

12.0 Niger

ACMAD	African Centre of Meteorological Application for Development
AFD	Agence Française de Développement (French Development Agency)
ALP	Adaptation Learning Programme
ANCR	National Self-assessment of Capacity Building Needs for managing global environment
BCPR	Bureau for Crisis Prevention and Recovery (of UNDP)
CBA	Community-based Adaptation
DANIDA	Danish International Development Agency
DFID	Department for International Development (UK)
ES/CNEDD	Executive Secretariat of the National Environmental Council for Sustainable Development
FGEF	French Global Environment Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
IFRC	International Federation of Red Cross
LDCF	Least Developed Countries Fund
NAPA	National Adaptation Programme of Action
NECSD	National Environmental Council for Sustainable Development
NGO	non-governmental organization
PNEDD	National Plan for Sustainable Development
SNCCC	Second National Communication on Climate Change
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
USAID	United States Agency for International Development

Niger is a landlocked, West African country that has a total area of about 1,267,000 km². The country is characterized by a harsh natural environment, low rainfall and high temperatures. The majority of the population lives in rural areas and relies upon agriculture for their livelihoods; accounts for 39 per cent of the country's total GDP and employs 90 per cent of the population (CIA, 2011).

A. Adaptation Needs and Priorities

Historic climate related hazards in Niger include flash flooding, drought, low river flows, windstorms, sand/dust storms, extreme temperatures and forest fires (NECSD, 2006). In recent decades, severe droughts have been of particular concern for the country. Combined with increased population pressure, these droughts have caused hydrologic disturbances, degradation of agricultural lands, depletion of the natural environment, and loss of biodiversity in Niger (NECSD, 2009). These changes have increased the vulnerability of Niger to the impacts of climate change.

Niger is already experiencing declining rainfall and rising temperatures. Future projections for the country indicate that average annual temperatures will increase between 2.3°C and 2.6°C by 2020-2049 according to different scenarios (NECSD, 2009). How precipitation patterns will change is less certain but current projections suggest that rainfall is likely to increase slightly over the 2020 to 2049 period and will start later in the (May/June to September) rainy season (NECSD, 2009). This change is expected to affect agricultural production, which is predominately rain-fed, and food security in general (NECSD, 2009). Other expected impacts are: reduced fishery productivity; water shortage and/or groundwater depletion; increased disease and/or other health problems; loss of forest area or production; loss of biodiversity; and degradation or loss of land. These changes will negatively affect livelihood activities and income generation (NECSD, 2006).

According to Niger's NAPA (NECSD, 2006), the country's most vulnerable sectors are agriculture, cattle breeding, forestry, water resources, fisheries, health and wetlands. The priority adaptation needs for some of these sectors include:

- *The agriculture sector:* education and outreach activities; the development of new crops; and the development of early warning systems.
- *The cattle breeding sector:* introducing fodder crops species in pastoral areas; and creating Livestock Food Banks;
- *The forestry sector:* promoting crop species that are the most adapted to climatic conditions; building the material, technical and organizational capacities of rural producers; and improving anti-erosion actions;
- *The water resource sector:* increasing water supply by using groundwater, building reservoirs, improving or stabilizing watershed management and desalination; decreasing water demands through higher efficiency, minimizing water losses, water recycling, and changing irrigation practices; and improving water management systems.
- *The fisheries sector:* water control; protecting riversides and restoring silted up ponds; and
- *The health sector:* the promotion of epidemic prevention and control measures; raising awareness of the population for the protection and prevention against climate-sensitive diseases; and establishing high-performance vaccination strategies.

Moreover, Niger’s National Communication underlines the absence of national technical expertise and information to support adaptation to climate change. These shortcomings include the absence of: an accessible and structured national database; long term monitoring units of climate parameters; a specific coherent model; efficient systems of climatic and hydrologic projections; material resources for collection, archiving, analysis and communication (NECSD, 2009); and climate impact studies in Niger (DANIDA, 2008). Furthermore, Niger lacks a national calculation center specialized in research on climate change and a system of national research and observation institutions in the area of water sciences (NECSD, 2009). The absence of national expertise in tools and methodologies for appropriate evaluation of vulnerability and adaptation to climate change and inadequate scientific training on some aspects—such as vulnerability, adaptation and mitigation of climate impacts—are also identified as obstacles to the implementation of adaptation strategies (NECSD, 2009). Given these circumstances, it is not surprising that the production and dissemination of agro-metrological data is a key objective of several of Niger’s NAPA projects, particularly those related to agriculture (see Table 3).

