

8.0 Namibia

ASARECA	Association for Strengthening Agriculture Research in Eastern and Central Africa
DFID	Department for International Development (United Kingdom)
GDP	Gross Domestic Product
GEF	Global Environment Facility
FANPRAN	Food, Agriculture, and Natural Resources Policy Analysis Network
IFPRI	International Food Policy Research Institute
IIED	International Institute for Environment and Development
MET	Ministry of Environment and Tourism
MAWF	Ministry of Agriculture, Water and Forestry
NGO	non-governmental organization
PIK	Potsdam Institute for Climate Impact Research
SIDA	Swedish International Development Agency
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	US Agency for International Development
ZALF	Leibniz-Centre for Agricultural Landscape Research

Namibia is a country located on the southwestern coast of Africa. Its land is characterized as semi-desert with a high plateau, and it is home to a large part of the Namib Desert. Like many other countries in the area, Namibia's economy is dependent on rain-fed agriculture; over 70 per cent of the population derives their livelihoods from farming activities (Reid *et al*, 2007). It is estimated that up to 30 per cent of Namibia's Gross Domestic Product (GDP) is dependent on natural resources and the environment.

A. Adaptation Needs and Priorities

The mean annual temperature in Namibia has been increasing at approximately three times the global average rate recorded in the 20th century (Reid *et al*, 2007). Relative to mean temperatures between 1961 and 1990, the country is projected to experience temperature rises by 2100 of between 2 to 3°C based upon use of the B1 emissions scenario, and 4.5 to 6°C based on use of the A1 emissions scenario. Temperature increases are projected to be less in the western areas of Namibia that are nearer to the ocean (MET, 2002). Projections of

future rainfall patterns are more uncertain, with models indicating ranges from small increases of less than 30 mm per year to severe declines in annual rainfall (MET, 2009). It is anticipated that rainfall patterns will correlate closely with projected temperature changes.

Namibia's Proposed Climate Change Strategy and Action Plan notes that future climate change impacts will cause greater rainfall variability, shortening of the rainy season, a possible increase in evapotranspiration and sea level rise. (MET, 2009). An increase in drought and aridity is also expected, with attendant impacts upon agriculture, forestry, fisheries resources, water resources, ecosystems and food security. Climate change is also expected to increase the occurrence of certain vector-borne diseases (e.g. malaria) as well as the population's vulnerability to water- and food-borne diseases that spread person to person (e.g. cholera. Frequent and intense rainfalls, rising sea levels, and drought may also affect infrastructure, including water, wastewater, and sewerage treatment systems as well as houses, buildings, roads, railways, dams and water pipes (MET 2009).

Namibia is particularly vulnerable to climate change given its geographic location, variable climate and socioeconomic factors that include its dependence on rain fed agriculture (MET, 2009). Research suggests that, over the next 20 years, Namibia's economy could lose up to six per cent of its GDP annually due to the impact of climate change on its natural resources (Reid *et al*, 2007). Namibia's vulnerabilities to climate change have been identified in through its Initial National Communication to the UNFCCC, National Adaptation Vulnerability Assessment, and the Proposed Climate Change Strategy and Action Plan. These documents high concerns relevant to the following sectors:

- *Agriculture.* Smallholder agriculture and pastoralism, practiced by over two-thirds of the population, are considered to be particularly vulnerable to the projected impacts of climate change in Namibia as agricultural output in Namibia already extremely sensitive to climatic conditions. Even under best-case climate change scenarios, subsistence farming in Namibia is expected to experience declining productivity, with approximately a quarter of the population required to find new livelihoods (Reid *et al*, 2007). Under future climate conditions, ranching will also become more difficult as climate change is expected to impact the productivity of grassland, savanna and shrub-based ecosystems (Reid *et al*, 2007). As the export of livestock products makes up a substantial portion of the country's annual GDP, this decline could have implications for the national economy.
- *Tourism.* Climate sensitive biodiversity is also seen as being particularly at risk, with consequent impacts on the ecotourism sector. A considerable contributor to the Namibian economy, approximately 75 per cent of Namibia's tourism sector is nature-based (Reid *et al*, 2007).

- *Freshwater resources.* Namibia currently experiences a net water deficit as it has no perennial rivers and less than one per cent of annual rainfall is retained as groundwater. Should Namibia experience a decrease in rainfall and an increase in evapotranspiration, the impact on the country's water supply and dependent sectors would be extreme.

