



# Africa Climate Briefing

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# Foreword

Climate change is affecting all corners of the globe, but it is hitting Africa particularly hard. Droughts and floods are becoming more frequent, and leaving some of the world's poorest populations without access to food and water, while putting at risk the livelihoods of millions of people.

The EU and Africa are natural allies when it comes to fighting climate change. We know that climate action is not only good for the environment, but goes hand in hand with our efforts to eradicate poverty and create a more sustainable model of economic development.

We must avoid a future where some of the world's most vulnerable countries continue to spend twice as much on imported oil than on food. Europe must help Africa harvest its vast renewable and low-carbon energy potential to spur new economic growth opportunities, create jobs in innovative sectors and help millions of people out of poverty.

This brochure gives a good overview of the variety of climate policies and programmes set up as part of the climate cooperation between the EU and Africa. It gives a feel for what is already happening across the continent and what we can build on in the future. The many climate initiatives and projects supported by the European Commission and its Member States show that our cooperation is already helping to change lives and is raising standards of living across the continent.

The European Commission has already provided more than EUR 3.7 billion over the last decade to strengthen climate-friendly development in Africa and other developing countries. But this can only be a start. That is why the EU will devote at least one-fifth of its entire budget until 2020 to climate-related policies and projects. From this, a record EUR 1.7 billion will be used in the next two years to support climate-related action in developing countries.

The success of EU-Africa climate cooperation was highlighted at the 4th EU-Africa Summit in April 2014 in Brussels. Around 80 heads of states and government, as well as climate ministers from the EU and African Union countries, stressed the wish to further deepen our partnership to tackle this pressing global issue.

EU-Africa climate cooperation has already brought benefits to thousands of people across the African continent. But many challenges remain and we must now work together with international partners to tackle climate change at a global level. Here, the EU and Africa must lead the way towards a more climate-friendly future.



A handwritten signature in black ink, appearing to read 'Connie Hedegaard'.

**Connie Hedegaard**  
EU Commissioner for Climate Action



A handwritten signature in black ink, appearing to read 'Andris Piebalgs'.

**Andris Piebalgs**  
EU Commissioner for Development

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# Abbreviations

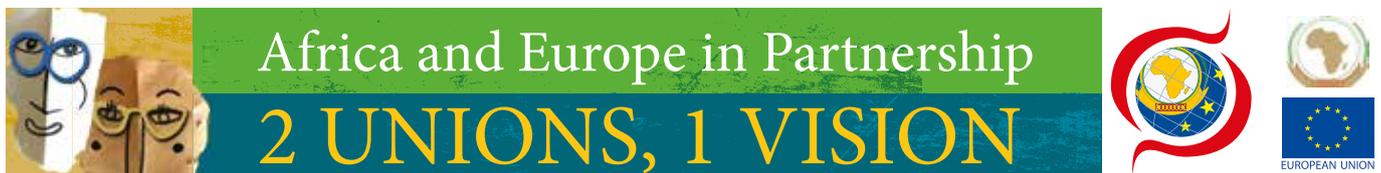
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AFD	Agence Française de Développement (France)
CDM	Clean Development Mechanism
CGIAR	Consultative Group on International Agricultural Research
COMESA	Common Market for Eastern and Southern Africa
COP	Conference of the Parties (UNFCCC)
CREG	Regulatory Commission for Electricity and Gas
DFID	Department for International Development (UK)
DRC	Democratic Republic of Congo
DRR	Disaster risk reduction
EAC	East African Community
EDF	European Development Fund
EEP	Energy and Environment Partnership programme
EU	European Union
FLEGT	Forest Law Enforcement, Governance and Trade
FSF	Fast Start Finance
GCCA	Global Climate Change Alliance
GDP	Gross domestic product
GEF	Global Environment Facility
GIZ	Gesellschaft für Internationale Zusammenarbeit GmbH (Germany)
IPCC	Intergovernmental Panel on Climate Change
ISDR	International Strategy for Disaster Reduction
LDC	Least developed countries
LECBP	Low Emissions Capacity Building Programme
MDG	Millennium Development Goals
MENA	Middle East and North Africa
MRV	Monitoring, reporting and verification
NAMA	Nationally Appropriate Mitigation Actions
NAPA	National Adaptation Programmes of Action
NatComm	National Communication (to the UNFCCC)
PPP	Public private partnership
REDD	Reducing Emissions from Deforestation and forest Degradation
SADC	Southern African Development Community
SME	Small and medium-sized enterprise
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
WMO	World Meteorological Organization

# About this brochure

This Africa Climate Briefing aims to facilitate knowledge exchange and discussion by providing short climate profiles of all African countries as well as illustrative examples of climate-relevant projects.

Ricardo-AEA would like to thank the EU Delegations in Africa and development agencies of EU Member States for their inputs to this brochure, as well as the Support Mechanism of the Africa-EU Partnership for its support with translation and production.



## Sources of Data

<b>Population:</b>	2013 data CIA Factbook
<b>GDP per capita:</b>	Purchasing Power Parity (PPP), 2012 data CIA Factbook
<b>Annual carbon dioxide emissions:</b>	Megatonnes of carbon dioxide, 2010 data CDIAC**
<b>Carbon dioxide emissions/capita*:</b>	Kilograms of carbon dioxide, 2010 data CDIAC**
<b>UNFCCC groups:</b>	aosis.org g77.org ldclimate.wordpress.com
<b>Last National Communication:</b>	UNFCCC submissions, unfccc.int

## Notes on Data Use

Data has been used from the sources listed above, from the UNFCCC website, and from EU Delegations in Africa.

\* The latest population data used is from 2013, and latest comparable annual carbon dioxide emissions data is 2010. Hence carbon dioxide emissions per capita are approximate.

\*\* Carbon Dioxide Information Analysis Centre, US Department of Energy (DOE), available from the official UN Millennium Development Goals Indicators website.

# Algeria



Despite its location on the Mediterranean coast, Algeria is mostly dry with semi-arid and arid climate zones. North Africa is one of the regions with the highest levels of water scarcity in the world. Most of Algeria is covered by the Sahara Desert, and a challenging landscape characterised by high plateaus and mountainous terrain. Algeria is facing challenges due to its dry, arid climate – decreasing water resources, declining agricultural yields, soil erosion and desertification. With temperatures projected to rise, rainfall expected to decrease and extreme weather events expected to intensify under future climate scenarios, these challenges are likely to become more acute in the years ahead. Algeria has developed an adaptation strategy that focuses on food security and sustainable water management to avoid negative impacts in the agricultural and industrial sectors. The strategy is based on protecting water resources, reducing consumption, using non-conventional water resources (such as desalination of seawater and the re-use of wastewater) and improving irrigation techniques.

Energy supply is also an important issue for Algeria. The country is highly reliant on oil and natural gas to meet domestic energy demand, and as important sources of export revenue. In 2011, the Government adopted a national energy programme that aims to increase the use of renewable electricity and improve energy efficiency. One of the programme's targets is to produce 40% of the country's electricity needs from renewable sources through large-scale investment in solar power.

## Projects and Actions

### Support for the Mediterranean Solar Plan and Union for the Mediterranean Initiatives

#### Domestic and international supply of renewable energy

Solar energy has the potential to become an important complement to oil and gas exports in North Africa. Between 2011 and 2014, GIZ is funding a EUR 3.5 million project to help countries in the Middle East and North Africa (MENA) region develop renewable energy resources and increase capacity to actively shape international processes in this field. Under the project, the Algerian regulatory commission for electricity and gas (CREG) will receive advice on how to design a funding mechanism for renewable energy. In addition, the project will develop a framework for the export of renewable electricity from the MENA region to Europe.

### Support for Climate Change Mitigation and Adaptation in the European Neighbourhood and Partnership Instrument southern region (Clima South)

#### Knowledge sharing and capacity building for climate action

The EU is providing EUR 5 million between 2013 and 2016 to enhance regional cooperation between the EU and its southern Mediterranean neighbours. The project will contribute to improved climate change policies, strategies and tools in the European Neighbourhood Policy South region. This will be achieved by promoting targeted exchanges that prioritise the sharing of information, best practices and legislation on climate change challenges, and policies. One of the main themes of these exchanges will be the identification, design and formulation of Nationally Appropriate Mitigation Actions, such as the adoption of low-emission development strategies on the basis of accurate and up-to-date measurement, reporting and verification systems.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2010)
- National Inter-Ministerial Dialogue on Climate Change was held in Algiers (2009)

Population:

**38.1 million**

GDP per capita:

**USD 7,300**

Annual carbon dioxide emissions:

**123 Mt**

Carbon dioxide emissions per capita:

**3,481 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2010**

# Angola



Angola's climate consists of a cool, dry season and a hot, rainy season. The coastal region is relatively humid, while the inland region is characterised by a tropical zone in the north, a moderate plateau zone and a semi-arid zone in the southwest. Angola's economy has recently experienced high levels of growth, largely due to high exports in the oil and diamond sectors. Despite a largely stable economy, poverty is still a major issue. It is estimated that less than 20% of the population is connected to the electricity network and levels of access to clean water remain low.

Conflict and poverty have taken their toll on Angola's environment which is rich in biodiversity. Soil erosion, desertification and deforestation are key issues that increase the country's vulnerability to climate change. Floods are a recurrent issue, threatening the livelihoods of the population. At the same time, southern Angola has also been affected by a prolonged drought since 2011. The most vulnerable sectors to climate change include ecosystems, biodiversity, fisheries, agriculture, infrastructure and human health. In response to climate change, Angola's National Adaptation Programme of Action prioritises renewable energy to avoid deforestation, sustainable land management (including crop diversification and soil erosion control), early warning systems, and the development of monitoring and data management systems.

## Projects and Actions

### Improved management of national parks

#### National Biodiversity Project: Conservation of Iona National Park

Angola's six national parks are in need of improved regulation and management so they can protect key ecosystems that play a role in mitigating the impacts of climate change. The EU has provided EUR 4 million to the EUR 10 million project, which is co-financed by the Angolan Government, the United Nations Development Programme and the Global Environment Facility. The main focus of the project is the restoration of Iona National Park. It also aims to strengthen institutional capacity to manage the wider network of national protected areas. The key to the successful management of Angola's national parks, which forms a core element of this project, is engaging local communities to develop ways to reduce the demand for firewood and charcoal, which drives high rates of deforestation.

### Measurement, reporting and verification system for forest-related projects

#### Developing Integrated Monitoring Systems

The BMU has provided grant funding of EUR 3.4 million to support the Southern African Development Community to participate in the REDD+ mechanism. Working in conjunction with the Directorate of Food, Agriculture and Natural Resources in Angola, the project team will assess data sources and establish reporting procedures to monitor trends in forest cover, carbon stocks and emissions. Training is offered to the organisations involved in REDD+ to increase national capacity to participate in forestry-related projects.

## National Strategies and Reports

- Initial National Communication to the UNFCCC (2012)
- National Adaptation Programme of Action (2011)

Population:

**18.6 million**

GDP per capita:

**USD 6,100**

Annual carbon dioxide emissions:

**30 Mt**

Carbon dioxide emissions per capita:

**1,594 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2012**

# Benin



Benin covers approximately 115,000 km<sup>2</sup> and is located on the Gulf of Guinea between Togo and Nigeria. The southern coastal tip of Benin has a subtropical climate, receiving 1,000-1,500 mm of rainfall each year. The northern half of the country is considerably drier, with rainfall as low as 450 mm per year, and has a semi-arid climate influenced by the harmattan winds of the Sahel. The economy is dominated by the agricultural sector, which accounts for approximately one third of the country's GDP. The dependence of smallholder farmers on rain-fed systems has contributed to high rates of poverty – over a third of Benin's population is estimated to live below the poverty line. This is anticipated to lead to further economic vulnerability as temperatures rise and rainfall becomes increasingly unpredictable. According to the Government of Benin, the most climate-vulnerable sectors are water, energy, coastal, health, agriculture and forestry.

With a relatively low contribution to global greenhouse gas emissions, Benin's national climate change response prioritises adaptation over mitigation activities. In 2008, Benin published its National Adaptation Programme of Action (NAPA). This identified the three main national adaptation priorities – the establishment of early warning systems, adaptation interventions in the agriculture sector to promote food security, and the promotion of fuel-efficient stoves and other renewable energy sources to limit deforestation.

## Projects and Actions

### Global Climate Change Alliance in Benin

#### Fighting floods through the conservation and development of gallery forests

In recent years, gallery forests in the Ouémé river basin have come under increasing threat from human activities such as charcoal production, unsustainable timber extraction and the encroachment of agriculture. Land degradation and deforestation in Benin pose a significant challenge for communities dependent on forest products and downstream regions that are increasingly suffering from severe flooding during the rainy season.

In 2012, the Global Climate Change Alliance (GCCA) launched a six-year EUR 8.3 million project to reduce flood impacts in Benin. The first objective of the project is to reduce flood impacts by promoting the conservation and sustainable use of gallery forests in the lower valley of the Ouémé river. This will be done by establishing a network of community-based conservation areas embedded in the national protected area system. The second objective is to equip Benin with basic geographical information systems and cartographic equipment. This will support forest management, and inform the growth strategy for poverty reduction and the NAPA.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2011)
- National Adaptation Programme of Action (2008)

Population:

**9.9 million**

GDP per capita:

**USD 1,600**

Annual carbon dioxide emissions:

**5.2 Mt**

Carbon dioxide emissions per capita:

**586 kg**

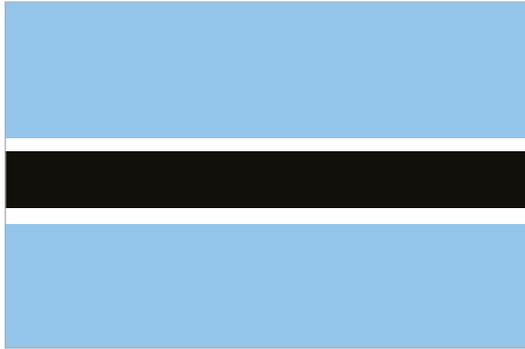
UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2011**

# Botswana



Botswana is home to the vast Kalahari Desert, which spans the central and southwest regions of the country. The conditions in Botswana are semi-arid with erratic rainfall. However, due to the country's plateaus and hilly landscape, the climate is predominantly sub-tropical. Economic growth has been driven by revenues in the country's export sector – particularly from diamonds, but also from copper, gold and nickel – which accounts for nearly 40% of gross domestic product. Agriculture plays a smaller role in national output, but provides the main source of livelihood for more than 80% of the population in the form of subsistence farming and livestock management. Water is vital for these activities. Yet, in the country's Second National Communication to the UNFCCC, the water sector was also highlighted as the most vulnerable to climate change. Notable manifestations of climate change that are already impacting the water sector include temperature rises, land degradation, desertification and persistent drought.

In 2012, Botswana hosted the Summit for Sustainability in Africa. The outcome of this summit, the Gaborone Declaration, calls on governments to ensure that the contributions of natural capital to sustainable economic growth, maintenance and improvement of social capital, and human wellbeing are quantified and integrated into business practice. A follow-up meeting at ministerial level took place in Gaborone on 7 and 8 October 2013, chaired by Minister Khama, where it was resolved to increase policy advocacy, environmental education and research to advance the development of natural capital accounting systems on the continent. In addition, the 5th Special Session of the African Ministerial Conference on the Environment was held in Gaborone from 15 to 18 October 2013. The main objective was to provide a platform for African countries to further consolidate and enhance Africa's common position in climate change negotiations.

## Projects and Actions

### Improving access to energy for primary schools

#### Off-grid renewable energy

The European Union has provided EUR 6 million in budgetary support to the Government of Botswana to install solar panels in primary schools. The schools are located in villages that are not connected to the electricity network and students will benefit from being able to study without being limited to daylight hours or through using fossil fuels for light.

### Climate change adaptation and mitigation, Eastern and Southern Africa

#### COMESA, EAC and SADC tripartite action

The Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC) and the Southern African Development Community (SADC) signed the Tripartite Agreement for the Implementation of the Programme on Climate Change Adaptation and Mitigation in Eastern and Southern Africa in 2012. The five-year programme is multi-donor funded, receiving USD 90 million in total from the Government of Norway, the European Union, and the Government of the United Kingdom and Northern Ireland. The overall objective of the project is to build community resilience to climate change through 'climate smart' agricultural processes.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2011)

Population:

**2.1 million**

GDP per capita:

**USD 15,700**

Annual carbon dioxide emissions:

**5.2 Mt**

Carbon dioxide emissions per capita:

**2,600 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2011**

# Burkina Faso



Burkina Faso is landlocked and located at the centre of the Sahelian-Sudanese ecological zone in West Africa. The country has a predominantly tropical climate with dry and rainy seasons. The north of the country is considerably hotter, drier and more arid than the south, where rainfall is higher and the land more fertile. Agricultural practices occupy 80% of the working population. In the north, this consists mostly of stockbreeding, while the livelihoods of people in the south and southwest are dominated by small-scale farming activities.

Burkina Faso's reliance on agriculture makes the country vulnerable to environmental variability and shocks that are associated with climate change. Water shortages and floods are common problems in the country, and drought and flooding have been known to impact the same area within months of each other. In addition to drought and flooding, Burkina Faso is vulnerable to heatwaves brought on by rising temperatures and to dry, dusty storms that blow in with the annual harmattan winds.

In response to these threats – and in recognition of the importance of the agricultural sector – Burkina Faso's National Adaptation Programme of Action (NAPA) prioritises interventions that strengthen food and water security. The most urgent actions under the country's NAPA include the creation of early warning systems, improving irrigation techniques, and preventing sedimentation and pollution of water sources.

## Projects and Actions

### New water reservoirs to prevent drought and famine

#### Climate-friendly dams

In 2009 and 2010, Burkina Faso was hit by heavy rainfall and floods that destroyed many of the country's dams and irrigation systems. Consequently, this had a severe impact on the livelihoods of thousands of people. From 2010 to 2012, the Swedish International Development Cooperation Agency contributed EUR 10.8 million to restore and build new water reservoirs in Burkina Faso – which will help conserve water to aid irrigation during periods of drought. The 12 dams provide around 1,000 families with water for livestock and crop irrigation, and have been built to help meet food security goals set out in Burkina Faso's NAPA.

### CLIM-WARN: Developing a global, multi-hazard, climate-related early warning system

#### Protecting the population against climate risk

Burkina Faso is one of three countries in Africa participating in a pilot programme to develop a comprehensive early warning system that tracks the impact of climate change. The programme is being funded through a EUR 618,400 contribution by the German Government and is being run by UN Environment Programme, the World Meteorological Organization and the UN International Strategy for Disaster Reduction.

## National Strategies and Reports

- Strategy for Accelerated Growth and Sustainable Development Strategy (2011)
- National Adaptation Programme of Action (2007)
- Initial National Communication to the UNFCCC (2002)

Population:

**17.8 million**

GDP per capita:

**USD 1,400**

Annual carbon dioxide emissions:

**1.7 Mt**

Carbon dioxide emissions per capita:

**102 kg**

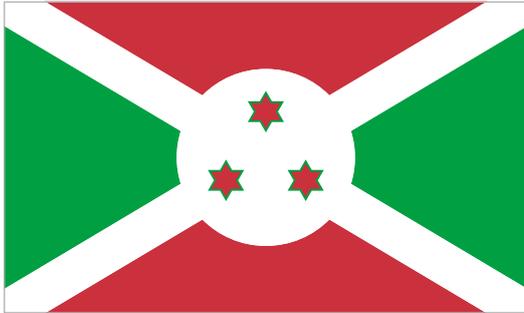
UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2002**

# Burundi



Landlocked Burundi is one of the world's poorest countries, with the majority of the population dependent on subsistence agriculture. It is situated in altitudes ranging from 774 m to 2,670 m above sea level, which gives it a moderate tropical climate, and average temperatures between 16°C and 25°C. Burundi receives high levels of rainfall, ranging from 1,000 mm to 1,600 mm depending on local elevation. Burundi is spread across two large hydrographical basins – the Nile and Congo River – and the runoff from the rains drains into these.