B. National Level Policies and Strategic Documents

Niger completed its NAPA in 2006 and released its Second National Communication in 2009; Niger is now starting its Third National Communication. The national authority responsible for coordinating climate change adaptation issues is the National Council for the Environment and Sustainable Development (NECSD) under the Office of the Prime Minister. A National Technical Commission on Climate Change and Variability was created in 1997 to support the NECSD in the elaboration of policies and strategies related to climate change. However, since its creation, the Commission has only managed to meet once. Under the office of the Prime Minister, Niger has also established a Coordination Cell for early warning and disaster management (Cellule de Coordination du Systeme d’alerte Precoce et de gestion des catastrophes) that is responsible for preventing disasters and managing food crisis. One of its mandates is to document and disseminate local traditional adaptation strategies in relation to crises (primarily food crises).

Table 1: Key Government Policies and Reports reflecting Adaptation Needs, Priorities and Planned Actions

Name of Policy Action		Government Division Responsible	Status	Summary description
1.	National Environmental Plan for Sustainable Development (PNEDD)	National Environmental Council for Sustainable Development	Process started in 1995; Released in 1998	The main objectives of the PNEDD are: (1) to ensure a more rational management of natural resources based on a more systemic approach; (2) to integrate environmental concerns in policies, programs and projects in all main development sectors; (3) to improve the participation of the population in the management of resources; and (4) to foster the development of partnership among

Name of Policy Action	Government Division Responsible	Status	Summary description
			actors interested in environmental and sustainable development issues in Niger. The PNEDD is based on six priority programs including a climate change and variability program.
2.	Initial National Communication on Climate Change	Republic of Niger, Office of the Prime Minister, National Environmental Council for Sustainable Development	Released in 2000 This document describes the steps Niger is taking and envisages undertaking to implement the UNFCCC. It underlines key vulnerabilities (agriculture/food security, water resources, public health, terrestrial ecosystems) as well as potential adaptation measures.
3.	National Strategy and Action Plan for Climate Change and Variability	Republic of Niger	Elaborated in 2003; Adopted in 2004 According to NECS (2006), this strategy is one of the six priority programs of the National Environmental Plan for a Sustainable Development. No more information is available on this strategy.
4.	National Autoevaluation of Capacity to Reinforce Nationale des Capacités à Renforcer (ANCR)	National Environmental Council for Sustainable Development	Released in 2006 Inventory and analysis of all national initiatives related to biodiversity, climate change and soil degradation including laws, policies, strategies, plans, programs and projects, environmental multilateral agreements considered a priority for the country
5.	National Adaptation Program of Action (NAPA)	National Environmental Council for Sustainable Development	Released in 2006 This document aims to contribute to reduce the adverse effects of climate on the most vulnerable populations. The NAPA identifies national and regional climate change impacts and climate change adaptation measures to address those impacts.
6.	Second National Communication on Climate Change	Republic of Niger, Office of the Prime Minister, National Environmental Council for Sustainable Development	Released in 2009 This document describes the steps Niger is taking and plans to undertake to implement the UNFCCC. It underlines key vulnerabilities in particular sectors (agriculture, livestock production, health, water resources) as well as potential adaptation measures.

C. Current Adaptation Action

Compared to other West African countries, a high number of adaptation focused projects are currently underway in Niger. Two of these are quite significant—the Pilot Program for Climate Resilience and the Japan-funded project “Supporting Integrated and Comprehensive Approaches to Climate Change Adaptation in Africa,” or the Africa Adaptation Programme. All of the ongoing projects in Niger generally have a core purpose of building capacity in the country. While some address a number of sectoral, most of the projects specifically focus on reducing vulnerability within Niger’s agricultural sector. Other sectors being addressed through adaptation action in Niger are disaster

risk management, freshwater, gender, ecosystem conservation and governance. Although Niger's National Communication does not assess progress with respect to implementation of its NAPA, it underlines low fundraising to support programs and adaptation strategies as a concern (NECSD, 2009).