To reduce its vulnerability to the impacts of climate change, Namibia has recommended a number of actions through its various policy documents, including the National Communication, Adaptation and Vulnerability Assessment, and Proposed Climate Change Strategy and Action Plan. These include the following measures, by key socioeconomic area:

- *Policy, planning and research:* Integrate available information on the vulnerability to climate change and adaptation options into existing economic, social and natural and environmental resource policies, and into the National Development Agenda; establish a consultative planning process to develop a strategic framework to address climate change issues within existing policies and legislation; and undertake further research on Namibia's socioeconomic and ecosystem vulnerability to climate change, as well as available measures to adapt to these changes.
- *Agriculture:* Improve information dissemination around the effects of climate change, as well as improved forecasting and the establishment of early warning systems, to encourage adaptation in the farming sector; development of climate resilient cropping/agriculture/production systems; development of climate resilient crop varieties/cultivars; diversification of agriculture and livelihoods; and development of climate resilient livestock breeds.
- *Forestry, biodiversity, and ecosystems:* Conservation, utilization and sustainable development of biological resources; and maintenance of ecosystems to ensure environmental sustainability.
- *Coastal zone, fisheries and aquaculture:* Conservation, utilization and sustainable development of the coastal zone and its resources; develop climate change infrastructure risk assessment guidelines and methodology; improve drainage and sanitation facilities in rural and urban areas; adaptation to floods; adaptation against future sea level rise; and conservation, utilization and sustainable development of fisheries and aquaculture
- *Sustainable freshwater resources:* Conservation and management of watershed/catchment areas; promote integrated development and management of water resources; promote conservation and sustainable utilization of water resources; improve transboundary cooperation regarding water resources; support institutional and human capacity building in water resources management and use; and improve efficiency and conservation in the use of water resources, including implementation of water demand management policies and integrated water resources management.
- *Housing and settlements:* Improve infrastructure spatial planning and development in urban and rural areas; improve formal and informal settlement patterns and housing; and climate-proof existing and future housing and other infrastructure.

- *Human health and well-being:* Assessment of the impacts of climate change on human health and well-being; expansion of health facilities and networks to remote areas; improve the capture, management, storage and dissemination of health information; improve access to sanitation and water; increase human resources capacity and improve efficiency; and support action plans against HIV/AIDS.

To address gaps in Namibia's adaptation identified through this assessment, it was recommended that the following actions be taken: (a) targeted, pro-poor disaster insurance schemes should be developed for the rural poor in Namibia as part of a broader rural development policy and strategy; (b) pricing mechanisms of water, land and electricity should be introduced that reflect the scarcity of the goods and the importance of conservation; (c) capacity should be enhanced to access, interpret, translate, and communicate climate change science to policymakers and the general public in the country; (d) access to weather data should be improved and the number of weather stations increased; and (e) vulnerability mapping should be enhanced in order to enhance disaster preparedness (MET, 2008).

The 2008 Assessment also noted some of the key barriers to adaptation to climate change in Namibia, namely: insufficient awareness, political and institutional barriers, sociocultural barriers and financial barriers. Additional research corroborates the need for Namibia to ensure its policies and activities take the impacts of climate change into consideration (Reid *et al*, 2007).

B. National Level Policies and Strategic Documents

As part of activities leading to the submission of Namibia's Second National Communication to the UNFCCC, the Ministry of Environment and Tourism is undertaking research and consultations to develop a national climate change policy and strategy and accompanying action plan (MET 2009). This process is being funded by the Government of Japan's "Supporting Integrated and Comprehensive Approaches to Climate Change Adaptation in Africa," or Africa Adaptation regional program being implemented in Namibia by the United Nations Development Programme (UNDP).

Studies conducted during this process include: a vulnerability and adaptation assessment (with UNDP support); research on farming systems needs to enable adequate adaptation to climate change; a study examining adaptation to climate change through the project "Improvement of Traditional Crops and Livestock Farming in Namibia;" and the Proposed Climate Change Strategy and Action Plan in 2009.¹⁹⁷ The latter outlines Namibia's approach to addressing mitigation, adaptation, and tackling cross-cutting issues. The Ministry of

¹⁹⁷ Based on current research, this proposed document has yet to be formally adopted as the country's national climate change strategy.

