

# National Adaptation Plans in focus: Lessons from Tanzania

The United Republic of Tanzania is one of the largest countries in East Africa. Besides its mainland, the country also includes the semi-autonomous archipelago of Zanzibar, which lies roughly 35 km off the mainland's coast<sup>1</sup>, with total land areas of 881,289 km<sup>2</sup> and 2,460 km<sup>2</sup>, respectively.<sup>2</sup> It is bordered by Kenya and Uganda to its north, Rwanda, Burundi, Democratic Republic of Congo, and Zambia to its west, Malawi and Mozambique to its south, and the Indian Ocean to its east. As of 2018, almost 60 percent (33.78 million) of its population of around 56.32 million live in urban areas<sup>3</sup>. Tanzania is bestowed with a relative abundant level of natural resources and has comparative advantages in the production of many crops, such as coffee, tea, maize, rice, and cashew nuts, amongst others. However, as of 2016, more than 55 percent of the population are multidimensionally poor, meaning that they suffer overlapping deprivations in the areas of health, education, and standard of living. Despite its low human development rank (159 out of 189 countries and territories), the country made significant progress over the past 30 years, with life expectancy at birth increasing by 14.8 years, mean years of schooling by 2.4 years, and expected years of schooling by 2.5 years. Similarly, its Gross National Income (GNI) per capita increased by about 88.2 percent between 1990 and 2018.4

Tanzania's climate is characterized by the two main rain seasons *Masika* (long rains) and *Vuli* (short rains), which last from mid-March to the end of May and mid-October until early December, respectively. Average temperatures in the central, northern and western parts of the country range between 20°C to 30°C, while they reach 27°C to 29°C on average along the coast and its islands, with temperatures highest between December and March. In the mountain areas and highland region in southwestern Tanzania temperatures can drop to 15°C at night and can even go below zero in the months of June and July.

"Water scarcity, droughts and floods significantly threaten people's livelihoods and seriously challenge many of Tanzania's development goals. The Tanzanian government has recognized the urgency to act and to adapt to what is forecasted to become only more intense in the near future."

Ms. Catherine G. Bammwenzaki, Assistant Director for EIA and Climate Change, Vice President's Office - Division of Environment

.....

### **Climate change risks**

In recent years, the country experienced a significant change in its climatic conditions, including increasing temperatures, rising sea levels, intensified rainfall patterns, and longer dry spells. This puts especially the marginalized 75 percent of its urban population living in informal settlements at high risks from extreme heat waves, water shortages, and flooding. Livelihoods and food supply highly depend on rainfed agriculture which makes up around 80 percent of total agricultural output. Around 25 percent of Tanzania's Gross Domestic Product (GDP) is generated by the agriculture sector, which employs between 75 to 80 percent of the population. Especially low-input

smallholder farmers are at risk from unpredictable weather conditions and yields for many of the country's critical crops are forecasted to decline in the decades ahead, further threatening food security and livelihoods. Likewise, coastal and inland fisheries are increasingly placed in jeopardy by sedimentation after heavy rains and warming ocean and freshwater temperatures. Around 25 percent of Tanzania's population lives along its coastlines, and are more and more at risk of inundation, salinisation, and storm surges. The same holds true for the country's coastal infrastructures and ecosystems.<sup>5</sup>





### Policy, planning and budgeting

The Government of Tanzania has taken necessary steps at addressing climate change risks, taking into account local and regional needs.

The country is a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), and has ratified the Paris Agreement in May 2018. To this end, the Government has taken forward several initiatives, including submission of its First (2003) and Second (2015) National Communications to the UNFCCC, the National Adaptation Programme of Action (2007), the National Climate Change Strategy (2012 current under review), the national REDD+ strategy (2013), The Zanzibar Climate Change Strategy (2014) and the Intended Nationally Determined Contributions-INDCs (2015) refined to Nationally Determined Contributions (2020), awaiting government approval before submission to the UNFCCC. It has received strong support by international development partners, and the country's five-year National Development Plan 2016/17-2020/21 recognizes climate change as a threat to national development, which is important for defining the financing of relevant programmes.