Table 2: Current Adaptation Actions in Niger

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
National Action							
1.	Implementing NAPA Priority Interventions to Build Resilience and Adaptive Capacity of the Agriculture Sector to Climate Change ²²⁶	LDCF <i>Budget: US\$15.02 million</i>	NECSD	Capacity building; Policy formation and integration	2009 – ?	Agriculture	National
2.	Program on Reinforcing Capacities for Preventing and Managing Crisis (Programme de Renforcement des Capacités pour la Prévention et la Gestion des Crises)	UNDP (BCPR)	UNDP	Capacity building	2010 – 2013	Disaster risk management	National with some interventions in specific departments
Participation in Regional and Global Projects							
3.	Pilot Projects on Uses of Plant Genetic Resources for Food and Agriculture to put Strategic Plans into Action to Promote Sustainable Use and Management of Land	FAO	FAO	Research; Field implementation	2007 – 2010?	Agriculture	African: Burkina Faso, Chad, Niger, Sudan
		<i>In Niger: Not available</i>					

²²⁶ GEF, <http://www.gefonline.org/projectDetailsSQL.cfm?projID=3916> and http://www.thegef.org/gef/sites/thegef.org/files/documents/Progress%20Report.rev1_.pdf

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
for Adaptation to Climate Variability ²²⁷	resources for food and agriculture to put strategic plans into action to promote sustainable use and management of land for adaptation to climate variability. Use of tools and plant genetic resources for food and agriculture to secure implementation and management methods to enhance capacities of poor farmers to face climate change.						
4. Advancing Capacity for Climate Change Adaptation (ACCCA) ²²⁸	The rationale for this project is that countries lack scientific knowledge and understanding of climate risks, and that this is an impediment to addressing climate variability. Activities include the following: identify and prioritize climate risks; assess available knowledge about risks and adaptation opportunities; develop, test, and disseminate risk communication materials that are designed to assist adaptation decisions; and identify critical knowledge gaps that impede effective adaptation decisions.	IDRC; DEFRA; Swiss Federal Office for the Environment; NCAP; European Commission	UNITAR	Assessment; Capacity building; Policy formation and integration	2007 – 2010	Multi-sectoral	<i>Global:</i> 17 countries in Asia and Africa ²²⁹ including Burkina Faso, Ghana, Mali, Niger and Nigeria
		<i>In Niger: Not available</i>					
5. Interdisciplinary and Participative Research on Interactions between Ecosystems, Climate and Societies in West Africa ²³⁰	The project will identify the relations between ecosystem vulnerabilities and human populations in order to scientifically support political responses to climate change.	France's Foreign Affairs Ministry	Agence inter établissements de la recherche pour le développement (Inter-	Research	2007 – 2011	Ecosystem conservation	<i>Regional:</i> Benin, Burkina Faso, Cameroon, Cape Verde, CAR, Chad,

²²⁷ FAO, http://unfccc.int/files/adaptation/sbsta_agenda_item_adaptation/application/pdf/fao_pledge_2.pdf and <http://www.fao.org/climatechange/unfccc-process/63662/en/>

²²⁸ ACCCA, <http://www.acccaproject.org/accca/>

²²⁹ *African countries include:* Burkina Faso, Cameroon, Ethiopia, Ghana, Kenya, Malawi, Mali, Niger, Nigeria, Tanzania, Tunisia and South Africa. *Asian countries include:* Bangladesh, India, Mongolia, Nepal and the Philippines.

²³⁰ <http://www.aird.fr/ripiecsa/index.htm>.

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)	
			institutional Research Agency for Development)				Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Mauritania, Niger, Nigeria, Senegal, Togo	
<i>In Niger: Not available</i>								
6.	Enhancing the Disaster Risk Reduction Capacity in Agriculture and Rural Development ²³¹	Preparation of 10 capacity building modules on pre- and post-disaster risk management and mainstreaming of disaster risk reduction in agriculture and rural development, with a focus on climate change adaptation.	Global Facility for Disaster Reduction and Recovery Budget: US\$50,000	Agriculture and Rural Development (ARD) and Sustainable Agriculture Systems, Knowledge and Information (SASKI)	Capacity building	2008 – 2010 (closed)	Agriculture; Disaster risk management	<i>African:</i> Burkina Faso, Comoros, DRC, Eritrea, Ethiopia, Kenya, Madagascar, Niger, Rwanda, Senegal, Seychelles
<i>In Niger: To be confirmed</i>								
7.	Capacity Development for Policy Makers: Addressing climate change in key sectors ²³²	The project is a targeted capacity development initiative that supports two goals: 1. To increase national capacity to coordinate Ministerial views for more effective participation in the UNFCCC process; and 2. To assess investment and financial flows to address climate change for selected key	United Nations Foundation; Switzerland; Finland; Spain; and Norway	UNDP	Capacity building; Policy formation and integration; Knowledge communicatio	2008 – 2010	Government	<i>Global:</i> 19 countries, ²³³ including Liberia, Niger and Togo