Environment and Tourism also conducted three regional consultative workshops in July 2010 to gather public inputs for a draft national climate change policy.¹⁹⁸

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

Name of Policy Action		Government Division Responsible	Status	Sector(s) of Focus	Summary description
1.	Initial National Communication to the UNFCCC ¹⁹⁹	Ministry of Environment and Tourism	Submitted in 2002	Multi-sectoral	Provides an overview of the climate and economy of Namibia; outlines anticipated impacts of climate change and emissions profile of the country along with needs and priorities to address them.
2.	Namibian Biodiversity Strategy and Action Plan	Ministry of the Environment	Released in 2002	Multi-sectoral	One of the ten priorities of the action plan is to “raise awareness and strengthen capacity to adapt to climate change.” In particular, the plan commits to synthesize relevant regional and national information from other sources, commission analyses of the biodiversity impacts of climate change in Namibia, design and implement an awareness program, integrate climate change monitoring and research needs in the planning of environmental observatories, focus research and management planning on climate change impacts on vulnerable species and areas, and to make results and recommendations regularly available to stakeholders.
3.	Adaptation and Vulnerability Assessment	Ministry of Environment and Tourism (with assistance from UNDP)	March 2008	Freshwater supply; Agriculture	Focuses on impacts of climate change in the water and agriculture sectors as well as socioeconomic impacts. This study is part of an overall effort to develop a national climate change policy and strategy and associated action plan.
4.	Proposed Climate Change Strategy and Action Plan ²⁰⁰	Ministry of Environment and Tourism (with assistance from the UNDP)	Produced in 2009; remains a working document	Multi-sectoral	As noted in the document, the National Climate change Strategy and Action Plan is “part of the background activities of Namibia under the second national communication to develop a national climate change policy and strategy and accompanying action plan” (MET 2009). The adaptation section outlines activities in the following areas: food security and sustainable resource base, sustainable water resources, human health and well-being, and infrastructure.
5.	National Development Plan ²⁰¹	National Planning Commission	2009 – 2011	Multi-sectoral	The document outlines an intention to modernize meteorological services in Namibia and to set up a Climate Change Unit to support the National Climate

¹⁹⁸ Source: <http://www.met.gov.na/SiteCollectionDocuments/Hon%20Minister%20speech%20at%20the%20National%20Climate%20Change.pdf>

¹⁹⁹ UNFCCC, http://unfccc.int/essential_background/library/items/3599.php?rec=j&preref=3455#beg

²⁰⁰ Accessible here: <http://www.met.gov.na/Documents/NAMIBIA-Proposed%20Climate%20Change%20Strategy%20and%20Action%20Plan%20%2813.pdf>

²⁰¹ Accessible here: http://www.npc.gov.na/docs/NDP3_Executive_Summary.pdf

Name of Policy Action	Government Division Responsible	Status	Sector(s) of Focus	Summary description
				Change Committee. The document also outlines a commitment to ensure environmental sustainability by strengthening the management of natural resources and biodiversity, to develop and implement a National Strategy on Climate Change, and to mainstream climate change adaptation and mitigation into national policies. Related goals include the implementation of Community-Based Natural Resource Management and integrated sustainable land management.

C. Current Adaptation Action

When compared to other southern African countries, a moderate amount of adaptation programming is currently occurring in Namibia. Most of this action is being directed towards supporting adaptation in the areas of agriculture, governance and, to a lesser extent, urban areas. Projects are also being capacity related to disaster risk management, climate information services, sustainable land management and biodiversity. The actions being implemented through these projects primarily include capacity building, knowledge communication and policy development; some projects are supporting community based adaptation. Financing for these projects is most commonly being provided by the Global Environment Facility (GEF) and the governments of Germany, Japan and Norway.