It is projected that rainfall rates in Burundi will increase over the coming years, but that rainfall will be spread less evenly throughout the year, leading to longer dry periods and more heavy rainfall during the wet periods. This could have serious consequences for hydroelectric power production and the agricultural sector. Unsustainable use of wood is already a problem, which could increase if hydroelectric power plants stop operating due to seasonal variability in water volume. Priority projects that have been identified in the National Adaptation Programme of Action include improving early warning systems, enhancing management of protected areas, promoting rainwater harvesting techniques for farmers and afforestation of degraded areas. Two other priorities involve the construction of hydropower micro-stations, and promoting renewable energy sources and energy efficiency for households.

## Projects and Actions

### Electricity access to rural households in Southern and Eastern Africa

#### Increasing levels of access to energy

The UK Government has provided EUR 5.4 million in fast start financing to support the use of clean, affordable and sustainable energy by rural households in Southern and Eastern Africa. During the project, which operates in 13 countries including Burundi, more than 7,000 households that are not connected to the grid will be provided with grants to enable them to invest in small-scale renewable energy technologies. Decentralised energy generation will make households less vulnerable to increased variability of hydroelectric power production.

### Analysis of water availability, drought and flood risks

#### Making climate change scenarios for the Congo Basin

From 2010 to 2013, the German International Climate Initiative (IKI) funded a EUR 1.5 million project that provided national and regional decision-makers with climate change scenarios for the Congo Basin. This enabled them to make effective decisions to promote climate change resilience. In developing the scenarios water availability, drought and flood risks were analysed and the results used as inputs for natural resource management strategies.

### Management for the Protection of Water and Land Resources (ACCES)

#### Improving resilience and building capacity

Through the ACCES project, GIZ is implementing adaptation measures in water catchment areas that are particularly vulnerable to climate change, and contributes to implementing a national hydro-climatological information and early warning system. Three pilot community plans for commune development were formulated in Gitega province.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2010)
- National Adaptation Programme of Action (2007)

Population:

**10 million**

GDP per capita:

**USD 600**

Annual carbon dioxide emissions:

**0.3 Mt**

Carbon dioxide emissions per capita:

**37 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2010**

# Cameroon



Cameroon's geography is diverse, including a humid coastal plain, equatorial rainforest, an elevated Sahelian plateau and mountain ranges stretching from the coast to the north. According to predictions by the Government of Cameroon, the areas most vulnerable to climate change in the country are the coastal and Sahelian zones. On the coastal plain, the infrastructure, mangroves and local economy are vulnerable due to a rise in sea level that can lead to flooding, salt water intrusion, coastal erosion, and destruction of mangroves and agricultural land. On the Sahelian plateau, the agricultural sector will be susceptible to changes in rainfall and temperature. These changes may also increase the risk of water-related diseases.

Cameroon's climate change response strategy includes policy, regulatory and institutional measures based around four objectives – reducing emissions, adaptation in fragile ecosystems, promoting development projects that reduce emissions or increase carbon dioxide sequestration, and strengthening Cameroon's capacity for climate change management. Relevant policy measures include the establishment of the National Forest Development Agency and the National Plan for Management of the Environment. Actions in these plans focus on the management of protected and coastal areas, the promotion of alternative energy, the conservation of forest resources and the integration of environment issues into policy planning.

## Projects and Actions

### Electricity access for 28 villages in six municipalities in the far north of Cameroon

#### Grid extension to improve access to energy

The overall objective of this EUR 10 million EU Energy Facility project is to improve the living conditions of the rural population by ensuring access to basic electricity services. The project will improve the quality of life for those living in recipient villages. Approximately 16,000 households, groups and other local actors in villages such as Balaza Lawan, Mouldar and Gayak Kossewa will benefit from the project. The main activities of the project include the grid extension itself, project information dissemination and increased awareness.

### Legal protection for forest-dependent communities and civil society organisations

#### Increasing legal and financial management capacity

The European Union has provided EUR 972,000 to increase the legal and financial management capacity of civil society and indigenous peoples' organisations through extensive legal training. This will result in the development of a best practice guide for designing and implementing forest laws, as well as recognising the tenure rights of forest-dependent communities. Other objectives of the project include provision of 'on-call' legal advice and legal counselling to civil society and indigenous peoples' organisations.

## National Strategies and Reports

- Initial National Communication to the UNFCCC (2005)
- Forest Carbon Partnership Facility Country Participant since September 2010

Population:

**22.5 million**

GDP per capita:

**USD 1,200**

Annual carbon dioxide emissions:

**7.2 Mt**

Carbon dioxide emissions per capita:

**369 kg**

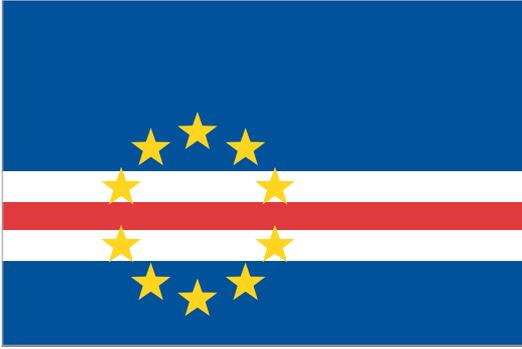
UNFCCC groups:

**G77**

Last NatComm:

**2005**

# Cape Verde



The archipelago of Cape Verde is made up of 10 islands and nine islets, and is located approximately 500 km off the coast from Senegal in West Africa. Lying in the sub-Saharan African climatic zone, the country is characterised by a dry, tropical climate with two distinct seasons. The dry season in Cape Verde covers a period of approximately nine months from November to July and is marked by a near total absence of rainfall. The wet season occurs from July to October and is a period of intense cultivation, which starts with the seeding of the major rain-fed crops.

Cape Verde is highly vulnerable to climate change and has low levels of adaptive capacity. Climate projections for the year 2100 suggest that temperatures will increase by up to 4°C and rainfall could decrease by as much as 20% compared to current levels. Droughts are predicted to reduce vegetation cover and contribute to the degradation of the ecosystem. At the same time, floods are cited in the country's National Adaptation Programme of Action as being a particular threat. Torrential rain is an increasingly frequent event, which has led to loss of human and animal life, agricultural soils and infrastructure. At COP 19 in Warsaw, the delegation from Cape Verde outlined its goal of reducing the use of imported fossil fuels. The delegation also highlighted the country's National Energy Plan, which has set a target to generate 50% of Cape Verde's energy needs from renewable resources by 2020.

## Projects and Actions

### New EU support for renewable energy and governance

#### Supporting policies to counter climate change and promote sustainable development

During his first visit to the country in February 2014, Andris Piebalgs, the EU Development Commissioner, announced EUR 55 million of new support for Cape Verde during the period 2014 to 2020. The funding will focus specifically on poverty alleviation and sustainable, inclusive growth. The EU provided EUR 51 million to Cape Verde between 2008 and 2013 through the European Development Fund.

### Cape Verde wind farm

#### Sustainable energy to support national development

A EUR 30 million European Investment Bank loan, with subsidised interest rates, is funding the construction of four onshore wind farms. The total 28 MW of renewable electricity generation capacity will increase access to electricity and reduce carbon dioxide emissions by an estimated 92,000 tonnes compared with using energy from fossil fuels. The project is one of largest wind projects in sub-Saharan Africa, and won the Best Renewable Project in Africa prize at the Africa Energy Awards 2011.

### Sustainable energy services from renewables, Santa Antao Island

#### Electricity access for isolated communities

This EUR 1.5 million European Union funded project intends to improve the access to electricity of the isolated communities of Tarrafal and Monte Trigo in Cape Verde. Project activities include the creation of a solar micro network in Monte Trigo (25 kW), a hydropower plant in Tarrafal (30 kW) and an electricity company to provide operation and maintenance services.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2010)
- National Adaptation Programme of Action (2007)

Population:

**0.5 million**

GDP per capita:

**USD 4,400**

Annual carbon dioxide emissions:

**0.4 Mt**

Carbon dioxide emissions per capita:

**717 kg**

UNFCCC groups:

**G77, AOSIS**

Last NatComm:

**2010**

# Central African Republic



The Central African Republic's landscape is characterised by flat and rolling savannah, with more arid, desert-like conditions in the northeast and the southern border formed by the tributaries of the Congo River. A tropical climate prevails across the majority of the country and annual rainfall varies from 2,500 mm in the humid south to as low as 300 mm in the extreme north. Approximately 45% of the country is covered in forests.

The Central African Republic suffers from low levels of economic development and high rates of poverty. According to Government estimates, over two-thirds of the country's population and almost three-quarters of the rural population live below the poverty line. Together, agriculture and forestry combine to support more than three-quarters of peoples' livelihoods, which leaves the country vulnerable to environmental threats such as flooding, drought, disease outbreaks and human-induced deforestation.

The Central African Republic does not have a national climate change law. In the UNFCCC, it aligns itself with the G77 and the Least Developed Countries Group, and has been particularly vocal on the topic of REDD+. With forestry playing a critical role in the country's economy and the global importance of Central Africa's forests, the Central African Republic has worked with other nations in the region to promote conservation. The Central African Republic is also working to fight the trade in illegal logging, having recently signed a Voluntary Partnership Agreement to support the EU's Forest Law Enforcement, Governance and Trade initiative.

## Projects and Actions

### Sustainable rural development in the southwest of the Central African Republic

#### Supporting poverty reduction and REDD+

Building on more than 10 years of support from the French Government to promote sustainable forest management in the Central African Republic, the Global Climate Change Alliance has recently approved a EUR 10.5 million project to support poverty reduction and REDD+ related activities. France's contribution to this project will help improve economic and social conditions for 350,000 people through better management of tax revenues from sustainably managed forests.

In addition, a regional REDD+ strategy will be developed in the Central African Republic's southwest, and the role of civil society in monitoring REDD+ and Forest Law Enforcement, Governance and Trade (FLEGT) schemes will be strengthened.

## National Strategies and Reports

- Central African Republic National REDD+ Strategy to the Forest Carbon Partnership Facility (2011)
- National Adaptation Programme of Action (2008)
- Initial national communication to the UNFCCC (2003)

Population:

**5.2 million**

GDP per capita:

**USD 900**

Annual carbon dioxide emissions:

**0.3 Mt**

Carbon dioxide emissions per capita:

**60 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2003**

# Chad



Chad is landlocked, bordered by Libya to the north and the Central African Republic to the south. As such, the country spans several distinctive geographical zones – with desert in the north, an arid Sahelian zone in the centre, savannah in the south and Lake Chad, Africa's second-largest wetland, in the mid-west. Chad has observed nearly three decades of recurring drought, which has degraded agricultural land and water resources, and destroyed delicate sylvo-pastoral habitats. Since the 1970s, a southern shift of increasing aridity has been observed in the country, with further decreases in rainfall expected in the future. With 80% of the population deriving their livelihoods from climate-dependent sectors such as agriculture, livestock and fishing, these changes are likely to bring increased vulnerability to rural communities.

The Government of Chad recognises that agriculture, water resources, forestry, habitat and human health are vulnerable to climate change. In 2010, Chad published its National Adaptation Programme of Action (NAPA), prioritising a number of actions in these vulnerable sectors. These include the greater mobilisation of surface water for agriculture and livestock, the diversification and intensification of crops, the improvement of crop calendars and seasonal predictions, and the defence and restoration of agricultural soil. However, resources for implementing the country's NAPA priorities are insufficient to address the threats associated with climate change. Chad requires assistance to develop institutional resources to make full use of financing mechanisms under the UNFCCC, and implement adaptation and mitigation projects.

## Projects and Actions

### Climate change adaptation and renewable energy development in Chad

#### A national response to climate change

The Global Climate Change Alliance has provided EUR 8 million to support Chad in the implementation of a national response to climate change, thereby contributing to the emergence of a resilient, low-carbon economy. The first objective of the project is to develop and implement climate change adaptation and mitigation policies, notably in the agriculture and livestock sector (adaptation) and the energy sector (clean energy development). The second component of the project will see the piloting of activities to enhance the resilience of the most climate-vulnerable people and help them sustainably manage critical natural resources.

### Addressing the rights of women through energy management in Chad

#### Improving access to energy

The overall goal of this EU-funded project is to increase access to modern, affordable and sustainable energy services for the rural and peri-urban poor – focusing on renewable energy solutions and energy efficiency measures. The project's strategy is to strengthen the capacity of women to influence institutional frameworks and processes for defining energy and environmental policies at the regional and national level. There are a number of activities under the project: an awareness campaign on climate change, the creation of cooperatives for briquetting and improved electricity distribution to 10,000 households, the creation of community forests and the establishment of an energy commission.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2013)
- National Adaptation Programme of Action (2010)

Population:

**11.2 million**

GDP per capita:

**USD 2,500**

Annual carbon dioxide emissions:

**0.5 Mt**

Carbon dioxide emissions per capita:

**42 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2013**

# Comoros



The Union of Comoros is an archipelago composed of three main islands, located in the Indian Ocean between Madagascar and the Mozambican mainland. Comoros has a marine tropical climate and is marked by two main seasons – the humid, rainy season from November to April, when Comoros is vulnerable to violent winds and tropical cyclones; and the cooler, dry season from June to September. In addition to tropical cyclones, Comoros is highly vulnerable to extreme weather events such as landslides and flooding.

The economy of Comoros is dominated by the agriculture sector, which accounts for 70% to 80% of employment and contributes approximately 45% of GDP. However, high population growth, insecure land tenure and the scarcity of fresh water in many parts of the islands have led to high rates of poverty and corresponding pressures on natural resources. In its National Adaptation Programme of Action, Comoros identified acute drought, land degradation, declining agricultural yields, reduced productivity of fisheries and food insecurity as the main climate impacts already being felt by the population. These impacts are predicted to become more severe as temperatures and sea levels rise, rainfall becomes increasingly unpredictable and extreme weather events become more frequent in the decades ahead.

As a member of the Alliance of Small Island States, Comoros has pushed for strong action on climate change within the UNFCCC to address the vulnerability of small island states.

## Projects and Actions

### Support to the Union of the Comoros for strengthening resilience to climate change

#### Mainstreaming resilience

In 2014, the Global Climate Change Alliance will launch a 5-year, EUR 3 million project to strengthen climate change resilience and reduce poverty in the Union of Comoros. The project aims to boost the capacity of key climate change stakeholders and to mainstream climate change into sectoral plans for those sectors considered to be most vulnerable to climate change – energy, water, infrastructure, agriculture and fisheries. Initiatives to improve people's resilience to climate change will also be piloted.

### Implementation of the Mauritius Strategy for Small Island Developing States (SIDS)

#### Supporting SIDS in Eastern and Southern Africa – Indian Ocean

Between 2011 and 2013, the European Union supported Comoros, Madagascar, Mauritius, Reunion, Seychelles and Zanzibar with a EUR 10 million grant to develop national plans to implement the Mauritius Strategy on sustainable development. With the EU's support, each country outlined plans for the 20 thematic areas of the Mauritius Strategy, including systems for monitoring and evaluating the implementation of the Strategy. The strategy also promoted knowledge exchange and transfer to further regional cooperation and integration.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2013)
- National Adaptation Programme of Action (2006)

Population:

**0.75 million**

GDP per capita:

**USD 1,300**

Annual carbon dioxide emissions:

**0.14 Mt**

Carbon dioxide emissions per capita:

**189 kg**

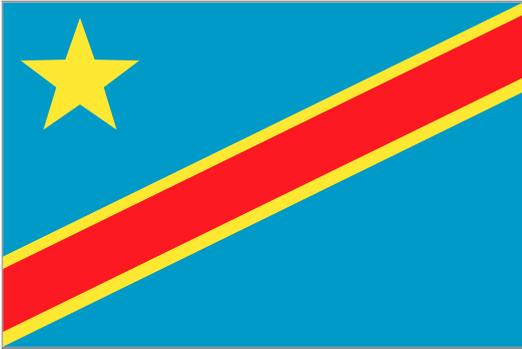
UNFCCC groups:

**G77, LDC Group, AOSIS**

Last NatComm:

**2013**

# Democratic Republic of the Congo



The Democratic Republic of the Congo is the second largest country in Africa, with an area of over 2.3 million km<sup>2</sup>. The country is endowed with abundant natural resources, including mineral deposits of cobalt, copper, diamonds and coltan. The country is also home to vast areas of tropical rainforest and eastern Albertine Rift montane forests that play a vital role in supplying the Congo River with fresh water. The forests of the Congo Basin are considered a global conservation 'hotspot', as they are rich in biodiversity and hold an estimated 8% of the world's forest carbon. The Democratic Republic of the Congo's climate is mostly tropical, with average annual rainfall exceeding 1,000 mm. The main climate hazards are intense rains, coastal erosion, floods, extreme heat waves and seasonal droughts, which all serve to exacerbate persistent rural poverty. In the longer term, global warming might also affect the huge rainforests of the Congo basin. Since more than 90% of the population relies on rain-fed agriculture as the primary source of income or sustenance, this will become more pronounced under future warming trends.

The Democratic Republic of the Congo is developing a draft climate change strategy. Also, as the Minister for Environment, Conservation and Tourism outlined at COP 19 in Warsaw, the country has been a pioneer in the field of REDD+, having developed a national REDD+ strategy, developed a legal and institutional REDD+ framework, and created a national REDD+ fund. The Democratic Republic of the Congo is now in the process of sourcing climate finance to implement forestry projects.

## Projects and Actions

### Addressing climate change in the Democratic Republic of Congo

#### Support for training and reforestation

The Global Climate Change Alliance is working in the Democratic Republic of the Congo on a 6-year, EUR 14 million project to assist with the development of the country's national climate change policy. The project will implement training programmes on adaptation and mitigation at various scales, develop agroforestry plantations to provide woodfuel to villages and small land owners to reduce pressure on protected forests, and will launch initiatives to restore degraded forest habitats in the eastern Democratic Republic of the Congo.

### Development of a carbon storage and payment model for the Democratic Republic of Congo forest belt

#### Promoting REDD+

Germany's International Climate Initiative is supporting a five-year, EUR 6 million project to promote REDD+ activities in the Democratic Republic of the Congo. The project is using 'LiDAR' remote sensing data to map the carbon content of the country's forests and then using these data to develop payment for ecosystem services models to conserve carbon stocks, in conjunction with local communities in the Lac Tumba region. The aim is that this pilot model can be replicated in other forest communities and regions across the country.

## National Strategies and Reports

- The Democratic Republic of the Congo National REDD+ Programme (2010)
- Second National Communication to the UNFCCC (2009)
- National Adaptation Programme of Action (2006)

Population:

**75.5 million**

GDP per capita:

**USD 400**

Annual carbon dioxide emissions:

**3.0 Mt**

Carbon dioxide emissions per capita:

**46 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2009**

# Djibouti



The Republic of Djibouti is located in the Horn of Africa, at the intersection of the Gulf of Aden and the Red Sea. The country's coastal region is semi-arid, with hot and humid weather throughout the year and annual rainfall of less than 300 mm. The interior of the country is significantly drier, with a hotter and more arid climate and annual rainfall rates below 150 mm.

At COP 19 in Warsaw, the Republic of Djibouti's Minister of Housing, Spatial Planning and Environment cautioned that climate change is a threat to the country's water security, food security and sustainable development. With its characteristically dry climate and low levels of social development, the Republic of Djibouti is vulnerable to a number of climate-related impacts – including extreme drought, temperature extremes, sea-level rise, flash flooding and water salinisation. These phenomena have already been observed in the country, and are only expected to increase in frequency and severity under future climate scenarios.