²³¹ GFDRR, http://gfdrr.org/gfdrr/ca_projects/detail/1228

²³² UNDP, <http://www.undp.org/climatechange/capacity-development.html>

²³³ These countries are: Algeria, Bangladesh, Colombia, Costa Rica, Dominican Republic, Ecuador, Gambia, Honduras, Liberia, Namibia, Nepal, Nicaragua, Niger, Paraguay, Peru, St. Lucia, Togo, Turkmenistan, and Uruguay.

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)	
	sectors. As a result of this project, both the technical understanding of key climate change issues and their economic and policy implications within the context of the Convention will be enhanced.	Budget: US\$6,953,413		n				
		In Niger: Niger has completed its Investment and Financing Flows assessment for the key sectors of forestry (mitigation) and agriculture (adaptation), with a focus on livestock. ²³⁴						
8.	Pilot Program for Climate Resilience (PPCR) ²³⁵	PPCR aims to pilot and demonstrate ways in which climate risk and resilience may be integrated into core development planning and implementation in a way that is consistent with poverty reduction and sustainable development goals. In this way, the PPCR provides incentives for scaled-up action and initiates transformational change. The pilot programs and projects implemented under the PPCR are country-led and build on NAPAs and other relevant country studies and strategies.	World Bank's Strategic Climate Fund US\$971.75 million pledged as of February 2011	World Bank	Policy formation and integration	2008 – ongoing	Multi-sectoral	Bolivia, Cambodia, Mozambique, Nepal, Niger, Tajikistan, Yemen, Zambia <i>Regional Programs:</i> Caribbean and Pacific (includes Papua New Guinea, Samoa, Tonga)
		In Niger: The PPCR is based on three main pillars which are: (1) enhanced integration of climate resilience in the poverty reduction strategy and development planning; (2) investments in innovative or tested approaches which increase climate change resilience; and (3) knowledge management and strategic coordination of the program.						
9.	Community-based Adaptation (CBA) Programme ²³⁶	The objective of the program is to enhance the capacity of communities in the pilot countries to adapt to climate change including	GEF (Strategic Priority on	UNDP	Knowledge communication; Capacity	2009 – 2011	Multi-sectoral	<i>Global:</i> Bangladesh, Bolivia,

²³⁴ UNDP-CC, <http://www.undpcc.org/content/niger-en.aspx>

²³⁵ CIF, <http://www.climatefundsupdate.org/listing/pilot-program-for-climate-resilience>

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
	<p>variability. Planned outcomes are: Enhanced adaptive capacity allows communities to reduce their vulnerability to adverse impacts of future climate hazards; National policies and programs include community-based adaptation priorities to promote replication, up-scaling and integration of best practices derived from community-based adaptation projects; and Cooperation among member countries promotes global innovation in adaptation to climate change including variability.</p>	<p>Adaptation), co-financing</p> <p>Budget: US\$6.7 million</p>		<p>Building; Community-based adaptation</p>			<p>Guatemala, Jamaica, Kazakhstan, Morocco, Namibia, Niger, Samoa, Viet Nam</p>
<p><i>In Niger:</i> The following projects, with the additional financial support of the Government of Japan, are or have been implemented under the CBA:²³⁷</p> <ol style="list-style-type: none"> 1. “Reconstitution of Hut Livestock to Reduce Household Vulnerability to Climate Change in the Communities of Houtchi and Dan Djaoudi, Roubou.” This project aims to protect the Tarka ecosystem by providing the surrounding communities with livelihoods not based on the exploitation of natural resources. The project supports the provision of livestock to vulnerable households to increase their food security and to provide alternative source of income. <i>Implementing Agency:</i> UNDP; École Instrument de Paix (School Instrument of Peace) <i>Duration:</i> 2008 – 2013 2. “Development of Sustainable Agricultural Techniques for Adapting to Climate Change in three villages in the Municipality of Roubou, Department of Dakoro.” The objective of the project is to build the capacity of the community to engage in livelihood practices that will contribute to the reduction of climate change-driven soil erosion pressures and to adapt to climate change. <i>Implementing Agency:</i> ONG Contribution à l'Education de Base <i>Duration:</i> 2009 – 2010 3. “Improving Agro-forestry and Providing Better Seeds to the Community of Maigochi Saboua, Rombou.”²³⁸ The project aims at improving agro-forestry practices in the community by using assisted natural regeneration, planting trees, carrying out awareness campaigns, and promoting sustainable agricultural practices that use improved seeds to adapt to climate change and variability. 							