Table 2: Current Adaptation Projects and Programs active in Namibia

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
National Action							
1. Country Pilot Partnership for Integrated Sustainable Land Management Namibia: Adaptation to climate change through the improvement of traditional crops and livestock farming (CPPISLM) ²⁰²	The project objective is to develop and pilot a range of coping mechanisms for reducing the vulnerability of farmers and pastoralists to climate change and climate variability.	GEF Trust Fund (Strategic Priority for Adaptation) Budget: US\$6,795,806	UNDP, Ministry of Agriculture, Water and Forestry, Ministry of Lands and Resettlement, Ministry of Regional and	Capacity building	2008 – 2011	Agriculture; Biodiversity	Namibia

²⁰² ALM, <http://www.adaptationlearning.net/project/cpp-namibia-adapting-climate-change-through-improvement-traditional-crops-and-livestock-farm>

Name		Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
				Local Government and Housing and Rural Development, and the National Planning Commission				
2.	Adjusting Community Agricultural Practices to Reduce Climate Change Risk in Omusati Region ²⁰³	Project objectives include both providing the community with practical tools for adaptation and increasing community awareness about climate change risks. The project seeks to integrate all community groups, including younger members, into activities. Lessons learned from project implementation will be shared regionally, nationally and globally, to encourage adaptive solutions at all levels.	Japan, GEF Budget: US\$135,000	UNDP, Onkani community; Ministry of Agriculture, Water and Forestry; Desert Research Foundation of Namibia; Namibia National Farmers Union; Ongushu cooperative	Capacity building; Community based adaptation	2009 – 2011	Agriculture	Omusati Region
Participation in Regional and Global Actions								
3.	Capacity Development for Policy Makers: Addressing climate change in key sectors ²⁰⁴	The project is a targeted capacity development initiative that supports two goals: to increase national capacity to co-ordinate ministerial views for more effective participation in the UNFCCC process and to	United Nations Foundation; Switzerland; Finland;	UNDP	Capacity building; Policy formation and integration;	2008 – 2010	Government	Global: 19 countries, ²⁰⁵ including Namibia

²⁰³ ALM, <http://www.adaptationlearning.net/project/adjusting-community-agricultural-practices-reduce-climate-change-risk-omusati-region>

²⁰⁴ UNDP, <http://www.undp.org/climatechange/capacity-development.html>

²⁰⁵ 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)
		assess investment and financial flows to address climate change for selected key 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 UNFCCC will be enhanced.	Spain; and Norway Budget: US\$6,953,413		Knowledge communication			
			<i>In Namibia:</i> A work plan for an Investment and Financial Flows (IFF) assessment for the key sectors of energy (mitigation) and land-use change (adaptation) has been undertaken in Namibia. Leading up to the development of the work plan, two Inter-Ministerial training sessions took place in 2008 and 2009. The first workshop aimed to (a) raise awareness for policymakers on strategic climate change issues and national priorities, (b) develop capacity of negotiators on the building blocks of the Bali Action Plan, and (c) build the capacity of technical experts on conducting assessments of investment and financial flows to address climate change. The second workshop brought together policymakers to discuss investment and financial flows to address climate change in key sectors, trained participants in how to conduct an I&FF assessment using UNDP methodology, reviewed the a national work plan for undertaking I&FF assessment, and established institutional arrangements and next steps for the work plan.					
4.	Supporting Integrated and Comprehensive Approaches to Climate Change Adaptation in Africa (or Africa Adaptation Program – AAP) ²⁰⁶	Under this program, UNDP will assist 20 African countries in implementing integrated and comprehensive adaptation actions and resilience plans. The projects will ensure that national development processes incorporate climate change risks and opportunities to secure development gains under a changing climate. UNDP will help countries establish an enabling environment and develop the capacity required to design, finance, implement, and monitor long-term and cost-effective adaptation policies and plans.	Japan International Cooperation Agency Budget: US\$92 million	UNDP	Capacity building; Policy formation and integration; Knowledge communication	2008 – 2011	Government	African: 20 African countries ²⁰⁷ including: Lesotho, Malawi, Mauritius, Mozambique, Namibia
			<i>In Namibia:</i> The goal of this project is to ensure that Namibia has the institutional, individual and systemic capacity to address climate change risks and opportunities through a national approach to adaptation. In particular, Namibia's project is focused on strengthening: (1)					

²⁰⁶ ALM, <http://www.adaptationlearning.net/program/africa-adaptation-programme> and UNDP-APP, <http://www.undp-aap.org/>

