
  - Distribution of **QUALITY SEEDS**
  - **INCOME-GENERATING ACTIVITIES**
  - **MICROFINANCE PROGRAMMES**
  - **EMPLOYMENT OPPORTUNITIES**
  - **TRAINING PROGRAMMES**
  - **GREATER INCLUSION OF INDIGENOUS PEOPLE**

- Provide **HIGH QUALITY BUILDING MATERIALS**
- Increase **CONSTRUCTION OF CANALS, PAVED ROADS** and **PROTECTIVE DIKES**

- Expand **MICRO-CREDITS**
- Promote **GREATER SYNERGY** among actors
- Improve mobilisation and **INCREASE APPLICATIONS FOR FUNDS AND GRANTS**

## OUALLAM

- Promote **LAND RECOVERY, TREE PLANTING, REFORESTATION** and **AFFORESTATION, DUNE STABILISATION**
- Raise awareness on **GAS USAGE** instead of wood.
- Support **AGRICULTURAL INPUTS**

- Expand the social safety net through
  - **FREE FOOD DISTRIBUTION**
  - **PRICE ADJUSTMENTS**
  - Distribution of **QUALITY SEEDS**
  - **CREATION OF REFUGEE CAMPS**
  - **JOB CREATION**
  - **INCOME-GENERATING ACTIVITIES**
  - **MICROFINANCE INITIATIVES**
  - **SMALL-BUSINESS OPPORTUNITIES**
  - **SEWING PROJECTS FOR YOUNG WOMEN**
  - **TRAINING AND LITERACY PROGRAMMES**

- **RELOCATE AND RESETTLE EXPOSED POPULATIONS**
- Improve **ZONING CODES** and **MAPPING OF FLOOD-PRONE AREAS**
- Provide **HIGH QUALITY BUILDING MATERIALS**
- Increase **CONSTRUCTION OF CANALS, PAVED ROADS** and **PROTECTIVE DIKES**, and more **INFRASTRUCTURE** in general

- Expand **MICRO-CREDITS**
- Promote **GREATER SYNERGY** among actors
- Improve mobilisation and **INCREASE APPLICATIONS FOR FUNDS AND GRANTS**

# Key

## CHALLENGES

Through the survey process and workshops, participants in the RRI research in Niger offered recommendations that demonstrate important recurring themes. These can be considered to be the key challenges identified across the three RTUs selected in Niger, and therefore where local, national and international actors should focus their efforts:

- General recommendations were given to improve synergies across efforts and initiatives, both research and government led, for the exchange of information and greater collaboration. Along these lines, greater integration of local authorities and institutions in national level DRR efforts was recommended.
- Land issues are a key concern, which include the need for improved access to land, more housing to meet increasing demand, and the mapping of flood zones. In this vein, efforts to improve soil quality and land reclamation are viewed as crucial, including the need to fight against soil erosion, desertification and deforestation. This is especially the case in Niamey and Ouallam.
- Concerns regarding natural resources are also significant, and specifically the need to increase the availability of renewable and alternative energy sources.
- The question of infrastructure is significant, particularly in Ouallam, where the focus is on the need for more infrastructure to be built. The need for improved drainage and sewage systems was also cited.
- Food security is a significant concern for Niger's population. Many recommendations centred on this issue, including price controls for food stuffs, better management of cereal banks, support for market gardens, distribution of high-quality seed, and continued free food distribution.

- Unemployment is also very serious, with respondents across the three RTUs recommending the need for job creation, professional and technical training, more income-generating activities and the creation of literacy centres and programmes.
- A need to improve the justice system and raise awareness around corruption issues was also regularly recommended. Respondents recognised the most pressing governance concern to be the country's limited financial resources and its dependence on foreign assistance.

In addition to the national government and local councils, the following partners were identified as key actors to carry forward the recommendations given:

- The Global Environment Facility (GEF)
- United Nations Development Programme (UNDP)
- Comité inter-état de lutte contre la sécheresse au Sahel (CILSS)
- World Bank
- Autorité du Iptako Gourma (ALG)
- Economic Community Of West African States (ECOWAS)
- Union économique et monétaire ouest africaine (UEMOA)
- Autorités du bassin du Lac Tchad