²³⁶ UNDP, http://www.undp-adaptation.org/projects/websites/index.php?option=com_content&task=view&id=203

²³⁷ UNDP, http://www.undp-adaptation.org/projects/websites/index.php?option=com_content&task=view&id=260&sub=1

²³⁸ http://www.undp-adaptation.org/projects/websites/index.php?option=com_content&task=view&id=260&sub=1.

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
10.	Supporting Integrated and Comprehensive Approaches to Climate Change Adaptation in Africa (or Africa Adaptation Program – AAP) ²⁴⁰	Japan International Cooperation Agency Budget: US\$92.1 million	UNDP	Capacity building; Policy formation and integration; Knowledge communication	2008 – 2011	Government	African: 20 African countries ²⁴¹ including: Burkina Faso, Ghana, Niger, Nigeria, Senegal
11.	Groundwater in sub-Saharan Africa:	Alliance for a Green	International Water	Research; Policy	2009 – 2011	Freshwater supply	African: Burkina Faso,

²³⁹ <http://www.adaptationlearning.net/project/agir-project-supporting-adaptation-productive-practices-among-pastoral-and-agropastoral-comm>

²⁴⁰ ALM, <http://www.adaptationlearning.net/program/africa-adaptation-programme> and UNDP-APP, <http://www.undp-aap.org/>

²⁴¹ These countries are: Burkina Faso, Cameroon, Congo, Ethiopia, Gabon, Ghana, Kenya, Lesotho, Malawi, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome et Principe, Senegal, Tanzania and Tunisia.

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
Implications for food security and livelihoods ²⁴²	security and livelihoods in the countries targeted by AGRA. The specific objectives include: assessing groundwater availability and sustainability, including the impacts associated with its use and role in adapting to climate change; identifying opportunities and constraints in using groundwater, and provide advice to investors in groundwater interventions; and developing a groundwater strategy for the region.	Revolution in Africa (AGRA)	Management Institute	formation and integration			Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Tanzania, Uganda, Zambia
<i>In Niger: Not available</i>							
12. Lake Chad Sustainable Development Support Program (PRODEBALT) ²⁴³	To promote sustainable development in the Lake Chad Basin, this project will do several things: clean out the Vrick canal to augment the volume of water flowing into the lake; undertake feasibility and implementation studies on transferring waters from the Oubangui River in the Central African Republic to the lake; and undertake studies to reduce the water losses provoked by the many small dams built on the waterways feeding the lake. Judicious, integrated management of the basin's natural resources is expected to increase the incomes of the target populations, particularly women, by 67% on average, and to improve food security. One of the project's specific objectives is to improve the adaptive capacity of the lake's productive systems to climate change.	African Development Bank, Government of Chad, other co-financing Budget: US\$95 million	Lake Chad Basin Commission	Field implementation	2009 – 2015	Watershed management	African: Cameroon, the Central African Republic, Chad, Niger, Nigeria,
<i>In Niger: Not available</i>							
13. Water Supply, Sanitation, and Hygiene Infrastructure	This program aims to support infrastructure projects taking into account expected	USAID	Unknown	Field implementation	[2010 - ?]	Freshwater supply	Regional: Burkina

²⁴² IWMI, <http://gw-africa.iwmi.org/>

²⁴³ AfDB, <http://www.afdb.org/en/projects-operations/project-portfolio/project/p-z1-cz0-002/#>