²⁰⁷ 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)
			adaptive long-term planning capacities (2) institutional and human resource capacities, (3) policies and measures, (4) A sustainable financing strategy (5) knowledge management activities. The project was initiated in Namibia in 2009.					
5.	Strategies for Adapting to Climate Change in Rural Sub-Saharan Africa: Targeting the most vulnerable ²⁰⁸	“Promote adaptation among vulnerable populations through developing comprehensive systems for assessing global changes and the changes of these impacts across disaggregated systems, groups, and factors influencing initial state of vulnerability. Provide regional organizations, policy-makers and farmers in sub-Saharan Africa with tools to identify and implement appropriate adaptation strategies.”	BMZ Budget: US\$91,241	IFPRI (lead); ASARECA; FANRPAN; PIK; ZALF	Capacity building; Community based adaptation; Policy formation and integration	2008 – 2011	Rural areas; Agriculture; Government	African: Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe
In Namibia: Further information required.								
6.	Cities and Climate Change Initiative (CCCI) ²⁰⁹	The first phase of this project was designed to promote policy dialogue, develop tools and implement pilot activities in the cities of Sorsogon (Philippines), Esmeraldas (Ecuador), Maputo (Mozambique) and Kampala (Uganda). The project aims at advising and supporting cities and towns prone to the different impacts of climate change by offering innovative approaches and solutions for national and local development planning.	Government of Norway	UN-HABITAT, UNEP, National Governments	Knowledge communication; Capacity building; Assessment	2008 – ongoing	Urban areas	Global: 17 countries, ²¹⁰ including: Mozambique and Namibia
In Namibia: Further information required.								

²⁰⁸ FANRPAN, <http://www.fanrpan.org/themes/eachproject/?project=2> and http://www.fanrpan.org/documents/d00539/BMZ_Climate_Change_Adaptation_Jun2008.pdf

²⁰⁹ UN-HABITAT, http://www.fukuoka.unhabitat.org/programmes/ccci/index_en.html and http://www.fukuoka.unhabitat.org/programmes/ccci/pdf/CCCI_Asia-Pacific_Flyer.pdf

²¹⁰ These countries are: Burkina Faso, Ecuador, Fiji, Indonesia, Kenya, Mongolia, Mozambique, Namibia, Nepal, Papua New Guinea, the Philippine, Rwanda, Samoa, Senegal, Sri Lanka, Uganda and Vanuatu.

Name		Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
		In 2010, efforts were initiated to up-scale lessons from this initiative by launching CCCI-Asia/Pacific with UN-HABITAT partners in China, Fiji, Indonesia, Mongolia, Nepal, Papua New Guinea, Samoa, Sri Lanka, Vanuatu and Viet Nam. The project was also upscaled in Africa.						
7.	Community-based Adaptation (CBA) Programme ²¹¹	The objective of the program is to enhance the capacity of communities in the pilot countries to adapt to climate change including 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.	GEF (Strategic Priority on Adaptation), co-financing Budget: US\$6.7 million	UNDP	Knowledge communication; Capacity building; Community-based adaptation	2009 – 2011	Multi-sectoral	<i>Global:</i> Bangladesh, Bolivia, Guatemala, Jamaica, Kazakhstan, Morocco, Namibia, Niger, Samoa, Viet Nam
			<i>In Namibia:</i> The CBA program's work in Namibia is being co-financed by the Government of Japan. Two projects are underway: ²¹² 1. "Ecosystem and Livelihood Resilience through Sustainable Agriculture." The focus of the project is to increase community-level capacity cope/adapt to climate change through implementation of sustainable agricultural practices at four farming communities in the arid Onkani region and the surrounding communities of Onakapya, Ondjungulume and Onkaankaa. 2. "Harnessing coping strategies via a holistic approach for community adaptation to climate change." The project pilots the implementation of six coping strategies to climate change vulnerability that can be duplicated on a large scale in subsistence agricultural communities.					
8.	Regional Science Service	The objective is to develop a program that will	Germany		Research;	2009 – 2012	Ecosystem	<i>Regional:</i>

²¹¹ UNDP, http://www.undp-adaptation.org/projects/websites/index.php?option=com_content&task=view&id=203

²¹² UNDP, http://www.undp-adaptation.org/projects/websites/index.php?option=com_content&task=view&id=257&sub=1