The country is in the process of developing its second National Communication to the UNFCCC, and has identified a number of adaptation and resilience priorities under a National Adaptation Programme of Action, which include activities in the agricultural, forestry, water, livestock and marine/coastal sectors.

## Projects and Actions

### Responding to climate change in the energy and water sectors in the Republic of Djibouti

#### Renewable and energy efficiency

The Global Climate Change Alliance has recently launched a five-year, EUR 3 million project to strengthen the Republic of Djibouti's capacity to respond to climate change. The project aims to pilot energy efficiency and renewable energy schemes, and to improve the adaptive capacity of communities in the vicinity of the Douda wastewater facility. Other priorities include developing a wastewater irrigation system that supports water-stressed agricultural activities and will assist farmers with the selection of drought-resistant crops, water and soil management, and the marketing of farmers' produce.

### Promoting Agro-pastoralism in Djibouti's Weima Region

#### Improving food security

In recent years, severe droughts have hit the semi-nomadic populations of Weima particularly hard, decimating livestock populations and displacing people to major population centres like Djibouti city. In response, the European Union supported a EUR 92,000 project to improve food security in Weima, which focused on improving agricultural practices, water management, irrigation, animal health and environmental protection.

## National Strategies and Reports

- National Adaptation Programme of Action (2006)
- Initial National Communication to the UNFCCC (2001)

Population:

**0.8 million**

GDP per capita:

**USD 2,600**

Annual carbon dioxide emissions:

**0.5 Mt**

Carbon dioxide emissions per capita:

**607 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2001**

# Egypt



Egypt lies across a land bridge joining the African and Asian continents – an area of land that is bisected by the Suez Canal which links the Mediterranean Sea with the Red Sea. The majority of Egypt is covered in desert and has an extremely arid climate. As a result, 97% of Egypt's population is concentrated along the fertile plains of the Nile River and the Nile Delta. These densely populated areas are very low lying, and an estimated 26% of Egyptians live 5 m below sea level. Correspondingly, Egypt is under threat from rising sea levels, flooding and storm surges associated with climate change. In the country's Second National Communication to the UNFCCC, Egypt's Government highlighted the vulnerability of coastal infrastructure, as well as the water, agricultural and tourism sectors.

In addition to reducing environmental vulnerability, the Egyptian Government is committed to taking action to mitigate climate change by reducing carbon dioxide emissions. Under the National Energy Policy and National Low-Carbon Economy Strategy, the Government is taking action by accelerating the introduction of renewables and fuel switching in industry and transport, and introducing domestic and industrial efficiency programmes. This work will complement the Government's actions to increase resilience through the Climate Change Adaptation Strategy and Climate Change Socio-Economic Impact Study, which are under preparation.

## Projects and Actions

### Zafarana wind farm in the El Zayt Gulf

#### Harnessing wind power on the desert coast

It is estimated that Egypt's wind energy potential could be higher than 10 GW which, if harnessed, could fully meet Egypt's electricity needs and enable Egypt to export electricity to neighbouring countries. KfW Entwicklungsbank is managing a pool of European investments totalling EUR 340 million. This includes a EUR 50 million loan from the European Investment Bank and a EUR 30 million EU grant via the Neighbourhood Investment Facility to boost wind power generation capacity at Zafarana.

### Agricultural Water Productivity as Adaptation to Climate Change

#### Optimising agricultural production

This project will be implemented by GIZ and the Ministry of Agriculture and Land Reclamation. The objective is to improve agricultural productivity (which will be affected by climate change) by optimising fertiliser and pesticide use, the use of agricultural inputs, crop rotation and the planting calendar. Adapted farming and improved irrigation methods will increase water productivity, while protecting soil and water resources. In addition, the project will improve food security.

### Low Emission Capacity Building Programme (LECBP) in Egypt

#### Supporting NAMA development in the energy, transport, and industrial sectors

The LECBP is helping Egypt to develop and implement the country's low emission development strategy. Working within existing national priorities, the LECBP is helping Egypt to develop Nationally Appropriate Mitigation Actions (NAMAs), and associated measurement, reporting and verification capacity – focusing on the energy, transport and industrial sectors (specifically the cement and fertiliser industries). The Egyptian Environmental Affairs Agency and the Ministry of State for Environmental Affairs will oversee the project, coordinating the input of a broad range of relevant stakeholders in Egypt.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2010)

Population:

**85.3 million**

GDP per capita:

**USD 6,500**

Annual carbon dioxide emissions:

**205 Mt**

Carbon dioxide emissions per capita:

**2,524 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2010**



# Equatorial Guinea



Equatorial Guinea lies between Cameroon and Gabon on the Gulf of Guinea coast. The country is made up of a mainland territory and five islands – the largest of which is the island of Bioko, home to the capital city, Malabo. Equatorial Guinea's climate is tropical, with a rainy season lasting from March to October on Bioko Island and two rainy seasons from March to May and September to November on the mainland. The country receives a high amount of rainfall – varying significantly from 2,000 mm of annual rainfall in Malabo and Bata on the Gulf of Guinea to over 4,500 mm on the southern mainland coast. Average monthly temperatures in Equatorial Guinea vary only slightly between 26°C in February and 23°C in August.

Equatorial Guinea is highly vulnerable to climate change due to low national adaptive capacity, high poverty levels, unequal distribution of resources, and lack of progress towards the goals of the country's national development plan, Horizon 2020. According to the country's National Adaptation Programme of Action (NAPA), greater variability in rainfall, higher temperatures, a rise in sea level, more powerful storms and stronger tidal activity, are all expected impacts of climate change. A survey of stakeholders across the country, carried out as part of the NAPA, found that communities in Equatorial Guinea are already experiencing more frequent extreme weather events including storms, floods, drying up of springs and higher average temperatures. These impacts have been most harmful to communities that already have high levels of economic vulnerability.

Equatorial Guinea is highly reliant on the oil and gas sector – in 2012, oil and gas accounted for 77% of the country's GDP and nearly 100% of its export revenue. However, the Government aims to reduce the country's reliance on the extractive sector by diversifying the economy under the Horizon 2020 programme. Equatorial Guinea is also in the process of completing its Initial National Communication on Climate Change to the UNFCCC.

## Projects and Actions

### Conservation and rational use of forest ecosystem in Central Africa (ECOFAC V)

#### Forestry management and biodiversity protection

Since 1992, the European Union has been working in all countries of Central Africa, including Gabon, to promote conservation and sustainable forestry management. With a EUR 30 million contribution to the Central Africa Fragile Ecosystems Conservation project (ECOFAC V 2010-2015), the European Union continues to contribute to improving sustainable management of natural resources – mainly forest and protected areas. ECOFAC V aims to maintain the major role of the Congo Basin Forests in reducing the rate of climate change and the protection of biodiversity. It supports the promotion of the regional management of resources through strengthening regional organisations, improving coordination and increasing policy coherence. The EU is negotiating a Voluntary Partnership Agreement in Forest Law Enforcement, Governance and Trade (FLEGT) with Equatorial Guinea as well as other countries in the region.

## National Strategies and Reports

- National Adaptation Programme of Action (2013)

Population:

**0.7 million**

GDP per capita:

**USD 26,500**

Annual carbon dioxide emissions:

**4.7 Mt**

Carbon dioxide emissions per capita:

**6,681 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**N/A**

# Eritrea



Eritrea is situated along the Red Sea, in the arid and semi-arid region of Sahelian Africa. The country's landscape is characterised by fertile lands in the west, a mountainous region in the north and centre, descending to desert in the country's east. The majority of Eritrea's population lives in the cooler climates of the central highlands, and more than two-thirds of the population depend on agriculture and livestock as their primary means of subsistence. Recurrent drought and conflict have strained Eritrea's natural resource base. Considerable rates of poverty and ecological vulnerability are also expected to be exacerbated by increasing climate variability in Eritrea. According to future climate warming projections, it is expected that the country will experience more frequent droughts, increasing periods of heavy rainfall and flooding, and rising sea levels. These effects have already begun to be observed, with a shortening of the rainy season in recent years that has led to crop failure and depletion of livestock in some areas.

Eritrea's National Adaptation Programme of Action identifies the need for several critical interventions to address climate vulnerability – particularly in the agricultural, water and forestry sectors. These include activities such as soil conservation, alternative cropping techniques, improved irrigation structures, a reduction of livestock numbers, simultaneous improvement of livestock productivity, water management through the education and training of farmers, afforestation to combat degradation and desertification of land, and fuel switching to reduce demand for wood and charcoal.

## Projects and Actions

### Improving food security through sustainable water management

#### Water resource management

The European Union has provided EUR 0.9 million to improve sustainable water management in the highlands of Eritrea. The project, which ran from 2006 to 2010, addressed soil and water conservation issues and introduced small-scale irrigation and gardening techniques to farmers. Based on input and training from the project, farmers have started producing different varieties of vegetables, which is expected to contribute to food security in the region in the years ahead.

### Efficient, affordable and sustainable energy for cooking and heating rural households

#### Access to sustainable, decentralised energy

The EU's Energy Facility is promoting alternatives to woodfuel and energy efficiency, through a EUR 1.5 million grant that will help improve energy facilities and the supply of energy to rural households in Eritrea. Under the programme, at least 20,000 fuel-efficient cooking stoves will be delivered to rural communities. Furthermore, the project will promote the establishment of a sustainable supply of biofuel for cooking by enhancing community and Government forestry management, and the implementation of a mechanism to facilitate decentralised access to biofuel.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2012)
- National Adaptation Programme of Action (2007)

Population:

**6.2 million**

GDP per capita:

**USD 700**

Annual carbon dioxide emissions:

**0.5 Mt**

Carbon dioxide emissions per capita:

**98 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2012**

# Ethiopia



Ethiopia's climate is temperate on its plateaus and hot in the lowlands. The country covers a land area of about 1.1 million km<sup>2</sup>, occupying a significant portion of the Horn of Africa. The terrain ranges from semi-desert to alti-montane, and more than 50% of Ethiopia's land is used for grazing and browsing. Over the past 55 years, there has been a warming trend in the annual minimum temperature which could have negative implications for food security and the likelihood of drought. In 2011, Prime Minister Zenawi launched the Climate Resilient Green Economy (CRGE) strategy, which identified food insecurity, as a result of agro-ecological degradation, as the most critical development challenge to be addressed. The CRGE strategy is based on four pillars:

- Improving crop and livestock production practices to increase food yield
- Protecting and re-establishing forests for their ecosystem services
- Expanding electric power generation from renewable sources fivefold over 5 years
- Leapfrogging to modern and energy-efficient technologies in transport, industry and buildings.

At COP 18 in Doha in 2012, Prime Minister Hailemariam Desalegn stated that the country aimed to be carbon neutral by 2025 as part of the CRGE strategy.

## Projects and Actions

### Sustaining the forest landscape in South-West Ethiopia

#### Improving livelihoods using non-timber forest product development

Although launched before the CRGE strategy, the objectives of this European Union funded project are in line with the forestry pillar of the CRGE strategy. They include securing forest rights for communities, developing non-timber forest products, increasing participation in local forest management, building capacity in Government and communities to increase sustainability and investigating the potential role of carbon credit payments as an incentive for sustainable forest management. The European Union contributed EUR 2.7 million (80%) of the total EUR 3.4 million project cost.

### Building national capacity in climate change resilient actions

#### Federal and regional government level capacity building

The total cost of the project is EUR 13.7 million, which is jointly funded by the Global Climate Change Alliance and EU fast start financing. The project will contribute towards achieving the goals of Ethiopia's CRGE strategy through capacity building and the promotion of sustainable land management. Running from 2011 to 2015, the project will increase the awareness and capacity of targeted Government institutions, at federal and regional levels, and the rural population at large to deal with climate change.

## National Strategies and Reports

- Climate Resilient Green Economy strategy (2011)
- Initial National Communication (2001)

Population:

**93.9 million**

GDP per capita:

**USD 1,300**

Annual carbon dioxide emissions:

**6.5 Mt**

Carbon dioxide emissions per capita:

**78 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2001**

# Gabon



Gabon is a sparsely populated country located on the west coast of Central Africa. It has a tropical climate with two distinct seasons – the dry season from June to September and the rainy season, which lasts (in varying intensity) for the rest of the year. Gabon is one of the wettest countries in the world – receiving an average of almost 2,000 mm of rainfall per year and as high as 3,500 mm in some locations. Geographically, Gabon is characterised by hills and plateaus that spread across the majority of the country, and by its vast forest reserves, which cover 237,000 km<sup>2</sup> (88% of the country).

The economy of Gabon is dominated by two main sectors – the petroleum sector, which accounts for over 40% of GDP and 80% of exports, and the forestry sector, which accounts for nearly 10% of GDP and 28% of formal employment. High earnings from these two sectors have made Gabon the third most prosperous country in sub-Saharan Africa in terms of GDP per capita, behind Botswana and Equatorial Guinea.

Gabon is committed to mainstreaming climate action into its national development plans, particularly in these two main sectors. Since 2000, Gabon has reduced deforestation by 60%, to just 0.01% per year, through a combination of domestic laws, strengthened satellite monitoring and the protection of critical forestry reserves. At COP 17 in 2011, President Ali Bongo claimed that these efforts have reduced annual emissions by 450 million tonnes of carbon dioxide compared to 1990 levels. Gabon has also reduced emissions associated with gas flaring by 25%, winning the World Bank's 2012 prize for Global Gas Flaring Reduction. The country has set the target of increasing this margin to 50% by 2015.

## Projects and Actions

### Technical support for the creation of a climate fund and a carbon market in Gabon

#### Market based mechanisms for mitigation

This project was financed in 2013 as part of the joint Gabon-EU Programme of Sectoral Governance Support (PAGOS). It is managed by the AN-MDP (National Authority for the Clean Development Mechanism), which supports the Government of Gabon's involvement in the Kyoto Protocol through the promotion of Clean Development Mechanism projects in Gabon. This project provided AN-MDP with the technical assistance necessary to develop knowledge on carbon markets generally, and how Gabon could use market based instruments. This translated into suggested measures to enable Gabon to mitigate GHGs via a market mechanism in future.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2011)

Population:

**1.6 million**

GDP per capita:

**USD 18,100**

Annual carbon dioxide emissions:

**2.6 Mt**

Carbon dioxide emissions per capita:

**1,710 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2011**

# Gambia



The Republic of the Gambia is the smallest mainland country in Africa, occupying just over 10,500 km<sup>2</sup>. The land is narrow, between 15 km and 80 km wide, and stretches just over 400 km away from the Atlantic Ocean. A key feature of Gambia's topography is its elevation – nearly 50% of its total land area is less than 20 m above sea level. Given this topography, the main climate vulnerability faced by the country is flooding, highlighted by the fact that 10% to 20% of the country is seasonally flooded. At the UNFCCC COP 19 in Warsaw 2013, the Gambian delegation highlighted that, due to predicted warming and drying of Gambia, food insecurity will be exacerbated and ecosystem services will be seriously eroded. Flood vulnerability was also stressed, with a warning that sea level rises will inundate the capital city of Banjul and other coastal settlements.

In response, the Government is developing a strategy that will facilitate the mainstreaming of climate change policies into the agriculture, energy and water sectors. There is a decentralised institutional framework in place to produce key documents, such as the country's National Adaptation Programme of Action and National Communications.

## Projects and Actions

### Integrated coastal zone management and the mainstreaming of climate change

#### Responding to climate change in coastal areas

The project, which is funded by the Global Climate Change Alliance (GCCA), will contribute to the capability of the government and people of the Gambia to adapt to increased climate variability and change. Specifically, it will strengthen national capacity to plan for, and respond to, climate change impacts in coastal areas and contribute to mainstreaming climate change into development planning. Expected results include priority coastal zone adaptation measures being identified, local-level capacity to adapt to climate change being strengthened, the knowledge base for integrating climate change into key sectors strengthened and a national climate change policy to be formulated. The GCCA has contributed EUR 3.9 million for the project, which runs from 2012 to 2016.

### Infrastructure sector assistance to mitigate the impact of flooding

#### Drainage, sanitation and waste management interventions

The EUR 1.9 million project is funded by the European Union to improve living conditions and health for households in urban areas that are vulnerable to flooding. This will be achieved by improving drainage systems, enhancing sanitation capacity and providing a basic waste management service. Additionally, training will be delivered for local communities on sanitation, waste management and hygiene. As a result of the project, the efficiency of the government's response to flooding will be improved.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2013)
- Nationally Appropriate Mitigation Actions Document (2011)
- National Adaptation Programme of Action (2007)

Population:

**1.9 million**

GDP per capita:

**USD 1,900**

Annual carbon dioxide emissions:

**0.5 Mt**

Carbon dioxide emissions per capita:

**274 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2013**

# Ghana



Ghana is a tropical country that is divided into five distinct geographical regions – coastal plains in the south, a central forested plateau, tropical forest to the southwest, the hilly Akwapim-Togo Ranges along the eastern border, and dry savannah plains in the north. The northern half of the country is considerably drier than the south; average annual rainfall can be less than 1,100 mm in the north and around 2,000 mm in the south. Ghana has abundant mineral resources – including bauxite, gold and phosphates – and, in 2007, large oil reserves were discovered off the southern coast. Ghana is vulnerable to several climate-related impacts including desertification, land degradation, soil erosion and flooding. These effects are more pronounced in the north of the country, where poverty rates are higher, while temperature and low rainfall rates are also more extreme. Under future warming projections, the main sectors that will be impacted are agriculture, land use, fisheries and human health.

In September 2013, the Government approved Ghana's first comprehensive National Climate Change Policy, which focuses on low-carbon growth, adaptation and social development. Climate change governance in Ghana is guided by the National Committee on Climate Change – an inter-ministerial body with additional representation from academia, research institutes, the private sector and non-governmental organisations.

## Projects and Actions

### Innovative insurance products for climate change adaptation

#### Mitigating the costs of the impact of climate change

The aim of the project, which has received a EUR 3.8 million grant from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), is to help those involved in Ghana's agriculture sector to manage the socioeconomic costs and risks of climate change. One way this can be achieved is by developing and marketing, climate-related agricultural insurance schemes for certain agriculture value chains.

### Natural resource and environmental governance in Ghana

#### Sector policy support programme

In 2009, the European Union launched a EUR 8 million policy support programme to assist the Government of Ghana to develop environmental governance capacity in the environmental, forestry and mineral/mining sectors. The programme aimed to support policy changes in management of revenues, reduce illegal logging and increase civil society engagement in natural resource governance issues as production began at the country's offshore oil facilities.

### Food security and adaptation to climate change in the Afram Plains

#### Advancing capacity to support climate change adaptation

Between 2007 and 2008, the European Union implemented a EUR 1.4 million project to build adaptive capacity in the Volta Region. The Afram Plains is one of the poorest regions of Ghana, where farmers have experienced rainfall variability, soil erosion, declines in crop production and a drying up of freshwater reserves. Under the European Union funded project, communities developed adaptation strategies that could help reduce their climate vulnerability.

## National Strategies and Reports

- National Climate Change Policy (2013)
- National Climate Change Adaptation Strategy (2012)
- Second National Communication to the UNFCCC (2011)

Population:

**25.2 million**

GDP per capita:

**USD 3,300**

Annual carbon dioxide emissions:

**9.0 Mt**

Carbon dioxide emissions per capita:

**369 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2011**

# Guinea



Situated on the West African coast, Guinea has a tropical climate characterised by dry and rainy seasons. Guinea's geography includes coastal lowland plains, mountains in the centre of the country, dry lands in the northeast and tropical forests in the southeast. Agriculture is a fundamental component of the Guinean economy, providing employment for the majority of the country's population. Yet, increasing temperatures, prolonged drought, flooding and soil salinisation have all resulted in the loss of agricultural land and degradation of water resources in Guinea in recent years, threatening livelihoods and human health in the process.