Name		Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
	Program ²⁴⁴	variability in water availability or quality from climatic changes, and the increased potential for extreme weather events that could damage water systems. The project will also address specific climate change scenarios, as well as plan for climate change adaptation for peri-urban and rural areas.			n			Faso, Ghana, Mali and Niger
<i>In Niger: Not available</i>								
14.	Climate Risk Management Technical Assistance Report Project: Phase II	The CRM project aims at increasing in-country capacities to manage current and future climate risks.	Sweden and SIDA through UNDP, UNDP core finance	ADPC, International Institute for Sustainable Development	Research; Policy formation and integration	2010 – 2011	Multi-sectoral	<i>Global:</i> Bangladesh, Bhutan, Dominican Republic, Honduras, India, Kenya, Maldives, Mongolia, Nepal, Nicaragua, Niger, Pakistan, Papua New Guinea, Peru, Timor-Leste and Uganda
<i>In Niger: The objective is to undertake a climate risk assessment for the agriculture, livestock and water sectors and to identify risk management options through a participatory process.</i>								
15.	West African Science Service on Climate and Adapted Land Use ²⁴⁵	The project aims at generating knowledge and developing analytical capabilities in West Africa to cope with climate change by the	German Federal Ministry of	University of Bonn	Research	2010 – 2011	Agriculture; Ecosystem conservation	<i>Regional:</i> Benin, Burkina Faso,

²⁴⁴ <http://www.state.gov/documents/organization/151601.pdf>

²⁴⁵ http://www.lap.uni-bonn.de/research/research-projects/wascal?set_language=en

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
	design of resilient land-use systems and the development of measures to conserve or restore healthy ecosystems that allow sustainable development. It relies upon cooperation between the West African research community and the expertise existing in Germany on climate change and adapted land management.	Education and Research					Cote d'Ivoire, Gambia, Ghana, Mali, Niger, Nigeria, Senegal and Togo
		In Niger: To be determined.					
16.	Adaptation Learning Programme ²⁴⁶	DFID, The Ministry of Foreign Affairs of Denmark and the Ministry of Foreign Affairs of Finland	CARE International	Capacity building; Community-based adaptation; Policy formation and integration	2010 – 2014	Rural areas; Civil society; Gender	African: Ghana, Kenya, Mozambique and Niger
		Budget: £5,000,000	In Niger: to reduce the impacts of climate variability and climate change on vulnerable households in the department of Dakoro				
17.	Great Green Wall ²⁴⁷	LDCF; SCCF; World Bank; AfDB		Capacity building; Research; Policy formation and integration	2011 – ?	Agriculture; Ecosystem restoration	African: Benin, Burkina Faso, Chad, Djibouti, Eritrea,
		Budget: US\$3.108					

²⁴⁶ CARE, <http://www.careclimatechange.org/files/adaptation/ALP.pdf>, DFID, <http://projects.dfid.gov.uk/project.aspx?Project=200658> and CARE, <http://www.careclimatechange.org/adaptation-initiatives/alp>

²⁴⁷ GEF, <http://www.thegef.org/gef/node/4503>

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
	the project seeks to encourage cooperation within and among participating countries and for countries to incorporate evidence-based policy development. The program’s goals are to: “expand investment in sustainable land and water management technologies in order to help communities adapt production systems to climate variability and change; improve land use planning; and improve climate and water monitoring network improvements, institutional cooperation within and across countries, and evidence-based policy development.” ²⁴⁸	billion					Ethiopia, Ghana, Mali, Mauritania, Niger, Nigeria, Senegal Sudan and Togo
In Niger: More information required.							

D. Proposed Adaptation Action

A total of 17 planned projects have been identified in Niger’s NAPA and National Communications. The majority of these projects seek to address vulnerabilities within Niger’s agriculture sector. Other priority sectors include forests, health and water.

Table 4: Priority projects identified in Niger’s NAPA and other sources

Name	Objectives	Project Type	Priority Sector(s)	Geographic focus (if any)
1. Setting up three pilot centers to promote the use of agro-meteorological information	To increase farmers’ access to agro-meteorological information so that they may use them during the rainy season.	Capacity building; Field implementation	Agriculture	National
Notes: Source: SNCCC (2009)				
2. Capacity building for rural producers on the use of agro meteorological information to improve	To encourage farmers to use agro-meteorological information in their production activities, before making important decisions, in order to avoid	Capacity building	Agriculture	National
Notes: Source: SNCCC (2009)				

²⁴⁸ IISD, <http://climate-iiisd.org/news/gef-council-approves-programme-that-includes-great-green-wall-initiative/>