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
Centre for Adaptation to Climate Change and Sustainable Land Management in Southern Africa ²¹³	conduct problem-oriented research in the area of adaptation to climate change and sustainable land management and provide evidence-based advice for all decision-makers and stakeholders. Research will be geared towards filling current regional or local gaps in integrated knowledge. The research will aim to: integrate research on land- and resource management; link science and theory to practice and decision-making; compile, analyze and disseminate best practices.	Federal Ministry of Education and Research		Capacity building; Knowledge communication		conservation	Angola, Botswana, Namibia, South Africa, Zambia
		In Namibia: Further information required.					
9. Five-City Network to Pioneer Climate Change Adaptation in sub-Saharan Africa ²¹⁴	Local governments and coastal cities in southern Africa face a serious threat associated with climate change. This project aims to design a framework for managing increased risk from climate change, and is anticipated to lay the groundwork for a local climate change adaptation strategy and action plan in the five urban areas in the participating countries: Cape Town (South Africa); Dar es Salaam (Tanzania); Maputo (Mozambique); Windhoek (Namibia); and Port Louis (Mauritius).	DFID and IDRC through the CCAA program	International Council for Local Environmental Initiatives	Capacity building; Policy formation and integration)	2009 – 2012	Urban area	Regional: Mauritius, Mozambique, Namibia, South Africa and Tanzania
		In Namibia: Further information required.					
10. Zambezi River Basin Initiative ²¹⁵	In recognition of increasing flood events within the Zambezi River Basin, this project aims to reduce the vulnerability of communities within the basin to extreme weather events and climate change, including	International Foundation of Red Cross and Red Crescent	National Red Cross and Red Crescent societies	Capacity building; Community based adaptation	2009 – 2013	Disaster risk management	Regional: Botswana, Malawi, Mozambique, Namibia,

²¹³ SASSCAL, <http://www.sasscal.org/>

²¹⁴ IDRC, http://www.idrc.ca/EN/Regions/Eastern_and_Southern_Africa/Pages/ProjectDetails.aspx?ProjectNumber=105868

²¹⁵ ICP, <http://www.icp-confluence-sadc.org/projects/zambezi-river-basin-initiative-zrbi>

Name		Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)	Geographic focus (if any)
		the impact of flooding. Activities include developing community hazard maps, training staff in community disaster preparedness, implementing community based early warning systems, and training in adaptation techniques.	Societies					Zambia Zimbabwe
			In Namibia: Further information required.					
11.	Southern Africa Regional Climate Change Program ²¹⁶	The program aims to synthesize relevant climate change science, develop strategic research and strengthen the science-policy-governance-finance dialogue. The program will aim to build an evidence base for transboundary responses to climate change, strengthen the region's voice in international platforms, and enhance its ability to access necessary finance for climate change adaptation.	DFID, SIDA	OneWorld Sustainable Investments	Policy formation and integration; Research	2009 – 2014	Government; Climate information services	African: Angola, Botswana, DRC, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe
			In Namibia: Further information required.					

D. Proposed Adaptation Action

No planned adaptation projects have been identified at present.

E. Assessment

Namibia has made progress in implementing a moderate number of projects that address key adaptation priorities. There is considerable evidence that Namibia is integrating climate change adaptation considerations into its national development policies and strategies and, as

²¹⁶ Southern Africa Regional Climate Change Program, http://www.rccp.org.za/index.php?option=com_content&view=article&id=68&Itemid=61&lang=en

discussed above, the country is currently undertaking research and consultations to develop a national Climate Change Strategy and Action Plan with assistance from the UNDP and Government of Japan.

The majority of current adaptation projects in Namibia focus on adaptation in the agriculture sector, including crop production, livestock rearing and food security. Certain projects are also addressing the need to further mainstream climate change adaptation into policy frameworks. While these areas have been identified as important sectors for adaptation action, some gaps in current programming may exist. Looking strictly at the number of discrete adaptation projects underway in the country, needs related to biodiversity and the potential impact of climate change on Namibia's tourism sector do not appear to be addressed. Nor do the identified vulnerabilities of the freshwater resource, infrastructure, coastal zones, fisheries and human health sectors. The potential impacts of climate change by gender also do not appear to have been given dedicated attention through existing programming. Namibia's various documents assessing vulnerability to climate change identify a range of possible adaptation actions, and the country could make a concerted effort to identify the most important adaptation priorities in order to ensure scarce resources are allocated effectively.

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