In the country's Initial National Communication to the UNFCCC, Guinea identified agriculture, livestock, forestry, water resources and the coastal zone as the key sectors and areas that are vulnerable to climate change. Guinea's National Adaptation Programme of Action (NAPA) notes that these issues are targeted for action in existing policies including the Strategy for Poverty Reduction, the Policy Letter for Agricultural Development, the Policy Letter for Livestock Development, the Forestry Policy and the National Action Plan for the Environment. In a statement at COP 19 in Warsaw, Guinea reaffirmed its commitment to addressing climate change as a major national priority, as well as to investing in agriculture, health, water security and coastal zone protection.

## Projects and Actions

### Matching Guinean priority needs for climate change action and funding opportunities

#### Access to the Least Developed Countries Fund

The number of actions and projects related to climate change in Guinea should rise in the coming years, based on national policy plans. In June 2012, the Intra-ACP Global Climate Change Alliance (GCCA) mapping exercise of the major international climate funds indicated that there were two adaptation projects being implemented in Guinea. Both projects were presented in Guinea's NAPA and are financed through the Least Developed Countries Fund (LDCF).

As an LDC, Guinea benefits from priority access to the services provided by the Intra-ACP GCCA programme. The programme aims to build national capacity in Guinea to prioritise climate change initiatives, match priority needs with relevant funding opportunities, and develop proposals for potential future projects. Specific tasks include the updating of key documents such as the National Communication, NAPA, National Environmental Policy (2011) and project documents for the two on-going adaptation projects funded by the LDCF; preparation of climate change training materials; assessment of Guinea's institutional context and capacity to respond to climate change; training of Government staff in climate change funding opportunities (including the Clean Development Mechanism); conducting workshops on climate change adaptation and mitigation measures in Guinea; and the provision of technical guidance to newly established working groups on climate change.

## National Strategies and Reports

- National Environmental Policy (2011)
- National Adaptation Programme of Action (2007)
- Initial National Communication to the UNFCCC (2002)

Population:

**11.2 million**

GDP per capita:

**USD 1,100**

Annual carbon dioxide emissions:

**1.2 Mt**

Carbon dioxide emissions per capita:

**124 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2002**

# Guinea-Bissau



Guinea-Bissau is located on the West African coast to the south of Senegal, covering a surface area of 36,000 km<sup>2</sup>. There are two main climate regions – the coastal zone and the interior of the country to the east. The coastal zone is characterised by intense rains, steady average temperatures and high humidity. The coast is also vulnerable to erosion, with damage being particularly visible in the north-west. Conversely, the east of the country experiences limited rainfall, wide temperature variations and light humidity in the dry season.

Guinea-Bissau is vulnerable to a number of environmental hazards that are likely to increase in frequency as the climate continues to change. Under high and low Intergovernmental Panel on Climate Change emission scenarios, mean annual rainfall in Guinea-Bissau is expected to increase in the coming years – resulting in higher incidence of flooding, soil degradation, erosion, and salinisation of freshwater sources. In turn, agricultural production, grazing lands, human health and the forestry sector are expected to be negatively affected by these changes.

In Guinea-Bissau's most recent National Communication to the UNFCCC, the energy situation in the country is described as 'distressing'. Power plants are reported to incur constant interruptions to service, often due to a lack of diesel. Because of this, most of the urban population uses personal generators to power their businesses and homes, resulting in the sector becoming one of the most significant emitters of carbon dioxide in the country.

## Projects and Actions

### Renewable energy solutions for rural and peri-urban citizens in the Gabu Region

#### Providing solar home systems on a fee-for-service basis

The Rural Energy Services Foundation (FRES) promotes rural electrification by setting up small-scale commercial electricity companies in areas without a connection to the electrical grid. In 2010, EUR 2.5 million was secured from the EU to support the creation of a new FRES company in Guinea-Bissau. FRES works on a fee-for-service concept – a customer pays a monthly amount for access to electricity. The level of the fee depends on the service level chosen by the customer. For example, it may be based on the number of light bulbs or power points supplied, or an amount per kilowatt-hour if demand is higher. The cost of service to the customer is worked out to be similar to that of the more traditional alternatives, such as candles or lamp oil, and the FRES service provider covers maintenance costs.

Financial beneficiaries of the project are the rural and peri-urban population of the Gabu region of eastern Guinea-Bissau. Target groups for the project include income-generating households with no access to clean electricity, whose main activity is farming. The second target group is small businesses including shops and workshops. The four-year project, which started in 2012, aims to have 3,000 accounts covering over 27,000 people by 2015.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2011)
- National Adaptation Programme of Action (2006)

Population:

**1.7 million**

GDP per capita:

**USD 1,200**

Annual carbon dioxide emissions:

**0.2 Mt**

Carbon dioxide emissions per capita:

**157 kg**

UNFCCC groups:

**G77, AOSIS**

Last NatComm:

**2011**

# Ivory Coast



Ivory Coast's climate is varied, ranging from equatorial on the southern coast, to tropical in the centre and semi-arid in the north. The country is rich in biodiversity, but its natural resources are under pressure from agro-industry, urbanisation, fishing and tourism. Climate change is exacerbating these issues and threatening Ivory Coast with degrading water resources, flooding, sea level rise and coastal erosion. Populations that rely on coastal and agricultural resources in Ivory Coast are particularly vulnerable to climate change. A future sea level rise of just 200 mm is projected to affect more than 2 million people and 80% of economic activity. Changes associated with rainfall variability are also expected to have severe consequences, as nearly 90% of the population is dependent on the agriculture sector.

In response, the Government has revised its National Development Plan (2012-2015) to emphasise coastal management and has stressed action in key sectors – agriculture, water resources and public health – in the country's Second National Communication to the UNFCCC. Ivory Coast is also committed to voluntary mitigation actions, including the reduction of deforestation and promoting measures to halt land degradation. The country is among the pilot countries to develop a Technology Needs Assessment and Technology Action Plan with the Global Environment Facility (GEF), and has appointed a National Designated Entity to facilitate the activities of the national Climate Technology Centre and Network.

## Projects and Actions

### Development of an adaptation strategy for the coastal area

#### Protecting fragile ecosystems

The objectives of this Global Climate Change Alliance (GCCA) project are to assist Ivory Coast with the development of a sound adaptation programme to minimise the negative effects of climate change in the country's coastal areas. Thus far, the GCCA team of experts has carried out a mission to review relevant documents, conducted field assessments and held a workshop to shortlist prioritised adaptation activities in the country. In consultation with local stakeholders, a draft adaptation strategy has been prepared, and is now in the hands of the Ministry of Environment and Sustainable Development for finalisation, approval and implementation.

### Adapting to climate change and increasing the resilience of the population

#### Increasing productivity and income generating potential

The GIZ project aims to empower vulnerable groups to stabilise their livelihoods through long-term climate change adaptation and climate-resilient activities. The project's main actions are adapting agriculture practices to increase productivity, improving income-generation through the supply of animal protein to local markets and measures to improve access to clean drinking water. The project will target groups in the southwest of Ivory Coast whose vulnerability to climate change may have been exacerbated by conflict in the area.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2010)

Population:

**22.4 million**

GDP per capita:

**USD 1,700**

Annual carbon dioxide emissions:

**5.8 Mt**

Carbon dioxide emissions per capita:

**294 kg**

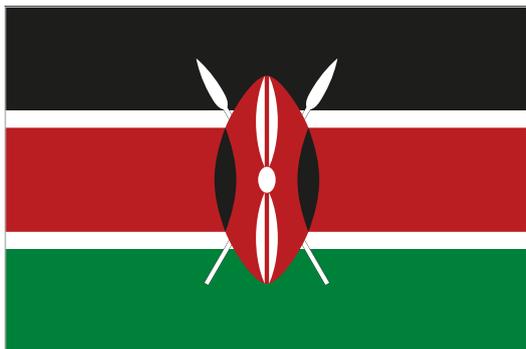
UNFCCC groups:

**G77**

Last NatComm:

**2010**

# Kenya



Kenya has a tropical climate that is influenced by its proximity to the equator, its diverse topography and the inter-tropical convergence zone (ITCZ). The exact position of the ITCZ changes over the course of the year causing Kenya to experience two distinct wet periods – the ‘short rains’ in October to December and the ‘long rains’ in March to May. Approximately 20% of total land area is of high to medium agricultural potential. Up to 80% of the population lives in these areas, the rest lives in arid and semi-arid locations. Erratic weather patterns, characterised by devastating floods and cycles of droughts, have become more frequent with increasing intensity. The Stockholm Environment Institute’s study on Kenya estimated that existing climate related shocks cost the country as much as USD 0.5 billion per year, equivalent to around 2% of GDP.

The National Climate Change Response Strategy (NCCRS, 2010) is a notable action to address climate change and its effects. The Action Plan to implement the NCCRS includes subcomponents such as a national adaptation plan, a low-carbon sector analysis, a technology action plan, and knowledge management and capacity building. At COP 19 in Warsaw, Kenya’s Minister of Environment confirmed that the country was on course towards a 70% renewable energy target by 2030.

## Projects and Actions

### Risk management strategies for adaptation to climate change in agriculture

#### A project for smallholders, processors and marketing enterprises

Funded by a EUR 2.3 million grant from Germany’s Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), GIZ is working with key Kenyan Government ministries to deliver this project. The project helps a variety of stakeholders throughout the agriculture value chain to appraise climate risk, select or develop suitable adaptation strategies and implement them. The project runs from 2010 to 2014 and is in line with the goals of the NCCRS. As a result, training on weather insurance for farmer groups has been carried out, methods for assessing the adaptive capacity of farmers have been developed and agricultural institutes have been trained with respect to climate risk.

### Fast start financing for climate change pilot projects

#### Catalysing private sector innovation and business development

Kenya became the first African country to receive fast start financing as bilateral support from Denmark, with DKK 60 million set aside for pilot projects. The overall programme emphasises the role of the private sector and communities in facilitating the use of innovative technology to reduce climate change vulnerability. Five pilot projects were launched under the programme, generating lessons such as the need for a clear business or development philosophy, how to keep realistic and measurable targets, and the value of carbon credits to local businesses.

## National Strategies and Reports

- The National Climate Change Action Plan (2013-2017)
- National Climate Change Response Strategy (2010)
- Initial National Communication to the UNFCCC (2002)

Population:

**44 million**

GDP per capita:

**USD 1,800**

Annual carbon dioxide emissions:

**12.4 Mt**

Carbon dioxide emissions per capita:

**307 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2002**

# Lesotho



Lesotho is landlocked and is completely surrounded by the Republic of South Africa. Due to its mountainous terrain and its subtropical position under the global high pressure belt, Lesotho has low levels of weather activity in winter, when temperatures fall to as low as  $-2^{\circ}\text{C}$ . In summer, low pressure systems dominate southern Africa and bring rain bearing, moist, tropical air and temperatures of up to  $28^{\circ}\text{C}$ . There are four geographic zones in the country – the lowlands, the foothills, the Senqu River Valley and mountainous areas. Common to all of these areas is the population's dependency on agriculture and livestock production to support domestic food supply. The agriculture sector is a major employer, but the sector's contribution to GDP has declined steadily over the last three decades, in part due to soil erosion.

The main environmental vulnerabilities that Lesotho faces are drought, land degradation, desertification and biodiversity loss. It is estimated that over 85% of the population is exposed to the risks of climate change. Lesotho is developing an overarching climate change strategy with the aid of the Global Climate Change Alliance (GCCA). At COP 18 in Doha, the Lesotho delegation informed the assembly that there had been more droughts and floods in the last decade than since 1978. As a result, the Prime Minister has had to declare a state of food emergency and appeal for international assistance. Energy security and access is also an important consideration in Lesotho. At COP 18, it was re-affirmed that Lesotho would be pursuing a goal of 100% power generation from renewable resources.

## Projects and Actions

### Support for a climate change response strategy

#### Agriculture, energy and food security

The GCCA is funding a EUR 4 million project, which aims to set up the policy and institutional framework required to reverse environmental degradation in Lesotho. Specifically, the project is supporting the development, finalisation and implementation of the National Climate Change Adaptation and Mitigation Strategy, and a national renewable energy strategy.

Budget support will be provided in the form of two fixed phases. The first is linked to the completion of a number of actions: These include:

- The 'zero draft' of the implementation strategy for environment and climate change
- The related public sector investment programmes and their endorsement by Cabinet
- The first meeting of the 'sector' coordination group and nomination of a working group to draft terms of reference
- Finalising terms of reference for technical assistance to help the Government in the development of a national policy on climate change.

The second phase is linked to the preparation of a national climate change adaptation and mitigation strategy, and a national renewable energy strategy – including estimates of implementation costs. By then, it is also expected that the climate change and environment coordination group will meet regularly and that a climate change and environment monitoring and evaluation framework is in place.

The National Climate Change Adaptation and Mitigation Strategy is expected to focus on improving soil and nutrient management, water harvesting and retention, water use efficiency, and the management of eroded lands and wetlands.

## National Strategies and Reports

- Second National Communication to UNFCCC (2013)
- National Adaptation Programme of Action (2007)

Population:

**1.9 million**

GDP per capita:

**USD 2,100**

Annual carbon dioxide emissions:

**0.02 Mt**

Carbon dioxide emissions per capita:

**8 kg**

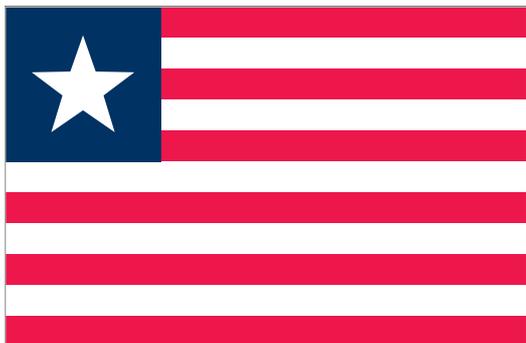
UNFCCC groups:

**G77**

Last NatComm:

**2013**

# Liberia



Liberia is situated on the Atlantic Coast of West Africa, bordered by Sierra Leone and Guinea to the north and Ivory Coast to the east. The country's landscape comprises flat and rolling coastal plains that rise to plateaus and low mountains in the northeast. Liberia has a tropical climate with heavy rainfall in the wet season and dust-laden harmattan wind from the Sahara desert in the dry season. Liberia is one of the world's poorest countries and is confronted with major infrastructure challenges as a legacy of the country's civil war (1989 to 2003). Economic growth began to accelerate after the war and Liberia's economy has since been one of the fastest-growing in Africa. The agriculture and forestry sectors – two of the most vital sectors for people's livelihoods – have taken time to begin to recover, and adaptive capacity and resilience to climate variability is very low.

Liberia's development challenges are exacerbated by degradation of agricultural lands, forests and biodiversity; lack of effective early warning systems; and coastal erosion. The country has developed a National Adaptation Programme of Action (NAPA), which complements its national sustainable development strategies. The NAPA targets better access to basic services, improved energy efficiency and forest conservation. Activities prioritised in the NAPA include the diversification of crops to enhance resilience; rebuilding the national hydro-meteorological monitoring system; and projects to reduce the vulnerability of urban coastal areas to erosion, floods and siltation.

## Projects and Actions

### Supporting the Ministry of Health & Social Welfare with off-grid electricity production

#### Renewable energy sources to rural primary health care facilities

Running from 2011 to 2014, this EUR 2 million project aims to increase access to reliable health care in rural and peri-urban health facilities in Liberia. Supported by the EU Energy Facility, the project will ensure access by rural communities to round-the-clock health care services through the provision of sustainable energy sources at the rural health facilities. It will also develop the capacity of key health staff and communities to ensure the sustainability of the project and establish a solar energy maintenance unit at the Ministry of Health & Social Welfare to support facilities in equipment maintenance.

### Ensuring sustainability of the forest sector

#### Support Unit for Liberia FLEGT Voluntary Partnership Agreement (VPA)

The EU and the Government of Liberia has concluded a VPA under the EU's Forest Law Enforcement, Governance and Trade Action Plan. The objective of the VPA is to ensure that timber exports to the EU are legally produced. It also commits Liberia to implementing governance reforms aimed at securing the long-term sustainability of the country's forest sector, while contributing to national economic development. The UK Government's Department for International Development has committed EUR 5 million in funding between 2013 and 2017 to support and strengthen the capacity of Liberian institutions to meet these commitments.

## National Strategies and Reports

- Initial National Communication to the UNFCCC (2013)
- National Adaptation Programme of Action (2008)

Population:

**4.0 million**

GDP per capita:

**USD 700**

Annual carbon dioxide emissions:

**0.8 Mt**

Carbon dioxide emissions per capita:

**200 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2013**

# Libya



Libya is bordered by the Mediterranean Sea, Tunisia and Egypt, and is a very large country (1.8 million km<sup>2</sup>). The climate is Mediterranean along the coast, but changes very quickly to a dry, extreme desert inland. More than 90% of the country is desert or semi-desert. The terrain is mostly barren, flat to undulating plains, plateaus and depressions. Approximately 3% of the country is arable land although fossil groundwater supports irrigation in the desert. There are hot, dry, dust-laden winds in the spring. Autumn sees dust, sandstorms and limited rainfall.

Libya is a part of a number of environmental protection initiatives and treaties. It is a signatory to the Barcelona Convention, which aims to protect the Marine Environment and the Coastal Region of the Mediterranean. Libya ratified the original Convention for the Protection of the Mediterranean against pollution, but has not ratified the amended Convention or its protocols. Libya could participate as an observer in Horizon 2020, the European Union's research and innovation programme, which is the main method of tackling the top sources of pollution in the Mediterranean by the year 2020. Given this basis of cooperation, there is potential for the EU to further explore technical assistance and support programmes with Libya that are related to environmental issues.

In September 2012, the Libyan Transitional Government outlined a national plan for developing renewable energy in the country for the period 2013 to 2025. The implementing body is the Renewable Energy Authority of Libya (REAOL). Short-term actions implemented from 2013 to 2015 include assigning budget to well-proven technologies to increase the share of renewables in the country's generation mix and investing in projects that will facilitate technology transfer. Such projects include three wind power projects with a combined installed capacity of 260 MW, five solar PV projects with a total installed capacity of 85 MW, concentrated solar power and solar water heating projects.

## Projects and Actions

### Libyan-German energy workshop

#### Renewable and energy efficiency knowledge-share

In May 2012, GIZ and REAOL organised a high-level workshop on behalf of the Libyan Ministry of Energy and Renewable Energies, and the German Foreign Office. The results of the workshop included the development of recommendations for promoting energy efficiency projects and renewable energy technologies in Libya. In addition, a Libyan-German task force on energy efficiency and renewable energy was established.

The National Climate Change Adaptation and Mitigation Strategy is expected to focus on improving soil and nutrient management, water harvesting and retention, water use efficiency, and the management of eroded lands and wetlands.

Other GIZ activities in the energy sector include:

- Policy advice to REAOL
- The long-term secondment of a German energy expert
- Support for the development of a renewable and energy efficiency strategy
- Jointly organising the 6th Middle East North Africa Renewable Energy Conference

Population:

**6.0 million**

GDP per capita:

**USD 11,900**

Annual carbon dioxide emissions:

**59 Mt**

Carbon dioxide emissions per capita:

**9,289 kg**

UNFCCC groups:

**G77**

Last NatComm:

**N/A**

# Madagascar



Located in the Indian Ocean off the eastern coast of Mozambique, Madagascar is the fourth largest island in the world and one of the most biologically diverse countries on Earth. Madagascar is divided down the middle by a tropical mountain system. This range divides the country into three distinct ecological zones, with unique flora and fauna that has adapted over millions of years to fit each of the country's niche ecosystems. To the east, the climate is tropical, rainforest covers large swathes of territory and annual rainfall can be as high as 3,700 mm. In the south and southwest – home to the desert-like 'spiny forest' – the climate is semi-arid, with annual rainfall rates dropping to as low as 400 mm. Northern and western Madagascar have a more temperate climate and are covered in deciduous forest. Madagascar is famous for its biodiversity – over 90% of the species found here are unique to the country. However, deforestation, land degradation and habitat loss in Madagascar have accelerated over the past two decades – driven by the expansion of subsistence agriculture, the cultivation of trees for fuel and illegal logging practices. In part, this trend can be attributed to rapid population growth and low levels of social development – at least half of Madagascar's population lives below the poverty line and is reliant on natural resources. In turn, this means that large segments of the population are vulnerable to climate variability and extreme weather events, such as cyclones, flooding, drought, erosion and water contamination.