Name	Objectives	Project Type	Priority Sector(s)	Geographic focus (if any)	
	their adaptation capacity to climate change and variability	sowing again and to increase yields.			
3.	Integration of climatic information in the prevention and fight against malaria, meningitis, and the major climate sensitive diseases in Niger	To provide the health sector with relevant information that would be integrated into the various aspects of planning and operation management, and, to a larger extent, into the permanent health watch system.	Capacity building; Knowledge communication	Human health	National
Notes: Source: SNCCC (2009)					
4.	Fodder crops species introduction in pastoral areas	To improve the fodder production in the project location in order to lessen the adverse effects resulting from climatic and human factors.	Capacity building; Field implementation	Agriculture	Rural districts in the Departments of Tchirozérine (Agadez Region) and Diffa (Diffa Region)
Notes: Source: NECSO (2006)					
5.	Promotion of food banks for livestock	To contribute to the improvement of the living conditions of the local populations through the increase of animal productivity.	Capacity building; Research	Agriculture	Villages in the Departments of Diffa (Diffa Region), Tchintabaraden (Tahoua Region), and Tchirozérine (Agadez Region)
Notes: Source: NECSO (2006)					
6.	Restoration of basins for the promotion of crop irrigation	To preserve the basins ecosystems in the Chétimari rural district and utilize water resources for the promotion of crop irrigation.	Capacity building	Agriculture; Freshwater supply	Village of Issari, Rural district of Chétimari, Department of Diffa, Diffa Region
Notes: Source: NECSO (2006)					
7.	Diversification and intensification of crop irrigation (NECSO, 2006)	To encourage sustainable crop irrigation productivity in the project areas.	Capacity building	Agriculture; Freshwater supply	Villages in the Department of Tchintabaraden (Tahoua Region) and the Urban district of Niamey I (Urban Community of Niamey/ Niamey Region)
Notes: Source: NECSO (2006)					
8.	Promotion of peri-urban market gardening and cattle breeding	To contribute to the improvement of the populations' food security in the urban community of Niamey and the increase of its income.	Capacity building; Field implementation	Agriculture	Urban district of Niamey I (Urban Community of Niamey/ Niamey Region)
Notes: Source: NECSO (2006)					

Name		Objectives	Project Type	Priority Sector(s)	Geographic focus (if any)
9.	Promotion of income-making activities and development of mutual benefit societies	Contribute to the fight against poverty through the diversification of income-making activities in the project areas.	Capacity building; Field implementation	Agriculture	Urban district of Loga (Department of Loga/ Dosso Region) and Rural villages and districts in the Department of Tchirozérine (Agadez Region), Tchintabaraden (Tahoua Region), Dakoro (Maradi Region), Department of Ouallam (Tillabéri Region), Department of Diffa (Diffa Region), and Tanout (Zinder Region),
10.	Mobilization of surface water and exploitation of ground water	To contribute to the reduction of poverty and improvement of food security through the mobilization of water resources.	Field implementation	Freshwater supply	Villages of Edouk I and Edouk II, and Kaou rural district (Department of Tchintabaraden/ Tahoua Region) Tondikiwindi rural district (Department of Ouallam/ Tillabéri Region)
11.	Production and dissemination of agro-metrological data	To contribute to the achievement of food security for the population in the project areas.	Knowledge communication	Agriculture; Climate information services	Rural districts in the Departments of Diffa (Diffa Region), Loga (Dosso Region), Dakoro (Maradi Region), Tchintabaraden (Tahoua Region), Ouallam (Tillabéri Region), and Tanout (Zinder Region).
12.	Promotion of food banks	To contribute to the improvement of the populations' living conditions against food insecurity related to adverse effects of climate changes in the project location.	Field implementation	Agriculture	Villages and rural districts in the Departments of Diffa (Diffa Region), Ouallam (Tillabéri Region), Tchirozérine (Agadez Region), Loga (Dosso Region), Dakoro (Maradi Region), and Tanout urban district (Department of Tanout/ Zinder Region)
13.	Contribution to the fight against climate sensitive diseases	To improve the health conditions of local vulnerable populations exposed to the adverse effects of climate changes.	Research	Human health	Villages and rural districts in the Departments of Tchirozérine (Agadez Region), Tchintabaraden (Tahoua Region), Diffa (Diffa Region), Ouallam (Tillabéri Region), Dakoro (Maradi Region), and Tanout (Zinder Region); And the urban districts of Loga (Department of Loga/ Dosso Region) and Niamey I (Urban Community of Niamey/ Niamey Region)