Tanzania's National Climate Change Strategy (2012-2018; currently under revision) constitutes a significant milestone for adequately addressing the adverse impacts of climate change and variability on the country's economic, social, and physical spheres. It intends to provide a sound platform to integrate climate change considerations into key sectoral strategies and outlines necessary roles and responsibilities to that effect. While the strategy covers adaptation, mitigation, and cross-cutting issues, adaptation is presented as the highest priority for Tanzania. It focuses on critical strategic sectors, including water, coastal and marine environment, forestry, wildlife, agriculture and food security, human health, tourism, energy, industry, livestock, fisheries, infrastructure, human settlements, and land use, and outlines potential measures for adaptation.

### Preparing for adaptation planning

In recent years, the government has taken necessary steps to address the adverse effects of climate change and its wider environmental consequences. The country acknowledges that successfully dealing with these issues requires a wide range of measures. Its Second National Communication to the UNFCCC (2015) presents risks and vulnerabilities for its key economic sectors water, health, agriculture, rangelands and livestock, forestry, wildlife, tourism, and coastal and marine environment. Further, for each sector the government has analyzed detailed potential impacts that climate change is expected to have and has developed standard responses to counter climate variability.

Tanzania's National Adaptation Programme of Action, the Hyogo Framework of Action 2005-2015, the Agriculture Climate Resilience Plan 2014-2019, the National Climate Change Strategy and Zanzibar Adaptation Strategy have provided strategic entry points for the government for the initiation of its National Adaptation Planning (NAP) process. The NAP process was officially established in July 2015 with a national training for ministers that led to the launch of the NAP Roadmap. In May 2016, a national multi-sector, multi-agency NAP team with around 30 experts was formed and was supported by the institution of a NAP Secretariat based at the Vice-President's Office, assisted by GIZ. Subsequently, capacity-building trainings and workshops for the national NAP team were conducted to ensure ownership and coordination among government agencies. A comprehensive stocktaking of climate information, vulnerabilities, capacities and gaps at national and sub-national levels has been carried out in 2017 and 2018, involving the environment officers of all 185 local councils of Tanzania.

#### Implementation of adaptation actions

Tanzania's government has implemented various climate change-related programmes drawn from the strategies discussed above, using both national and international resources. These include (in a non-exhaustive list):

- Planning for Resilience in East Africa Through Policy, Adaptation, Research and Economic Development (PREPARED), USAID Regional (2012-2018): Working with the East African Community (EAC) and its Partner States to strengthen the management of freshwater ecosystems shared across borders and improve access to and supply of drinking water and sanitation services;
- Strengthening Climate Information and Early Warning Systems in Tanzania (SCIEWS), UNDP (2014-2018): Strengthening the weather, climate, and hydrological monitoring capabilities, early warning systems, and available information for responding to extreme weather and planning adaptation to climate change;
- Integrated Approaches for Climate Change Adaptation in the East Usambara Mountains, EU (2015-2019): Increasing and diversifying incomes, strengthening resilience, and reducing vulnerability to climate change;
- Water Resources Integration Development Initiative (WARIDI), USAID (2016-2021): Improving the management of water resources, improving sanitation, creating livelihoods in water and sanitation services, and promoting resilient communities in the face of a changing climate.



#### Support programmes

The advancement of Tanzania's NAP process has been supported by GIZ through joint support from the GIZ Climate Finance Readiness Programme and the GIZ Climate Policy Support Programme, and by the UNDP-UN Environment NAP GSP.

#### Challenges

The Strategy and Roadmap for the NAP process in Tanzania highlights that there is i) a lack of adequate information on climate change impacts and vulnerabilities, ii) only limited levels of awareness and understanding of climate change issues among stakeholders, iii) insufficient technical capacity to address climate change impacts, iv) a lack of medium- and long-term interventions, v) limited vertical and horizontal coordination among different stakeholders, vi) a risk of uncoordinated implementation of sectoral adaptation priorities, vii) and a weak linkage between national policy making and the international processes. In addition, civil society involvement has been limited during the planning processes.