Due to its status as a highly climate-vulnerable country, Madagascar's main national climate priority is adaptation. At COP 19 in Warsaw, the Secretary General of Madagascar's Ministry of Environment and Forests outlined a number of initiatives that the Government had taken to integrate climate change into national policy – including the formation of climate change cells in each Ministry, and the development of adaptation and mitigation projects in the country's priority sectors of agriculture, water, forestry and biodiversity, and public health. Madagascar is also in the process of developing its national climate change action plan.

## Projects and Actions

### Management of protected areas

#### Preserving biodiversity

In 1989, the Government of Madagascar established an Environmental Action Plan to develop a network of protected areas. These areas are still under threat due to a lack of available financial resources. To address this, the French Agency for Development (AFD) invested a total of EUR 2 million between 2008 and 2012 to fund two approaches to management of protected areas. These focus on actions including controls, surveillance and research, as well as socioeconomic activities such as rural development, ecotourism and education.

### Implementation of the Mauritius Strategy for Small Island Developing States (SIDS)

#### Supporting SIDS in Eastern and Southern Africa – Indian Ocean

Between 2011 and 2013, the European Union supported Comoros, Madagascar, Mauritius, Reunion, Seychelles and Zanzibar with a EUR 10 million grant to develop national plans to implement the Mauritius Strategy on sustainable development. With the EU's support, each country outlined plans for the 20 thematic areas of the Mauritius Strategy, including systems for monitoring and evaluating implementation of the Strategy. The programme also promoted knowledge exchange and transfer to further regional cooperation and integration.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2010)
- National Adaptation Programme of Action (2006)

Population:

**22.6 million**

GDP per capita:

**USD 900**

Annual carbon dioxide emissions:

**2.0 Mt**

Carbon dioxide emissions per capita:

**97 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2010**

# Malawi



Malawi's geography is characterised by a mountainous area surrounding the Great Rift Valley with Lake Malawi, which makes up most of the eastern border, and low-lying areas to the south. Malawi's climate is tropical in the southern areas and temperate in the northern highlands. As the economy is largely reliant on agriculture, which supports the livelihood of over 80% of the population, the country is dependent on adequate and reliable rainfall.

In its National Adaptation Programme of Action, Malawi identified an increase in the frequency, intensity and magnitude of flooding and severe droughts over the last two decades. This threatens food and water security, water quality and energy generation from hydropower. Malawi is implementing a comprehensive National Climate Change (NCC) Programme that aims to mainstream climate change issues into the national development agenda. One of the two projects under the strategy aims to develop a strategic framework and implementation plan to address the immediate challenges that climate change poses, for example, to national food security. The second aims to support the long-term efforts of the Government to build capacity to implement its own adaptation programmes. An NCC Investment Plan was presented at COP 19 in Warsaw, where technical and financial support was requested to scale-up adaptation and mitigation actions.

## Projects and Actions

### Enhancing resilience to climate risks and impacts

#### 'Climate-proofing' development

The Global Climate Change Alliance is funding a EUR 8 million project that runs from 2014 to 2020. The project aims to mainstream climate change considerations into policies and actions at a regional and local level. As a result of strengthened capacity at sub-national level in designing resilience plans, vulnerable communities will be less at less risk to the adverse effect of climate change. For this purpose, the specific needs of sensitive sectors (such as agriculture and forestry), will be assessed. A capacity development programme will be designed to enable Government staff working at regional and district levels to 'climate proof' their development planning and implementation activities. Furthermore, the project will provide an enabling environment for policy reform, and the harnessing of human and financial resources.

### Msamala sustainable energy project

#### Better access and use of energy with solar PV, tree planting and efficient cooking stoves

The European Union has contributed EUR 1.8 million to improve sustainable access to energy in the Balaka District. Solar photovoltaic (PV) systems have been installed in schools, and energy efficient stoves fitted in health facilities and households. This has reduced the consumption of firewood by 39%. In addition, as a result of tree planting, the project is expected to result in the replenishment of wood sources.

## National Strategies and Reports

- National Climate Change Policy (2012)
- Growth and Development Strategy II (2012)
- Second National Communication to the UNFCCC (2011)

Population:

**16.8 million**

GDP per capita:

**USD 800**

Annual carbon dioxide emissions:

**1.2 Mt**

Carbon dioxide emissions per capita:

**83 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2011**

# Mali



Mali is landlocked and split by the Sahara desert and the Sahel. Some 65% of Mali's territory is desert or semi-desert, receiving very low amounts of annual rainfall. Most of the fertile land in Mali is located along the floodplains of the Niger, in the country's subtropical southwest. Due to a lack of rain over many years, Mali's main environmental concerns are desertification, drought and soil erosion. Deforestation is also a significant issue, as demand for woodfuel and timber has led to a rapid loss of forest cover in recent years.

In 2007, Mali published its National Adaptation Programme of Action strategy, which outlined the following sectors as most vulnerable to climate change (in order of highest vulnerability): agriculture, health, fishing, energy, water, livestock and forestry. Speaking at COP 19, Mali's Minister of Environment and Sanitation called this human-induced climate vulnerability 'a menace to ecosystems, food security, health and sustainable development' in Africa. In this speech, the Minister emphasised Mali's recent efforts in combatting climate change. These include establishing a national committee on climate change, launching the country's national climate change strategy in 2011 and developing a finance strategy to promote adaptation in Mali.

## Projects and Actions

### Innovative development planning for climate change adaptation

#### Financing mechanisms for decentralised adaptation

In 2011, GIZ launched a EUR 3 million project to promote climate adaptation among national and local decision-makers. The project is working with regional authorities to identify appropriate adaptation measures, integrate adaptation into decentralised planning structures and identify financing mechanisms for decentralised adaptation projects. Together, these will help vulnerable people and communities become more resilient to climate change.

### Global Climate Change Alliance in Mali

#### Supporting policy development and capacity building in Mali's forestry sector

The Global Climate Change Alliance (GCCA) is supporting Mali's sustainable development through a 5-year, EUR 5.65 million programme aimed at building capacity in the Ministry of Environment and Sanitation. With the support of the GCCA programme, Mali developed its flagship national climate change strategy and undertook a number of forestry initiatives. This included developing a national forestry inventory; capacity building with the forest information system unit for REDD+ readiness; and six reforestation projects in the Kayes, Ségou and Mopti regions.

## National Strategies and Reports

- National Policy on Climate Change (2011)
- Second National Communication to the UNFCCC (2011)
- National Adaptation Programme of Action (2007)

Population:

**16 million**

GDP per capita:

**USD 1,100**

Annual carbon dioxide emissions:

**0.62 Mt**

Carbon dioxide emissions per capita:

**41 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2011**

# Mauritania



Mauritania is a large country that has four distinct climatic zones – the dry, arid Sahara and Sahelian zones; the Senegal River Valley, characterised by higher rainfall; and the more moderate coastal zone. Over 70% of Mauritania is covered in desert. Mean annual rainfall in the majority of the country is below 200 mm and, even in the relatively more tropical south of the country, annual rainfall rarely exceeds 400 mm. Desertification is the most significant environmental issue facing Mauritania. Since the 1960s, prolonged periods of drought, overgrazing, soil erosion and deforestation have led to the expansion of the desert and the encroachment of sand dunes on major population centres. In its Second National Communication to the UNFCCC, Mauritania identified oasis ecosystems, forestry and livestock as the most vulnerable sectors to climate change. All of these have already been affected by rising temperatures and reductions in annual rainfall.

The country has a number of strategies and initiatives that work towards sustainable environmental development – including the National Action Plan for the Environment, which covers the period 2012 to 2016. Mauritania is one of the 11 founding members of the Pan-African Agency of the Great Green Wall of the Sahel project.

## Projects and Actions

### Triggering a process of resilience for food security in Mauritania

#### Community based food security

The Global Climate Change Alliance has recently launched a 5-year, EUR 4 million project to improve food security and reduce the vulnerability of communities in Mauritania to climate change. The project will work with four key local agencies to build forecasting and management capacity in the fields of meteorology, climatology, environment and rural development. It will also support community-based food security initiatives that focus on agriculture and livestock breeding techniques.

### Helping Mauritanian coastal cities adapt to climate change

#### Making Nouakchott more resilient

Between 2011 and 2013, the European Union supported Comoros, Madagascar, Mauritius, Reunion, Seychelles and Zanzibar with a EUR 10 million grant to develop national plans to implement the Mauritius Strategy on sustainable development. With the EU's support, each country outlined plans for the 20 thematic areas of the Mauritius Strategy, including systems for monitoring and evaluating implementation of the Strategy. The programme also promoted knowledge exchange and transfer to further regional cooperation and integration.

### Local initiatives for solar electrification in Mauritania

#### Power for schools

The European Union, in partnership with Tenmiya, a local non-governmental organisation, undertook a 4-year, EUR 300,000 project to provide rural communities in Mauritania with solar energy. The project worked in three municipalities of Gorgol – the second poorest region in Mauritania – and brought 400 solar kits to 2,500 people, two schools and four cooperative institutions. As a result, schools were able to hold evening classes and dropout rates in the area fell by 48%.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2008)
- Sustainable Development Strategy (2006)
- National Adaptation Programme of Action (2006)

Population:

**3.4 million**

GDP per capita:

**USD 2,100**

Annual carbon dioxide emissions:

**2.2 Mt**

Carbon dioxide emissions per capita:

**640 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2008**

# Mauritius



Mauritius is a small island nation that has a mild, tropical, maritime climate. It receives average annual rainfall of 4,000 mm in the Central Plateau and 800 mm along the coast.

Mauritius is vulnerable to a number of environmental hazards, including cyclones, tsunamis, drought, floods, coastal erosion and spills. It is also vulnerable to slow-onset trends associated with climate change such as sea-level rise, ocean acidification and coral bleaching. In its National Climate Change Adaptation Policy Framework (NCCAPF), Mauritius identified water, agriculture, fisheries and tourism as the sectors most likely to be affected by these environmental threats.

Mauritius is in the process of developing a national Climate Change Bill. Over the past five years, the country has been active in developing its response to climate change, including the formulation of the Maurice Ile Durable strategy – a national development plan that focuses on the pillars of energy, environment, education, employment and equity. Further work has been done to develop the NCCAPF, passing bills on energy efficiency and low-carbon buildings, and outlining a target of achieving 35% renewable energy production by 2025. Mauritius has also begun developing a low-carbon development strategy and Nationally Appropriate Mitigation Actions for its port facilities and energy industries.

## Projects and Actions

### Global Climate Change Alliance (GCCA) in Mauritius

#### Budgetary support for environmental strategy development

The GCCA provided the Government of Mauritius with EUR 3 million of budgetary support between 2010 and 2013 to support the development of the Maurice Ile Durable strategy and other environmental legislation. The project was effective in generating synergies between a number of national legislative priorities and working with a number of donors to fund these actions. The National Assembly also approved the Energy Efficiency Bill and the new Building Control Bill, which included requirements for sustainable buildings.

### Converting air-conditioning equipment in public buildings to use natural refrigerants

#### Mitigation in the buildings sector

The German International Climate Initiative is supporting the Government of Mauritius to retrofit air-conditioning systems in Government buildings. The EUR 1.7 million project aims to demonstrate the advantage of natural refrigerants (ammonia) over fluorinated refrigerants and to increase energy efficiency in line with new national legislation.

## National Strategies and Reports

- National Climate Change Adaptation Policy Framework (2013)
- Maurice Ile Durable – Policy, Strategy and Action Plan (2013)
- First comprehensive greenhouse gas inventory (2011)
- Second National Communication to the UNFCCC (2010)

Population:

**1.3 million**

GDP per capita:

**USD 15,400**

Annual carbon dioxide emissions:

**4.1 Mt**

Carbon dioxide emissions per capita:

**3170 kg**

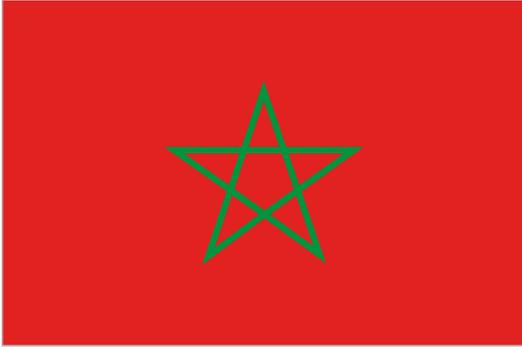
UNFCCC groups:

**G77, AOSIS**

Last NatComm:

**2010**

# Morocco



Morocco's climate is characterised by two regions – a hot, Mediterranean climate in the north and west of the Atlas Mountains, and a hot, dry climate towards the east and south, where the Sahara Desert begins. With high temperatures and a predominantly dry landscape, Morocco is vulnerable to a number of human-induced pressures. For example, water resources are under increasing stress from population growth, and agricultural and industrial activities, especially in rural areas. Forest ecosystems are also vulnerable to deforestation as trees are cut for woodfuel – the primary source of energy for rural inhabitants in Morocco. Climate change is expected to exacerbate these vulnerabilities, with the agriculture, forestry and fishery sectors considered to be particularly at risk. At the same time, economic development is expected to lead to the quadrupling of energy demand between 2007 and 2030, posing a challenge for environmental management and for controlling national emissions levels.

Adaptation and mitigation are addressed in Morocco's National Plan to Fight Against Global Warming. On the adaptation front, Morocco has developed a National Water Strategy, which focuses on demand management, water efficiency measures, preservation of sources, and reducing vulnerability to floods and droughts. As for mitigation measures, Morocco has developed a new Energy Strategy, which aims to respond to rising energy demand by increasing renewable energy supply to 42% of the country's total energy mix.

## Projects and Actions

### Drinking water efficiency programme in Morocco

#### Improving drinking water security

In support of Morocco's National Water Strategy, the French Government is funding a EUR 30 million programme to secure the supply of safe drinking water to 30 urban centres in Morocco. The French loan will support work to reduce leaks, increase water storage capacity, improve equipment, and help with aspects of operation and management. Some 30 cities, with populations ranging from 14,000 to 134,000 will benefit from the project.

### Support to the Moroccan Solar Plan

#### Renewables for energy security

The Moroccan Solar Plan aims to install 2,000 MW capacity by 2020, develop the associated supply chain and support research and development. In support of this plan, the German Government is funding a EUR 3 million programme to share German expertise on renewable energies with Moroccan ministries to accelerate innovation and enhance synergies between business, research and training. The project will be implemented by GIZ.

### Low Emission Capacity Building Programme

#### Design of mitigation strategies, systems and actions

Morocco was one of the first countries in Africa to establish a Designated National Authority for Clean Development Mechanism projects and now has 15 registered projects in its national portfolio. The Low-Emission Capacity Building Programme, funded by the UN Development Programme, the European Union, Germany and Australia, aims to build on this experience by strengthening national technical and institutional capacities on the national level to implement mitigation actions.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2010)
- National Plan to Fight Against Global Warming (2009)

Population:

**32.6 million**

GDP per capita:

**USD 5,200**

Annual carbon dioxide emissions:

**50.6 Mt**

Carbon dioxide emissions per capita:

**1,584 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2010**



# Mozambique



Mozambique's climate is tropical and characterised by two seasons – a hot, rainy season from October to April, and a cold, dry season from May to September. The terrain is mostly coastal lowlands, with uplands in the centre, high plateaus in the northwest and mountains in the west. Electricity is generated primarily through the use of large-scale hydroelectric power and the country has recently discovered abundant natural gas reserves. While the country has a huge potential for energy production, it has one of the lowest electricity access rates in Southern Africa. In 2008, Mozambique submitted its National Adaptation Programme of Action (NAPA) to the UNFCCC. The NAPA highlighted droughts, floods, and extreme weather events such as cyclones, as the main threats posed by climate change. Mozambique's Initial National Communication to the UNFCCC identified agriculture, forestry, livestock, water resources, coastal resources, infrastructure, health and fishing as the main sectors likely to be impacted by climate change.

In 2012, the Government of Mozambique launched the National Climate Change Strategy (NCCS), covering the period 2013 to 2025. The policy sets out adaptation measures (such as increasing the resilience of agriculture and livestock), mitigation measures (such as improving access to renewable energy) and cross-cutting measures (such as setting up the institutional framework for coordination of action on climate change).

## Projects and Actions

### Mainstreaming of climate change policies and strategies for resilience

#### Sector support programme

The EUR 47 million project is funded by the Government of Mozambique, Global Climate Change Alliance, the Republic of Ireland and the Danish International Development Agency. The project, which runs from 2011 to 2015, aims to implement the national response to climate change, increase institutional capacity to respond to climate change, enhance information sharing and develop awareness campaigns. Under the project, the 'Strategic Environmental Assessment of the Coastal Zone of Mozambique' was finalised in 2013. This is considered a key action for environmental management and climate change adaptation.

### Methane-free charcoal production facility with a briquette plant

#### Sustainable plantations

The EUR 2.4 million European Union funded project aims to increase access to modern, affordable and sustainable energy services for the rural and peri-urban poor by focusing on renewable energy solutions and energy efficiency measures.

The project will establish a network of Tree Grower Associations (TGAs). TGAs will create their own plantations and manage them in a sustainable manner. The programme will be complemented by a separate charcoal production facility. This facility will be a modern, efficient and methane-free production plant with a briquetting plant. The raw material for the charcoal will come from the sustainable plantations set up by the TGAs and the excess will be sold into the peri-urban market to ensure that the project becomes self-financing.

## National Strategies and Reports

- National Climate Change Strategy (2012)
- National Strategy on Disaster Risk Reduction (2012)
- Initial National Communication to the UNFCCC (2010)
- National Adaptation Programme of Action (2008)

Population:

**24.1 million**

GDP per capita:

**USD 1,200**

Annual carbon dioxide emissions:

**2.9 Mt**

Carbon dioxide emissions per capita:

**123 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2012**

# Namibia



Namibia is a sparsely populated country, covering an area of 825,000 km<sup>2</sup>. Home to the Namib and Kalahari Deserts, and the Great Escarpment, 92% of the country is classified as arid or semi-arid, receiving less than 250 mm of mean annual rainfall. The economy of Namibia is driven by tourism and the mining sector, with the main exports including diamonds, copper, gold and uranium. However, agriculture and livestock ranching still supports over 70% of the country's population.

Namibia is highly vulnerable to the effects of climate change. With high levels of rural poverty, an arid climate and finely balanced ecosystems, the country is likely to face a number of negative consequences as mean temperatures rise and rainfall becomes more variable in the future. These include more frequent drought, desertification and flash floods in the north, where the population density is the highest in the country.

To address these climate risks, Namibia launched its National Climate Change Policy (NCCP) in 2010. The NCCP's primary focus is promoting long-term adaptation in the sectors identified as most vulnerable which include agriculture, land use, land-use change and forestry (LULUCF), health, human settlements and coastal management. Under the NCCP, mitigation policies that focus on low-carbon development and sustainable energy will also be prioritised.