Name	Objectives	Project Type	Priority Sector(s)	Geographic focus (if any)
14.	Development of anti-erosion infrastructures for agricultural forestry and pastoral purposes	Capacity building; Field implementation	Agriculture	Urban district of Loga (Department of Loga/ Dosso Region) and Rural district of Tondikiwindi (Department of Ouallam/ Tillabéri Region)
Notes: Source: NECSO (2006)				
15.	Popularization of animal and vegetative species that are most adapted to climatic conditions	Capacity building; Field implementation	Agriculture; Forestry	Rural district of Aderbissinat (Department of Tchirozérine/ Agadez Region) and the villages of Edouk I and Edouk II (district of Kaou, Department of Tchintabaraden, Tahoua Region)
Notes: Source: NECSO (2006)				
16.	Protection of riversides and restoration of silted up ponds	Field implementation	Freshwater supply	Aderbissinat rural district (Department of Tchirozérine, Agadez Region) and the urban district of Niamey I (Urban community of Niamey/ Niamey Region)
Notes: Source: NECSO (2006)				
17.	Building material, technical and organizational capacities of rural producers	Field implementation	Agriculture; Forestry	Villages and rural districts in the Departments of Diffa (Diffa Region), Tchirozérine (Agadez Region), and Ouallam (Tillabéri Region); Loga urban district (Department of Loga/ Dosso Region)
Notes: Source: NECSO (2006)				

In addition, Niger is one of 10 countries in Africa that is part of a proposal submitted to the Special Climate Change Fund. This research project will undertake an analysis of the micro-economic cost of adaptation options in the agriculture sector.

Table 5: Other adaptation project in development

Name	Objectives	Project type	Priority Sector(s)	Geographic focus (if any)	
1.	Microeconomic Costing of Discrete Adaptation Options in the Agriculture Sector: A Sub-National Level Analysis of the Welfare Gains of Dynamic Adaptation ²⁴⁹	<i>To be identified</i>	Research	Agriculture	Regional: Burkina Faso, Cameroon, Egypt, Ethiopia, Ghana, Kenya, Niger, Senegal, South Africa, Zambia
Notes: Proposed to Special Climate Change Fund					

²⁴⁹ GEF, http://www.thegef.org/gef/sites/thegef.org/files/publication/adaptation-actions_0.pdf

E. Assessment

Niger has built a good knowledge base (particularly on vulnerability) and institutional structures on climate change are in place. The most vulnerable sectors, zones, communities and social groups have been identified through national studies that have contributed to informing the NAPA and Niger's Second National Communication. A number of priority actions to reduce vulnerability, especially in the agriculture, water, health and forest sectors, have already been identified. However, implementation of the adaptation options identified as part of the NAPA and other initiatives is modest. While addressing some of the objectives targeted by Niger's proposed NAPA projects,²⁵⁰ the majority of current projects focus on agriculture, leaving priority needs related to health unaddressed. There is also a lack of mainstreaming of climate risk into development strategies.

References:

Central Intelligence Agency [CIA] (2011). Niger. *The World Factbook*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/ng.html>. Last updated 20 January 2011.

Danish International Development Assistance [DANIDA] (2008). *Appréciation des impacts des changements climatiques sur les programmes de développement de la coopération avec le Niger*. Bruxelles: Baastel.

National Environmental Council for Sustainable Development [NECSD] (2006). *National Adaptation Program of Action (NAPA)*. Niamey: NECSD.

National Environmental Council for Sustainable Development [NECSD] (2009). *Second National Communications on Climate Change*. Niamey: NECSD. <http://unfccc.int/resource/docs/natc/nernc2e.pdf>

²⁵⁰ For example, the "Development of Sustainable Agricultural Techniques for Adapting to Climate Change" project in the municipality of Roubou should contribute to the reduction of climate change-driven soil erosion pressures, and by help fulfill the objective of Niger's NAPA project that aims to contribute to the restoration of deteriorated zones and fight food insecurity. As well, the current project "Supporting Adaptation of Productive Practices among Pastoral and Agropastoral Communities in the Rombou Rural Commune" can also respond to the objectives of several NAPA projects such as: increasing agricultural, forestry and pastoral production; improving food security through the mobilization of water resources; and improving fodder production.