## Projects and Actions

### European Union supported climate change adaptation and mitigation actions

#### Helping rural communities respond to climate change

The European Union is supporting Namibia with a EUR 7.1 million portfolio of projects to promote climate change adaptation and mitigation in rural areas. The main activities are focused on mainstreaming adaptation into rural agricultural practices including through conservation, agriculture and sustainable rangeland management. The main mitigation activities focus on using renewable energy and energy efficiency.

A EUR 3.2 million project, completed in 2013, established the first integrated water resource management programme in the country covering the Cuvelai-Etosha basin. This project also led to the discovery of a huge aquifer with the potential to change the outlook for hundreds of thousands of people in the north of Namibia.

### The Tsumkwe Energy Project

#### Hybrid electricity supply

Tsumkwe is Namibia's largest off-grid settlement and home to the majority of Namibia's indigenous San people. The European Union provided EUR 2.3 million to introduce solar-diesel hybrid electricity supply to the community, which has increased power supply from between 12 and 14 hours per day to 24 hours per day. The project has also funded solar water heaters and rechargeable electrical lanterns for residents in Tsumkwe's Otjozondjupa Region.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2011)
- National Climate Change Policy (2010)

Population:

**2.2 million**

GDP per capita:

**USD 7,800**

Annual carbon dioxide emissions:

**3.2 Mt**

Carbon dioxide emissions per capita:

**1,391 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2011**

# Niger



Niger is the largest country in West Africa. Landlocked and almost entirely desert, Niger is one of the most food-insecure countries in the world. The country has a hot, dry, subtropical climate with only 15% arable land in the extreme south. Nevertheless, agriculture is critical to Niger's economy, employing 80% of the working-age population.

Niger is highly vulnerable to climate change, the effects of which are expected to lead to higher rates of desertification, and increasing incidence of drought and flooding. In the past 10 years, Niger has suffered from the increasing effects of climate change. Major droughts led to widespread crop failure and hunger in 2005 and 2010, and additional effects have been desertification, deforestation and plagues of locusts. These incidents can be placed within longer-term warming and aridity trends in the region. Analysis of rainfall patterns from 1961 to 2001 by the UN Development Programme's Africa Adaptation Programme shows a trend towards decreasing rainfall and rising temperatures between 1986 and 2001.

Niger's National Adaptation Programme of Action focuses on supporting agriculture through improved livestock and water resource management, as well as better access to meteorological data. It also highlights the need to create food banks and fight climate-related disease. In its Second National Communication to the UNFCCC, Niger reiterates this focus, developing concepts for a number of pilot projects concerning agriculture, water resources, livestock production and human health.

## Projects and Actions

### Planning and watershed management in Badaguichiri

#### Increasing food security

The EUR 15.2 million watershed management project received EUR 11 million from the French Agency for Development (AFD), targeting actions to improve food security and increase the income of people in the Badaguichiri Basin of Niger's Tahoua Region. The project further aimed to build the capacity of communities to sustainably manage natural resources. This included the intensification of farming operations (perennial crops and arboriculture), the restoration of degraded farmland in plateaus and river basins, better management and conservation of groundwater, and fighting the encroachment of desert ecosystems into productive farming areas.

### Livestock support project in the district of Zinder

#### Agriculture and food security

In 2006, the AFD provided a EUR 7 million grant to promote security and sustainable water management in Niger's Zinder Region. The main objective of the project was to secure the movement of livestock in an area of conflict between nomadic and sedentary people – ensuring that both groups had equal access to water, so reducing conflict. Under the project, specific activities included constructing wells, creating corridors and areas for nomadic communities, supporting dialogue between actors and establishing land-use rights in Zinder.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2009)
- National Adaptation Programme of Action (2006)

Population:

**16.9 million**

GDP per capita:

**USD 800**

Annual carbon dioxide emissions:

**1.4 Mt**

Carbon dioxide emissions per capita:

**91 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2009**

# Nigeria



Located on the Gulf of Guinea, Nigeria is the most populous country in Africa and the continent's second largest economy. Nigeria has high temperatures throughout the year, with a mean annual temperature of 27°C. The climate varies from the dry and arid Sahelian landscape of northern Nigeria to the wet coastal areas in the south that receive seven times the annual rainfall of the north. Decreasing rainfall and a general warming of the Western African region is expected to impact Nigeria in a number of ways. Agriculture is the main source of food and employs the majority of the working-age population. Since crops are predominantly rain-fed, they are particularly vulnerable to climate change. Demand is already outstripping supply of water and this is expected to continue with projections showing that only 50% of demand may be met in 2030. Nigeria is Africa's biggest oil producer, exporting over 2 million barrels of crude oil per day. It also has abundant supplies of natural gas, coal, tar sand and biomass. Despite an abundance of natural resources, energy access remains a critical problem, particularly among the poor. Therefore, the development of sustainable energy resources to help meet demand is a priority for the Government of Nigeria.

At COP 18 in Doha, the Nigerian Minister of Environment confirmed that the National Policy on Climate Change and the National Adaptation Strategy and Plan of Action had been approved. The Federal Executive Council said that these strategies would provide the Government with a framework for tackling environmental challenges such as increased flooding and rising sea levels.

## Projects and Actions

### Energising access to sustainable energy

#### Renewables, efficiency and utilising flared gas

The European Development Fund, the German GIZ/Federal Ministry for Economic Cooperation and Development (BMZ), and the World Bank/Global Environment Facility (GEF) are co-funding a EUR 40 million project with the goal of improving energy access in Nigeria. The project has a particular focus on the use of renewable energy by small and medium-sized enterprises (SMEs) and households, improved energy efficiency of key economic sectors, and on promoting the small-scale use of flared gas. The main components of the project are:

- Improving the federal policy framework for energy access, with a focus on renewable energy and energy efficiency
- Capacity building for authorities in selected states to plan and implement energy access measures
- Building the institutional and professional capacity of the National Power Training Institute of Nigeria
- Demonstrating the commercial viability of small-scale gas processing in the Niger Delta region
- Farmer-managed renewable energy production.

### Improving resilience to climate extremes in Nigeria

#### European Community Humanitarian Office (ECHO)

ECHO has been working in Nigeria since 2010 to improve and scale-up the community management of acutely malnourished children and provide emergency food assistance. Following the 2012 floods in Nigeria, which displaced 7 million people, the European Union contributed EUR 3 million to help some of the most vulnerable families in Kogi and Delta States rebuild their homes and livelihoods. Actions to improve water, sanitation and hygiene were also funded to reduce the risk of disease outbreaks.

## National Strategies and Reports

- National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (2012)
- National Policy on Climate Change and Response Strategy (2012)
- Initial National Communication to the UNFCCC (2003)

Population:

**175 million**

GDP per capita:

**USD 2,700**

Annual carbon dioxide emissions:

**79 Mt**

Carbon dioxide emissions per capita:

**498 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2003**

# Republic of the Congo



The Republic of the Congo is an equatorial country situated along the north bank of the Congo River. Bordered by Gabon, Cameroon, the Central African Republic and the Democratic Republic of the Congo, the country has an area of 342,000 km<sup>2</sup>, of which approximately 65% is covered by forests. The Republic of Congo's climate is tropical and is characterised by two main seasons – a wet season from March to June, and a drier season between July and February. On average, the country receives 1,300 mm to 1,800 mm of rain, with higher rainfall occurring in the mountainous regions and high plateaus of the country. The country's economy is dominated by two main export sectors – petroleum (which accounts for the majority of GDP) and forestry. Yet, despite high export earnings, 46% of the population lives below the poverty line. As such, a large number of people are vulnerable to climate variability, which the Government expects to impact the water, agricultural (including food security), forest and health sectors the hardest.

The country is in the process of establishing its National Committee on Climate Change. Although rates of deforestation in the Republic of the Congo are relatively low (approximately 0.1%), one of the main environmental priorities is to strengthen the management of the country's forest reserves. According to the Minister of Tourism and Environment, a number of activities are being developed along these lines, including the enhanced protection of 11% of the country's forests, the development of a National Afforestation Programme and the implementation of a national REDD+ scheme.

## Projects and Actions

### Forest Law Enforcement, Governance and Trade (FLEGT)

#### Supporting governance and institutional reform in Central Africa

From 2006 to 2009, the European Union undertook a EUR 1.7 million project to support FLEGT activities in Cameroon, the Central African Republic, the Republic of the Congo, the Democratic Republic of the Congo and Gabon. The main goal of the project was to improve forestry governance in Central Africa through capacity building and institutional reform. The project targeted improvements in the monitoring of illegal logging, efforts to strengthen civil society's role in forestry advocacy, legal reform in the forestry sector and improvements in the transparency of private sector logging firms.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2009)

Population:

**4.6 million**

GDP per capita:

**USD 4,600**

Annual carbon dioxide emissions:

**2.0 Mt**

Carbon dioxide emissions per capita:

**502 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2009**

# Rwanda



Rwanda is a mountainous, landlocked country with the second highest population density in Africa. The country has a temperate, tropical climate and experiences high annual rainfall, although rainfall levels appear to have dropped significantly since the 1960s. Over 80% of Rwanda's population lives in rural areas and agriculture accounts for 90% of the country's labour force. Rwanda's main environmental vulnerabilities are the over exploitation of productive lands and high rates of soil erosion, which have been exacerbated by the country's high population density. In addition, deforestation has become a significant issue driven, in part, by the demand for combustible woodfuel and vegetable mass which, in 2007, made up 94% of the country's energy needs.

In response to these trends, Rwanda launched its National Strategy on Climate Change and Low Carbon Development in 2011, which aims to promote green growth and climate resilience. The Strategy's main pillars are energy security, sustainable land-use and water management, preservation of biodiversity and ecosystem services, and social protection. It was launched at COP 17 in Durban, and complements Rwanda's 2007 National Adaptation Programme of Action in several sectors – including water management, irrigation and disaster risk reduction.

## Projects and Actions

### Implementing the Strategic Road Map for Land Tenure Reform

#### Sector budget support for environment and natural resources

From 2010 to 2012, the Global Climate Change Alliance has funded a EUR 4.55 million programme in Rwanda to help the country implement its Strategic Road Map for Land Tenure Reform. The Road Map is a key pillar of Rwanda's national 'Vision 2020' development strategy, which aims to promote land rights for farmers, giving them the security they need to make investments in soil conservation and irrigation, thereby reducing economic and environmental vulnerability. The project led to the registration of 10.3 million land parcels and the issuing of 3.9 million land titles by the end of December 2012.

### Supporting Rwanda's KivuWatt project

#### Promoting geothermal energy generation

An important goal of Rwanda's National Strategy on Climate Change and Low Carbon Development Strategy is tapping geothermal energy through the conversion of methane reserves (located under Lake Kivu) to electricity. The Dutch Development Bank has joined other financial institutions in funding the first 25 MW geothermal power plant, bringing future benefits to Rwanda in terms of energy security, job creation and disaster risk reduction.

## National Strategies and Reports

- Second National Communication to UNFCCC (2012)
- National Strategy for Climate Change and Low Carbon Development (2011)
- National Adaptation Programme of Action (2007)

Population:

**12 million**

GDP per capita:

**USD 1,400**

Annual carbon dioxide emissions:

**0.59 Mt**

Carbon dioxide emissions per capita:

**56 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2012**

# Sao Tome and Principe



Sao Tome and Principe is an archipelago with a tropical climate, taking its name from its two largest islands. A rise in mean temperatures, coastal erosion and variability in rainfall are the most obvious manifestations of climate change. Rainfall variability in particular has caused delays to the start of the farming season, resulting in irregular crop yields, food insecurity and food price volatility. In this context, Sao Tome and Principe is vulnerable to a number of other environmental concerns. These include the use of low-resilience annual crops with a low potential to protect soils, to the detriment of agroforestry systems; the weakening of agroforestry systems resulting from a decline in irrigation and tree cover; forest degradation as a result of the overexploitation of timber and woodfuel; and higher risks of wild fires and the conversion of forests to savannah.

Sao Tome and Principe's National Adaptation Programme of Action outlines six priority areas for action – infrastructure, agro-livestock and forest, health, water and energy, fishing and public safety – with projects being defined for each priority area. The Second National Communication to the UNFCCC recommit to these goals, focusing on reforestation, water management, capacity building in fishing communities and the introduction of early warning systems for natural disasters.

## Projects and Actions

### Reducing climate vulnerability in Sao Tome and Principe

#### Adaptation with a focus on poverty reduction and food scarcity

The Global Climate Change Alliance has provided EUR 3 million to contribute to the consolidation of development efforts by Sao Tome and Principe, with a specific focus on poverty reduction and food security. The main objective of the project, which will run from 2014 to 2018, will be to engage Sao Tome and Principe in an effective and sustainable process of adaptation to climate variability and change. Two field projects, one in each of the targeted districts, will be selected on the basis of a call for proposals and implemented. Eligible activities relate to agriculture, water and forest management. Projects can focus on the rehabilitation of irrigation networks, anti-erosion infrastructure development, agroforestry, fire prevention, pest management, reforestation and improvements in social organisation. Projects will support the development of new agricultural and sustainable natural resource management practices that reduce sensitivity to annual variations in weather and reduce the propensity to over exploit natural resources in years of poor harvests. They will be subject to monitoring with a view to learning lessons and identifying good practices.

The organisational framework of national institutions to respond to climate change will be strengthened for a proactive, transparent and coordinated management of climate related issues. This will firstly take place through support for the organisation and management of the National Climate Change Committee that will provide overall coordination. Secondly, by facilitating the creation of an enabling environment for the replication of successful pilot activities.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2012)
- National Adaptation Programme of Action (2006)

Population:

**187,000**

GDP per capita:

**USD 2,100**

Annual carbon dioxide emissions:

**0.1 Mt**

Carbon dioxide emissions per capita:

**599 kg**

UNFCCC groups:

**G77, LDC Group, AOSIS**

Last NatComm:

**2012**

# Senegal



Located on the Atlantic coast, Senegal is the westernmost country on the African mainland. It has a tropical climate with dry and humid seasons, which are caused by the northeast harmattan winter wind and the moist southwest summer wind, respectively. Senegal's 700 km long coastline has begun to suffer from the impacts of sea level rise including coastal erosion, saltwater intrusion, salinisation of freshwater resources, reduced fishing stocks and damage to key infrastructure. In the worst-affected areas, the coastline is retreating at an average rate of two metres per year. Although the drivers of this phenomenon are partly human (beach sand mining, coastal development), combined with natural problems (for example, fragile coastal soils), their effects will be exacerbated by climate change. In fact, climate change is already beginning to be felt in Senegal. Increasing temperatures and variable rainfall patterns have resulted in high levels of vulnerability – particularly for Senegal's poorest communities. As a result, Senegal has experienced mass migration to the cities from rural areas. This has created new problems related to sanitation, land use, safety and urban unemployment.

In its Second National Communication to the UNFCCC, the Government of Senegal identified agriculture, the coastal zone, health and the fishing industry as the sectors and areas most vulnerable to climate change. Through the National Adaptation Programme of Action (NAPA) process, Senegal has outlined adaptation actions focusing on these key areas, and protecting and improving fresh water resources. The NAPA is designed to work alongside, and to complement, other national strategies such as the Poverty Reduction Strategy (2013-17). At the same time as the country prioritises adaptation, Senegal is also implementing a mitigation programme targeting the energy and forestry sectors. Priority investments for mitigation will include solar energy, hydro power, improved cook stoves and reforestation.

## Projects and Actions

### Integrated management of coastal areas

#### In-depth assessments and concrete measures for responding to climate change

The Global Climate Change Alliance has provided EUR 4 million to develop an Integrated Coastal Zone Management (ICZM) plan in Senegal to effectively address coastal erosion and to develop effective coastal protection measures. The plan involves developing a tool based on a geographic information system to support coastal zone monitoring, planning and early warning; and strengthening Senegal's institutional and legal framework in support of the implementation of an ICZM plan.

### Access to electricity services for small communities

#### Distribution network extension and promotion of photovoltaics

The EUR 4 million EU Energy Facility project aims to increase affordable and sustainable energy access for the population of the rural area of Sédhiou, one of the poorest regions of Senegal. It focuses on providing renewable energy solutions, in the form of photovoltaic plants and mini individual photovoltaic systems, in addition to energy efficiency measures on the supply (production equipment) and demand (consumer equipment) sides. The project uses a payment for electricity services model that has been successfully piloted in a number of other countries, including Guinea-Bissau.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2010)
- National Adaptation Programme of Action (2006)

Population:

**13.3 million**

GDP per capita:

**USD 2,000**

Annual carbon dioxide emissions:

**7.1 Mt**

Carbon dioxide emissions per capita:

**568 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2010**

# Seychelles



The Seychelles consists of an archipelago of over 100 granitic and coralline islands. There is a wide geographic spread with some being over 1,000 km from Mahé, the largest island, which covers approximately 150 km<sup>2</sup>. The vast majority of Seychelles' infrastructure is located on the narrow coastal plains on the three main islands and is very much threatened by climate related changes, such as rising sea levels.

Sea-level rise may cause increased flooding and erosion, and more frequent tropical storms and cyclone intensity are predicted. Furthermore, rising sea-surface temperatures and changes in ocean chemistry threaten to damage coral reef systems, which are a natural protective barrier for the coastal areas where 90% of the population lives. These are also a major tourist attraction, and an essential foundation for the islands' fisheries and the conservation of biodiversity. The economy and population are also expected to be affected by water shortages resulting from dryer south-east monsoons and a higher risk of climate-sensitive diseases during wetter north-west monsoons. In 2009, the Seychelles launched its National Climate Change Committee which had five strategic directives. These were to:

- Advance the nation's understanding of climate change
- Put in place measures to adapt, build resilience and minimise vulnerability to climate change
- Achieve sustainable energy security through reduction of greenhouse gas emissions
- Mainstream climate change considerations into national policies, strategies and plans
- Build capacity and social empowerment at all levels to adequately respond to climate change.

## Projects and Actions

### GCCA climate change support programme in the Seychelles

#### Enhancing the sustainability of economic reforms

The EUR 2 million of GCCA funding is to support sustainable development policies and the implementation of the priority areas of the Seychelles' National Climate Change Strategy (SNCCS). The project aims to minimise the impacts of climate change through concerted and proactive action at all levels of society, in a coordinated effort with other donors. SNCCS priorities include increasing national knowledge of climate change impacts and risks, and putting in place measures to adapt to those risks and impacts. Climate change considerations are to be mainstreamed into national policies, strategies and plans. The SNCCS also aims to achieve sustainable energy security and reduce greenhouse gas emissions.

Key achievements to date include:

- Adopting the National Climate Change Strategy in December 2009
- Setting up the National Climate Change Committee as an operational steering and monitoring body
- Implementing the climate change strategy through priority actions (such as strengthening meteorological and disaster management services)
- Updating national aerial/geographic information system (GIS) coverage
- Carrying out coastal erosion projects and education initiatives.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2013)
- The Seychelles National Climate Change Strategy (2009)

Population:

**0.9 million**

GDP per capita:

**USD 25,000**

Annual carbon dioxide emissions:

**0.7 Mt**

Carbon dioxide emissions per capita:

**8,137 kg**

UNFCCC groups:

**G77, AOSIS**

Last NatComm:

**2013**

# Sierra Leone



Sierra Leone is a tropical country marked by distinct wet and dry seasons, caused by tropical monsoons. It receives approximately 3,000 mm of mean annual rainfall, which provides a fertile ground for agricultural production. Agriculture provides employment for over three-quarters of Sierra Leone's population and contributes to approximately one-third of national GDP. The Government has identified flooding, landslides, storms, shifting rainfall and drought as climate vulnerabilities.

Sierra Leone is in the process of drafting its national climate change policy. However, it has already taken important steps to address climate change (for example, the development of a National Adaptation Programme of Action strategy in 2007 and the establishment of the National Climate Change Coordinating Committee in 2011). Furthermore, the country's Head of Delegation to COP 19 in Warsaw, outlined that a "shift to renewable energy is seriously gaining prominence in Sierra Leone". This was demonstrated by the installation of solar street lights, the launch of the second phase of the Bumbuna Hydro Project and the implementation of the ADAX bio-energy Clean Development Mechanism project.

## Projects and Actions

### REDD+ capacity building

#### Forest governance

As a country reliant on natural resources and agriculture, Sierra Leone is highly vulnerable to environmental variability as a result of climate change. In 2012, the Global Climate Change Alliance launched a EUR 5 million programme to promote sound forest governance in Sierra Leone. The objective of the project is to establish the basic conditions for developing the institutional, technical and social experience and capacities necessary for sound forest governance. To benefit from the REDD+ mechanism, Sierra Leone has to become 'REDD ready', which entails generating basic data on forest resources and the dynamics behind deforestation, strengthening institutions, adapting the policy and regulatory framework, and establishing stakeholder mechanisms. The project will strengthen the Forestry Division to prepare the country for REDD+ mechanisms and promote low-carbon initiatives.

### Rural Energy Activating Livelihoods (REAL)

#### Solar systems

A small percentage of Sierra Leone's rural population has reliable access to electricity. The European Union is implementing a EUR 1.6 million project to promote solar systems and enterprises in rural areas, which will reduce people's reliance on woodfuel and kerosene. The project will generate positive outcomes for forest ecosystems and human health. The project is implemented in four areas – Kailahun District, Kono District, Kenema District and Pujehun District – and runs from 2011 to 2014. The implementing organisation is the Environmental Foundation for Africa Sierra Leone.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2013)
- National Adaptation Programme of Action (2007)

Population:

**5.6 million**

GDP per capita:

**USD 1,300**

Annual carbon dioxide emissions:

**0.69 Mt**

Carbon dioxide emissions per capita:

**117 kg**

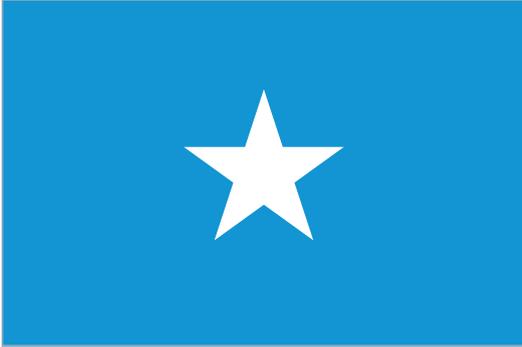
UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2012**

# Somalia



Somalia covers an area of approximately 638,000 km<sup>2</sup>. Its economy is based on pastoral and agro-pastoral production, and fees from the Somali diaspora. The climate is arid to semi-arid, with Intergovernmental Panel on Climate Change (IPCC) trends showing higher temperature extremes across the region over the last 50 years. The most recent global projections show that Somalia is expected to experience a steady future increase in temperature, which is predicted to rise by 3.2°C by 2080. The amount of rain that falls across Somalia varies dramatically from year to year, with droughts that persist for several years, and occasional erratic periods of intense downpours and flooding. Climate models for rainfall in the East Africa region show an expected gradual increase in rainfall anomalies over Somalia, under best- and worst-case IPCC emissions scenarios.

In Somalia, poverty and unemployment are widespread in urban and rural areas. The inadequate provision of road infrastructure and energy supply services in the country is a major hindrance to economic development and poverty reduction, with the majority of the population unable to access a reliable electricity source. They are also seen as barriers to facilitating humanitarian assistance. Somalia completed its National Adaptation Programme of Action in 2013, which drew on the experience of several stakeholders to settle on three main areas of activity. Projects identified in the NAPA aim to focus on the sustainable use of land and water resources, and disaster management.

## Projects and Actions

### Infrastructure and energy for economic development

#### Sustainable growth through natural resources management

The EUR 33 million project, funded by the EU via the 10th European Development Fund, has two main aims. First, the project will enhance access to sustainable and affordable cooking fuels by scaling up viable alternatives to charcoal, based on results from the Millennium Development Goal Initiative in Somalia's autonomous region of Puntland. Second, the project will improve electricity access through support of the installation and integration of pilot renewable energy systems into existing urban electricity grids. This will happen in two regions, Somaliland and Puntland, and includes the improvement of policy, legal, regulatory and institutional frameworks. In addition to capacity building for sector participants, support for public-private partnerships and the identification of barriers to tariff reduction in grid-based electricity will be identified.

Throughout the lifespan of the project, over 5,000 households or small enterprises (25,000 people) will gain access to grid electricity partially generated from renewable sources. Furthermore, some 100,000 households (0.5 million people) will benefit from improved cooking stoves and alternatives to charcoal fuel. Finally, over 50 cottage industries will be able to access electricity and other forms of energy, bringing the prospect of employment and improved livelihoods.

The call for proposals for this project began in 2014, and the project will last for 6 years.

## National Strategies and Reports

- National Adaptation Programme of Action (2013)

Population:

**10.3 million**

GDP per capita:

**USD 600**

Annual carbon dioxide emissions:

**0.6 Mt**

Carbon dioxide emissions per capita:

**65 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**N/A**

# South Africa



South Africa covers a vast surface area, ranging from the arid Namib Desert in the northwest to a subtropical and mountainous landscape in the east. Throughout the country, rainfall is variable, with cycles of droughts and sudden excessive rainfall causing water stress in many communities. The water sector is one of the most vulnerable sectors in the country, particularly for South Africa's poor who particularly lack the resources to adapt to water scarcity and already suffer from low access to safe drinking water. Despite its highly diversified and industrialised economy, 15% of South African households still do not have access to electricity.

In 2011, South Africa launched the country's flagship National Climate Change Response White Paper, committing the country to a low-carbon and climate resilient future. Under this policy framework, South Africa is prioritising a number of mitigation activities including energy efficiency, renewable energy and transport-related interventions. South Africa is also considering implementing a carbon tax. On adaptation and resilience, the white paper emphasises the importance of early warning and forecasting for disaster risk reduction. The water sector is a key focus, with the National Water Resource Strategy aiming to balance the allocation of water resources among major users in agriculture and industry on the one hand, and to provide fair access to water for poor communities on the other. South Africa is the only African country that has pledged to reduce carbon dioxide emissions under the Copenhagen Accord, having committed to reduce emissions by 42% by 2025 compared with a business-as-usual scenario, but subject to financial and technological support.

## Projects and Actions

### Basic Energy Climate Change Adaptation Programme (BECCAP)

#### Improved access to energy

Between 2008 and 2011, the German government funded the BECCAP with a EUR 1.6 million grant. The Programme aimed to secure and improve the supply of energy to low-income households and small businesses through the development and dissemination of energy efficient technologies. As such, it contributed to improvements in energy access and greenhouse gas emissions reductions.

### Support for Clean Development Mechanism Projects

#### Kyoto flexible mechanisms

Landfilling of waste accounts for 4% of South Africa's greenhouse gas emissions. To address this, the French Agency for Development (AFD) provided a EUR 6 million loan to the municipality of Ethekewini (Durban) to finance the collection of methane produced by the fermentation of waste in three landfills used for household refuse (Mariannahill, Bisasar Road, La Mercy) to generate electricity. This was the first project eligible for the Clean Development Mechanism in the framework of the Kyoto Protocol in South Africa.

### Infrastructure Investment Programme for South Africa (IIPSA)

#### Improved low-carbon and climate-resilient infrastructure

A lack of adequate infrastructure has been identified by the South African Government as one of the key constraints to faster economic growth and social inclusion. IIPSA is a EUR 100 million initiative based on blending European Union grants with loans from the development finance institutions in support of infrastructure projects. Energy, transport, water and waste are among the focal sectors of IIPSA. Overall, IIPSA seeks to promote essential infrastructure investments while promoting sustainable growth and action on climate change.

## National Strategies and Reports

- National Climate Change Response White Paper (2011)
- Second National Communication to the UNFCCC (2011)

Population:

**48.6 million**

GDP per capita:

**USD 11,300**

Annual carbon dioxide emissions:

**460 Mt**

Carbon dioxide emissions per capita:

**9,178 kg**

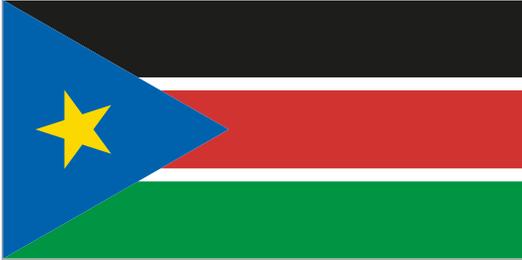
UNFCCC groups:

**G77**

Last NatComm:

**2011**

# South Sudan



On 9 July 2011, South Sudan became independent from Sudan, ending decades of conflict. As the world's newest country, South Sudan faces many development challenges. The country is landlocked and Government revenues rely on oil exports, which must be piped through Sudan to reach the Red Sea. The Government of South Sudan aims to diversify the economy by increasing agricultural production, which thrives in the tropical climate and provides subsistence for the majority of the country's population.

Climate change has been identified as one of the most important threats to the development of South Sudan. Expected impacts include increased water scarcity, accelerated desertification and soil erosion, loss of agricultural productivity, damage by droughts and floods, and health risks. These changes are already impacting livelihoods in South Sudan. In recent years, planting crops has been delayed by one or two months due to late rains. In addition, yields have been affected by rainfall variability in the middle of the growing season.

Having only recently gained independence, South Sudan is listed as an Observer State at the UNFCCC. South Sudan joined the Global Environment Facility (GEF) and has already begun enabling activities to qualify for GEF funding – including the launch of the National Adaptation Programme of Action (NAPA) process in early 2013. Many of the adaptation activities that were specified by the Sudanese NAPA in 2007 might also be relevant for South Sudan. These include afforestation, early warning systems for droughts, introduction of drought-resistant seed varieties, replacement of goat herds with sheep herds, new irrigation and traditional water conservation techniques, and improved water infrastructure.

## Projects and Actions

### Capacity building for the agricultural sector

#### EU support to the implementation of the South Sudan Development Plan

The EU has allocated EUR 200 million to support the implementation of the South Sudan Development Plan (2011–2013). The European Union is focusing its assistance on the agricultural sector to boost food security in South Sudan. The programme supports the development of information-based decision-making and training programmes to improve institutional capacity, and will also support smallholder farmers through the introduction of new agriculture techniques. Some EUR 80 million of the EU package will be allocated to improving rural infrastructure, improving productivity by providing easier access to services and land, and strengthening water management for sustainable use.

### Practical knowledge on food and animal husbandry

#### Helping small scale farmers

The Government of Slovakia is supporting smallholder farmers in South Sudan and Kenya to increase food security and improve livelihoods. Between 2013 and 2015, the EUR 0.38 million grant will assist farmers through knowledge transfer on agricultural practices and animal husbandry. Farmers near the city of Wau are also being given new equipment, and additional communities will be targeted to reduce deforestation rates through awareness raising and tree planting initiatives.

## National Strategies and Reports

- Environmental Impacts Risks And Opportunities Assessment (2011)

Population:

**11.1 million**

GDP per capita:

**USD 1,100**

Annual carbon dioxide emissions:

**N/A**

Carbon dioxide emissions per capita:

**N/A**

UNFCCC groups:

**LDC Group**

Last NatComm:

**N/A**

# Sudan



Sudan is the third largest country in Africa. It lies on the coast of the Red Sea and encloses a large section of the Nile Valley. Most of Sudan is covered in desert and the climate is predominantly hot and arid, with a thin tropical belt in the extreme south. Agriculture dominates the economy, employing the majority of the working-age population. In 2013, Sudan witnessed extreme flooding which destroyed settlements and farmland, and displaced thousands of people. Drought has also become more frequent and more severe in recent years, exacerbating problems such as food and water scarcity, and leading to conflict over natural resources.

The impacts of climate change threaten to undermine national efforts to address poverty and development in Sudan. At COP 19 in Warsaw, Sudan's statement said that climate change adaptation was a national priority for the Government. Sudan confirmed it had established the necessary institutions to address climate change and is mainstreaming adaptation into development planning. The country will promote sustainable development and resilience in the agriculture, water and public health sectors, which were all identified during the National Adaptation Programme of Action consultation process as being the highest priority sectors for adaptation interventions. Sudan is also committed to reducing its greenhouse gas emissions by targeting energy production and consumption, deforestation and land-use. For example, the Government aims to replace the country's existing energy infrastructure with alternative, clean energy sources such as solar and hydropower.

## Projects and Actions

### Water, Sanitation and Hygiene (WASH) programme in Sudan

#### Supporting adaptation after emergency relief

Since 2003, the UK Government has supported WASH programmes in Sudan's Darfur region following mass displacement linked to the ongoing Government conflict with rebel groups. The UK's Department for International Development (DFID) has been the largest contributor to the United Nations Common Humanitarian Fund (UN-CHF) active in Sudan, giving GBP 36 million in WASH support.

### The Wadi El Ku Catchment Management Project

#### For livelihoods, development and sustainable peace

The European Union is funding the EUR 7 million Wadi Al Ku Catchment Management Project for sustainable management of water land and natural resources. This is led by UNEP in cooperation with authorities, national non-governmental organisations and community-based organisations. The project, which will assist in the recovery and adaptation of livelihoods and food security of rural communities in the Wadi El Ku of North Darfur, focuses on those living in the vicinity of the state capital, El Fasher. The capital has a large and growing resident population, and three major camps for internally displaced peoples. It aims to redress, in part, years of environmental degradation caused by climate change, population growth, urbanisation and conflict. Measures taken include water management, erosion and flood control, forestry, agro-forestry and agricultural and livelihoods adaptation.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2013)
- National Adaptation Programme of Action (2007)

Population:

**34.9 million**

GDP per capita:

**USD 2,500**

Annual carbon dioxide emissions:

**14 Mt**

Carbon dioxide emissions per capita:

**325 kg**

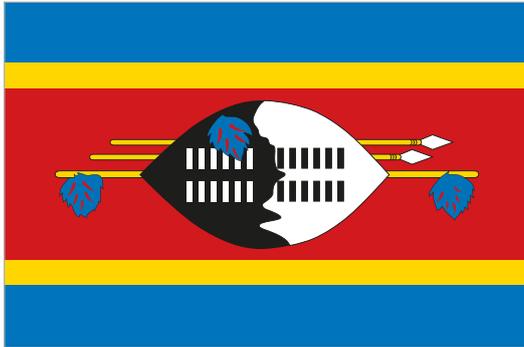
UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2013**

# Swaziland



Swaziland's climate is subtropical with dry winters (April to September) and hot, wet summers (October to March), during which about 75% of annual rainfall occurs. Analysis of temperatures showed a significant increase in annual mean temperature of 3°C between 1961–2000. As a result of such concentrated rainfall and rising temperatures, one of the greatest challenges Swaziland faces is security of food supply.

While an overarching climate change policy strategy is yet to be completed, the responsibility for coordination of climate change actions falls to the Swaziland Meteorological Services division under the Ministry of Tourism and Environmental Affairs. In 2010, the Ministry established the National Climate Change Committee (NCCC), which comprises various government ministries. The NCCC aims to build on previous policies that encompassed climate change considerations such as the draft National Energy Policy Implementation Strategy, Comprehensive Agriculture Sector Policy and draft National Biodiversity Conservation and Management Policy. Despite the fact that Swaziland lacks a single and integrated climate change policy, Prime Minister Dlamini reaffirmed at COP 18 in Doha that Swaziland is committed to achieving the goals of the UNFCCC. He emphasised that climate finance will need to play an important role as Swaziland lacks the resources to support the goals of the Convention by itself.

## Projects and Actions

### Support to water and sanitation in Swaziland An integrated approach to water management

The European Union has provided EUR 12 million for the project which is being implemented over 7 years. The project will support the expansion of the existing network of treated drinking water to include an additional 46,000 people in Siphofaneni (Lubombo region) and Somnotongo (Shiselweni). The sites have been selected based on need, social acceptability, feasibility, and financial and technical considerations. Good quality preliminary designs have been developed by the Swaziland Water Services Corporation (SWSC), and the estimated costs are EUR 5.3 million and EUR 5 million respectively. It will also ensure the drinkable water supplied to consumers through the water kiosks is not subsequently contaminated. This will be achieved by improving basic sanitation and hygiene. Finally, the project will provide capacity building to the Department of Water Affairs.

### Switching to natural refrigerants in the manufacture of refrigeration equipment

#### Replacing halogenated refrigerants

Germany's Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) has provided a grant of EUR 1.4 million for the project. The implementing agency, GIZ, has worked with a local manufacturer to replace halogenated refrigerants with natural, hydrocarbon-based technology that are less greenhouse gas intensive. The project also serves an industry model for energy efficiency, with new appliances 27% more energy efficient than those produced before completion of the project.

## National Strategies and Reports

- Second National Communication to UNFCCC (2012)
- Establishment of National Climate Change Committee (2010)

Population:

**1.4 million**

GDP per capita:

**USD 5,700**

Annual carbon dioxide  
emissions:

**1.0 Mt**

Carbon dioxide emissions  
per capita:

**863 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2012**

# Tanzania



Tanzania is the largest country in East Africa. The majority of the country has a tropical climate, with the central and northern zones being semi-arid. Increasing temperatures, shorter rain periods and declining rainfall are becoming more common throughout the country. Tanzania has experienced droughts, which have led to soil degradation and to decreased yields of major crops such as maize. As agriculture, including livestock, is the main economic sector, it means the effects of climate change will be felt throughout the economy. Deforestation is increasing due to overgrazing, wildfires and clearing for agriculture. The Government adopted a new National Climate Change Strategy in 2012. While the main objective is to strengthen climate resilience in Tanzania through adaptation, the Strategy also covers mitigation and looks at key economic and natural resource-based sectors such as agriculture, energy, industry, infrastructure, water and forestry. The Strategy is seen as a contribution to the sustainable development and green-growth agenda and it complements the Five Year Development Plan 2011/12 to 2015/16. In a statement to UNFCCC COP 19, President Kikwete confirmed that Tanzania had set aside millions of square kilometres of land as forest reserves and national parks for environmental management purposes.

## Projects and Actions

### Support to formulate a National Climate Change Strategy

#### Climate change policy development assistance

The Danish International Development Agency's (Danida) Environment Sector Programme Support ran from 2007 to 2012 and had an overall budget of DKK 180 million (approximately USD 32 million). As a main activity, Denmark supported the development of the Tanzanian National Climate Change Strategy (see above). In addition, Danish funding has been used in urban environmental management in the municipalities of Tanga, Mwanza, Arusha, Kigoma, Mtwara and Dodoma as part of the Tanzania Strategic Cities Project. Support for natural resources management has also been provided, for example to reform Tanzania's forest administration service.

### Establishment of eco-villages

#### GCCA projects for green development

Through the Global Climate Change Alliance (GCCA), the EU has supported three projects, implemented in three different ecosystems in Tanzania. These projects aim to increase the capacity of the most vulnerable communities to adapt to the adverse effects of climate change through sustainable use of natural resources. At the core of the project is the concept of the eco-village, it provides a model for green development, promoting food security, increasing resilience and the ability to adapt to climate change. This happens in a community-led and community owned manner, with great potential for replication in other parts of the country. The EU will continue supporting this approach in Tanzania through a second phase of the GCCA with a budget of EUR 8 million. Between four and seven new projects are expected to start in the second half of 2014.

### Protection of mountain forests

#### Management, eco-tourism and reforestation

The German-funded EUR 2.2 million project offered training for park rangers on forest management in the context of climate change in the Eastern Arc Mountains. The forest management plan was supported, infrastructure was developed and expanded in protection areas, and training was provided to local people in beekeeping, agroforestry, reforestation and eco-tourism.

## National Strategies and Reports

- National Climate Change Strategy (2012)
- National Adaptation Programme of Action (2007)
- Initial National Communication to the UNFCCC (2003)

Population:

**48.3 million**

GDP per capita:

**USD 1,600**

Annual carbon dioxide emissions:

**6.9 Mt**

Carbon dioxide emissions per capita:

**153 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2003**

# Togo



Togo is located on the Gulf of Guinea, between Ghana and Benin, and has an area of approximately 57,000 km<sup>2</sup>. The southern coastal tip of the country has a subtropical climate, while the northern half has a semi-arid climate influenced by the harmattan winds that blow in from the Sahel. The economy of Togo is dominated by the agricultural sector, which accounts for two-thirds of the country's workforce. The dependence of farmers on rain-fed systems has contributed to high rates of economic and environmental vulnerability. The majority of Togo's population lives below the poverty line, and the country is dependent on imported fossil fuels and electricity to meet its energy needs.

The Government of Togo recognises energy, water, agriculture, health and coastal zone activity as being the most climate-vulnerable sectors in the country. This vulnerability is expected to increase in the future, as temperatures rise and rainfall becomes increasingly unpredictable. In fact, Togo is already experiencing increased occurrences of extreme flooding, drought and coastal erosion. In response, Togo published its National Adaptation Programme of Action (NAPA) in 2009. The NAPA identifies several priority options for adaptation, including the capture of surface water by multipurpose dams, irrigation systems, improved agro-meteorological information, new cultivation techniques, early warning systems for flooding, disease prevention and coastal protection.

## Projects and Actions

### Rural electrification to South Togo

#### Enhancement of socio-economic activities for citizens in 12 towns in Southern Togo

The aim of this EUR 2.3 million project, funded under the EU Energy Facility, is to link 12 communities in Southern Togo to the electricity grid. This will provide them with an energy supply that will serve as a catalyst for wealth creation and poverty alleviation. A key task is to put in place agreements containing terms for the supply, construction and commissioning of the necessary infrastructure. The cross-border interconnection from Ghana is expected to provide power to over 16,000 people.

### Building capacity in conducting feasibility and impact assessment studies

#### Increasing ability to develop renewable and energy efficiency projects

After a successful pilot project, which provided an excellent training environment, the Global Climate Change Alliance (GCCA) Climate Support Facility (CSF) was asked to carry out a three-week training mission. This used a 'learning by doing' approach to increase the skills of the African Biofuel and Renewable Energy Company's (ABREC's) staff in designing, organising and implementing feasibility and impact-assessment studies. Although the mission intended to focus on one specific pilot project (light bulbs), the CSF expert analysed and commented on several draft feasibility studies undertaken by ABREC. As a result of the training, it was concluded that ABREC would need further support at two levels – first, an audit of its organisation and internal procedures for management of projects and, second, more technical assistance for studies and institutional support activities.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2010)
- National Adaptation Programme of Action (2009)

Population:

**7.2 million**

GDP per capita:

**USD 1,100**

Annual carbon dioxide emissions:

**1.5 Mt**

Carbon dioxide emissions per capita:

**256 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2010**



# Tunisia



Located on the south Mediterranean coast, Tunisia is the smallest country in North Africa, with a total area of approximately 160,000 km<sup>2</sup>. Tunisia's climate is temperate in the north along the coast, and dry and semi-arid in the south where it meets the Sahara desert. Tunisia's economy is highly diversified, with agriculture and fisheries, industry and the service sector accounting for 12%, 33%, and 55% of GDP respectively. The combination of a strong industrial base and the potential for solar energy installations makes Tunisia an ideal location for renewable energy projects.

Tunisia is in the process of developing a National Climate Strategy to reduce greenhouse gas emissions and climate change vulnerability. The main pillar of the Strategy is the Tunisian Solar Plan (PST) that aims to reduce energy demand by 40% by 2030 and increase the share of renewable energy by 30% by 2030. The PST has already identified 40 projects for the first period of implementation (2010 to 2016). The PST is designed as a unilateral and internationally supported Nationally Appropriate Mitigation Actions (NAMAs), along with NAMAs in the wastewater and agriculture sectors that are under development in Tunisia. In January 2014, Tunisia became only the third country after Ecuador and Dominican Republic to embed the importance of addressing climate change in the country's constitution.

## Projects and Actions

### Disseminating innovative solar thermal applications in industry

#### Mitigation using renewables

Germany, in partnership with Tunisia's Ministry for Industry & Technology and the National Agency for Energy Conservation, is promoting greenhouse gas mitigation in Tunisian industry. This five-year, EUR 2.5 million GIZ-funded project, which runs from 2012 to 2017, will pilot the use of solar process heat in one of Tunisia's large industrial firms. It will also help establish a national support programme for solar process heat, train experts and raise awareness among other industrial enterprises to launch further solar process heat schemes in the future.

### Support for the Mediterranean Solar Plan and Union for the Mediterranean Initiatives

#### Supporting countries in the MENA region to exploit domestic renewables

In 2011, GIZ launched a 4-year programme to support Tunisia, Algeria, Libya and Morocco in developing national political frameworks for the deployment of renewable energy. The project aims to create an enabling environment for the large-scale deployment of technologies, such as solar power, that could significantly contribute to sustainable energy supply in the region. It also aimed to develop strategies for the participation of civil society and the private sector in the lifespan of large-scale projects and strategies to maximise local value-chain development. This project is a precursor to the setting up of national renewable energy plans, such as Tunisia's PST.

## National Strategies and Reports

- Second National Communication to the UNFCCC (2014)
- International Partnership on Mitigation and MRV – Tunisia

Population:

**10.8 million**

GDP per capita:

**USD 9,700**

Annual carbon dioxide emissions:

**25.8 Mt**

Carbon dioxide emissions per capita:

**2,470 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2014**

# Uganda



Uganda is a landlocked country where agriculture provides employment for more than 80% of the workforce and is the main economic sector of the country. With two rainy seasons a year, fertile soil and a warm, tropical climate, Uganda's geographical characteristics offer great potential for agricultural activities. Yet, some parts of the country are vulnerable to severe droughts and flooding, which have the potential to lead to food shortages and water scarcity. During COP 19, Uganda highlighted that 'extreme weather events resulting in landslides in the east of the country' were now being continually witnessed as is 'unending flooding in the highland ecosystem of the Rwenzori Mountains'. Uganda also faces a high risk of drought in the north of the country, which is considerably drier than the south.

Uganda's Ministry of Water and Environment has established a Climate Change Unit, which coordinates the implementation of the UNFCCC, provides a platform on climate risk management and notifies farmers of weather projections. The country's National Climate Change Policy aims to enhance resilience of ecosystems to the challenges posed by climate change, to increase public awareness of climate change and put in place an enhanced institutional framework to address climate change. The Government has recently developed 40 climate change-related Nationally Appropriate Mitigation Actions (NAMAs) with priority NAMAs in the agriculture, energy, transport and waste sectors.

## Projects and Actions

### Global Climate Change Alliance (GCCA) in Uganda

#### Strengthening adaptation to climate change

The GCCA and the Republic of Ireland have allocated EUR 11 million for the sustainable improvement of livelihoods and food security in rural Uganda. This programme aims to strengthen the resilience of rural communities and reduce vulnerability in the agriculture and water sectors, which have been identified as being particularly vulnerable to drought and climate variability. The programme also aims to build the capacity of communities, commercial farmers and the Government of Uganda to respond to climate change. It will run from 2012 to 2016.

### Low Emission Capacity Building Programme (LECBP)

#### GHG inventories, NAMAs and MRV systems

The LECBP has three main planned outputs in Uganda. Firstly, development of a robust national system for the preparation of GHG emission inventories to be established at national level. Secondly, NAMAs formulated within the context of national development priorities. Thirdly, the design of monitoring and reporting systems to support identified NAMAs that are linked to the GHG inventory system being developed. The project activities to deliver the outputs run from 2011 to 2014 and are implemented in collaboration with the Ministry of Water and Environment, National Climate Change Unit and the National Environment Management Authority.

## National Strategies and Reports

- National Climate Change Policy (2013)
- National Development Plan (2010)
- National Adaptation Programme of Action (2007)
- National Communication to the UNFCCC (2002)

Population:

**34.8 million**

GDP per capita:

**USD 1,400**

Annual carbon dioxide emissions:

**3.8 Mt**

Carbon dioxide emissions per capita:

**113 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2002**

# Zambia



Zambia is landlocked and shares boundaries with eight other countries. It has a sub-tropical climate with three distinct seasons – a hot, dry season; a cool, dry season; and a rainy season. In recent decades, the country has experienced a number of environmental hazards, including drought, seasonal floods, flash floods, extreme temperatures and dry spells. Droughts and flooding, in particular, have increased in frequency, intensity and magnitude over the last 25 years and have adversely impacted food and water security, water quality, energy and the sustainable livelihoods of rural communities.

Zambia's National Climate Change Response Strategy is being developed and will provide a cross-cutting policy and institutional framework from which to develop a central climate change policy. In the meantime, climate change policy and programmes have been incorporated into the Sixth National Development Plan (2011 to 2015), with emphasis on the agriculture, energy and transport sectors. At COP 19 in Warsaw, the Zambian delegation also emphasised the importance of forests in mitigating emissions from land-use change. The Ministry of Tourism, Environment and Natural Resources has been designated as the national focal point for forestry and REDD+ projects.

## Projects and Actions

### Conservation of the Miombo Dry Forest through improved management

#### Forestry Conservation Project

The purpose of this German-funded project was to help set up the West Lunga National Park in Zambia and new protected areas surrounding it. Project partners also carried out measures to prevent and control forest fires, which have been an increasing risk in the dry evergreen forests due to decreasing rainfall that has been attributed to climate change. The main results of the project were the establishment of protected areas, increases in annual carbon sequestration and provision of infrastructure for protected areas. The project ran from 2008 to 2010 and was funded by a EUR 2.1 million grant from the German International Climate Initiative.

### Low Emission Capacity Building Programme (LECBP) in Zambia

#### Targeting the energy, waste, agriculture and industrial sectors

The LECBP aims to support and implement low-emission, climate-resilient development, and to strengthen the country's capacity to address the challenge of climate change. In Zambia, the LECBP Implementing Agency is the Ministry of Lands, Natural Resources and Environmental Protection, and the programme's timeframe is 2011 to 2014. Planned outputs of the project are: the design of a sustainable national greenhouse gas inventory management system; up to four Nationally Appropriate Mitigation Actions (NAMAs) developed in the energy, agriculture, industrial, and waste management sectors; and monitoring, reporting and verification (MRV) systems designed to support implementation and evaluation of NAMAs.

## National Strategies and Reports

- National Adaptation Programme of Action (2007)
- Initial National Communication to the UNFCCC (2004)

Population:

**14.2 million**

GDP per capita:

**USD 1,700**

Annual carbon dioxide emissions:

**2.4 Mt**

Carbon dioxide emissions per capita:

**186 kg**

UNFCCC groups:

**G77, LDC Group**

Last NatComm:

**2004**

# Zimbabwe



Zimbabwe is landlocked and bordered by the Zambezi River to the south and the Limpopo River to the north. The climate in Zimbabwe is sub-tropical, with variable rainfall across the country's central plateau and eastern highlands, and a mean annual temperature of 18°C. Zimbabwe's main vulnerability to climate change lies in the agricultural sector. Agriculture accounts for 66% of formal employment in Zimbabwe, contributing approximately 15% of GDP. Yet, mean annual rainfall has declined by 5% over the second half of the 20th century and temperatures in Zimbabwe are expected to rise faster than the global average – leading to further strain on water resources for agriculture, rangelands, biodiversity and human consumption. Speaking at COP 19 in Warsaw, Zimbabwe's Minister of Environment, Water and Climate, the Honourable Saviour Kasukuwere, said that such trends will "hamper my country's efforts to achieve the objectives of the Millennium Development Goals".

In 2013, Zimbabwe outlined its National Climate Change Response Strategy which aims to build a 'climate change resilient nation' through targeted actions. These include plans for adaptation action and disaster risk management, mitigation and low-carbon development, capacity building, governance, finance and investment, technology development and transfer, and communication strategies.

## Projects and Actions

### Increasing resilience to climate change – local plants for local people

Hilfswerk Austria International (HAI) and ECHO

Maize is the staple crop in Zimbabwe's Nyanga district, but increased rainfall variability and more frequent droughts have led to reductions in yields for Nyanga's farmers. HAI is working with vulnerable communities to build resilience to climate change through the promotion of crop diversification. The project has supported the establishment of 50 communal gardens that serve as teaching grounds to promote experience sharing and best practice. Overall, the project is working with 5,000 people in 10 rural villages in Nyanga.

### Community managed micro hydropower in Southern Africa

#### Renewable energy

Less than a quarter of the population in rural areas of Zimbabwe have access to electricity. This hinders delivery of socio-economic services, such as health and education, and limits economic activities. To change this situation, the project aims to develop viable models for producing and delivering electricity through micro hydropower systems. The European Union has contributed 75% of the EUR 1.6 million budget that has the objectives of adapting and applying community-based models in establishing micro hydropower systems in Zimbabwe, Malawi and Mozambique. The project ran from 2008 to 2012 and among its achievements was the development of a tariff calculator that was designed and adopted by the Rural Electrification Agency in Zimbabwe.

## National Strategies and Reports

- National Climate Change Response Strategy (2013)
- Second National Communication to the UNFCCC (2013)

Population:

**13.2 million**

GDP per capita:

**USD 600**

Annual carbon dioxide emissions:

**9.4 Mt**

Carbon dioxide emissions per capita:

**750 kg**

UNFCCC groups:

**G77**

Last NatComm:

**2013**

# European Union and Member State Funded Regional Projects

## The Global Climate Change Alliance (GCCA)

### Multi-donor programme

The GCCA, an EU initiative, was launched in 2007 and is coordinated by the European Union. It aims to strengthen dialogue and cooperation on climate change with developing countries most vulnerable to climate change, and to support their efforts to develop and implement adaptation and mitigation responses. It focuses on the least developed countries and small island development states. These countries have contributed the least to greenhouse gas emissions, but are often the most affected by climate change and have limited resources to address the related challenges. The GCCA is a global alliance, involving a wide range of partners across the world with a focus on helping the most vulnerable developing countries to more effectively address the challenges associated with climate change.

## The Great Green Wall for the Sahara and the Sahel Initiative

### Multi-donor programme

The Great Green Wall for the Sahara and the Sahel Initiative (GGWSSI), launched by African Union Commission (AUC) in 2007, is a unique programme focusing on the Saharan and Sahelian dry land ecosystems and the reduction of local communities' vulnerability to climate change, climate variability, land degradation and drought. Following the adoption of a Regional Harmonised Strategy in 2013, the AUC works with 13 African countries\* on developing national GGWSSI actions plans and project portfolios at country and cross-border levels supporting sustainable, income-generating land management practices targeting adaptation to and mitigation of climate change, biodiversity conservation and livelihood improvement. This is done in collaboration with the EU, the United Nations Organization for Food and Agriculture, the Global Mechanism of the United Nations Convention to Combat Desertification and other partners.

The results achieved with support from the European Union funded project (EUR 1.4 million contribution) were:

- Translation of the Regional Harmonized Strategy into a regional capacity building program and communication plan
- Development of a platform for knowledge management, experience-sharing and dissemination of best practices

- Development and endorsement of National GGWSSI Action Plans in several countries
- Start of field action in several countries aiming to transform degraded lands into productive landscapes.

Further support is foreseen in the EU budget 2014-2020.

\* Partner countries: Algeria, Burkina Faso, Chad, Djibouti, Egypt, Ethiopia, Gambia, Mali, Mauritania, Niger, Nigeria, Senegal and Sudan.

## Adaptation for Smallholder Agriculture Programme (ASAP)

### Multi-donor programme

Smallholder farmers are often the most vulnerable group affected by the adverse effects of climate change. Responding to this challenge, the International Fund for Agricultural Development (IFAD) set up ASAP in 2012. It is a 5-year multi-donor programme. Donors include Canada, Belgium, the Netherlands, Norway, Sweden, Switzerland, Finland and the UK. Investments are aimed at a variety of areas including in small-scale water harvesting, providing farmers with improved seeds that are drought tolerant and helping them access markets. ASAP won a 2013 Momentum for Change Lighthouse Activities award. This was announced by Ban Ki-moon during COP 19 in Warsaw. The award recognised IFAD's innovative work in using climate finance to support adaptation activities to deliver social and economic benefits to smallholder farmers.

## The Low Emission Capacity Building Programme (LECBP)

### Multi-donor programme

The Low Emission Capacity Building Programme is supporting 25 countries around the world, of which eight are in Africa. The programme aims to enhance the capacity of the public and private sectors to scale-up mitigation action through the development of Low Emission Development Strategies (LEDS), Nationally Appropriate Mitigation Actions (NAMAs) and the strengthening of the underlying systems for measurement, reporting and verification (MRV) and national greenhouse gas inventories. LECBP is supported by the European Commission, Germany and Australia.



## Climate-Smart Agriculture (CSA)

### EU and UN Food and Agriculture Organisation

The project, which is supported by co-financing from the EU of EUR 3.3 million and EUR 2 million from the Food and Agriculture Organisation of the UN, is implemented in three countries – Vietnam, Malawi and Zambia. The timeframe for the project is 2012 to 2015. The four main objectives are to:

- Provide an evidence base for identifying, developing and implementing practices, policies and investments for CSA
- Develop a country-owned strategic framework to guide action and investment on CSA
- Formulate CSA investment proposals and identify possible financing sources
- Build capacity to plan, implement and finance CSA.

To achieve these objectives, the project supports research and policy activities, and collaboration with international research and policy institutions including the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

## Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED)

### UK DFID

BRACED plans to build the resilience of over 5 million people to extreme weather events. It has a strong focus on empowering women to reduce their vulnerability to the impacts of extreme weather. By helping improve national policies and institutions to better integrate disaster risk reduction and adaptation, the programme is expected to indirectly help millions more people. BRACED is supporting a consortia led by a non-governmental organisation (NGO) to scale-up action in the Sahel, Burma, Ethiopia, Kenya, Mozambique, Nepal, Pakistan and Uganda. This is the largest global initiative between NGOs, the private sector, and research and local organisations that aims to deliver results at scale and learn what works best.

## Energy and Environment Partnership programme

### UK DFID

The Energy and Environment Partnership (EEP) programme with Southern and East Africa aims to support increased access to modern, clean, affordable and reliable energy services, and supports the take-up of renewable energy and energy efficiency. The UK Government provided GBP 4.5 million of fast start finance between 2010 to 2012 to the EEP programme, which operates through partnerships with the governments of: Botswana, Burundi, Kenya, Lesotho, Mozambique, Namibia, Rwanda, Seychelles, South Africa, Swaziland, Tanzania, Uganda and Zambia.

## Engaging banks in financing energy transition projects in East Africa

### AFD as lead financier

The French Agency for Development (AFD) has extended environmental credit lines to two local banks in Kenya (USD 39 million) for the financing of selected renewable energy and energy efficiency investments. The aim is to achieve the diversification of energy resources in the East African region and, thus, help the region's transition towards renewable energy solutions that are technically, economically and financially viable. Similar facilities will be negotiated in other countries in the region. The target investments are mainly projects of a maximum of USD 13 million in hydroelectricity, biomass, biogas, solar and wind power.

## Sustainable forest management in the Congo and Amazon basins

### French Global Environment Facility

The EUR 3.3 million project, (EUR 1.2 million co-financed by the French Global Environment Facility), aims to preserve the biodiversity of the Congo and Amazon forest basins. As a result of the project, carbon dioxide emissions will be curbed by preventing deforestation and degradation. Furthermore, the project will promote the integration of sustainable public forest policies into the future REDD mechanism, notably by encouraging exchanges of experience between the two regions.

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