### July 2015

A national training for ministries, conducted jointly by the UNDP-UN Environment National Adaptation Plan Global Support Programme (NAP-GSP), the UNDP Tanzania Country Office, and GIZ, resulted in a surge in government support for climate adaptation-related action.

### August 2016

The Tanzania GCF National Designated Authority officially submits a written request to receive support from the NAP-GSP to develop a Green Climate Fund (GCF) Readiness and Preparatory Support Proposal for additional adaptation funding.

# May – September 2018

A participatory process to update Tanzania's Intended Nationally Determined Contribution from 2015 and to align it with the NAP process has been undertaken by the NAP Team supported by GIZ in collaboration with UNDP.

### December 2018

The Ministry of Health, supported by the NAP team and funded by GIZ, WHO, and DFID, finalized Tanzania's Health NAP to Climate Change 2018-2023.

# December 2018

Submission of a Readiness and Preparatory Support Proposal for adaptation planning to the GCF.

#### Successes

While the country lacked predictable sources of financing the adaptation planning process and its implementation, support provided by the GIZ between 2016 until early 2019 addressed this barrier by strengthening internal funding capacities. Further, together with the support of international development partners, the government established the NAP Secretariat, hosted by the Vice President's Office. The secretariat has supported several workshops and training events to capacitate key sectors and agencies, as well as its NAP Team. The team, consisting of around 30 national experts, intends to ensure a well-coordinated implementation of the NAP process. To increase awareness amongst stakeholders and ensure government ownership, the team conducted awareness raising events and engaged all 185 councils, both in Tanzania mainland and Zanzibar. Other successes include the formulation of a NAP Roadmap well as a NAP for the Health sector and the accreditation of Tanzania's first National Implementing Entity to an international climate fund, namely the National Environment Management Council (NEMC). NEMC got accredited to access funds from the Adaptation Fund in 2018.

### May 2016

Inception of the NAP process and kick-off for a two-year bilateral NAP support project funded by the German Ministry for Economic Cooperation and Development (BMZ), co-funded by USAID and implemented by GIZ<sup>6</sup>. The inception was followed by the formation of the NAP Secretariat and a multi-sector, multi-agency NAP Team of 30 experts.

### May 2017 – November 2018

A comprehensive NAP stocktaking process takes place including regional workshops involving all 185 local councils in mainland Tanzania and Zanzibar as well as all Ministries to create awareness, assess vulnerabilities and capacities, and identify needs and ongoing adaptation actions.

### September 2018

A workshop was facilitated by the NAP-GSP to identify early priorities for the NAP strategy and provide technical support to the adaptation focal points at the Vice President's Office.

### March – May 2019

Development of a climate change statistics report to track implementation of SDG 13.

# The process to formulate and implement NAPs

Tanzania's Division of Environment of the Vice President's Office is the national focal point on climate change under the United Nations Framework Convention on Climate Change and is responsible for the overall coordination and execution of climate change and environmental initiatives in the country. As the host of the NAP Secretariat its mandate includes the oversight and coordination of the multi-agency NAP Team and the implementation of cross-sectoral measures in its NAP strategy. It has been working closely with international partners alongside the Ministries for Agriculture; Livestock and Fisheries; Energy and Minerals; Finance and Planning; Health, Community Development, Gender, Elderly, and Children; Natural Resources and Tourism; Water and Irrigation; corresponding Ministries from Zanzibar, as well as the Tanzania Meteorological Agency and National Environment Management Council, to conduct a consultative NAP process. The process aims at improving cross-sectoral coordination, integration of adaptation into development planning, and strategic access to climate finance.



#### **Opportunities and next steps**

The Government of Tanzania will continue to advance the NAP process, focusing on addressing capacity gaps and mainstreaming adaptation into national and sectoral development planning. Its NAP priority targets are still to be elaborated. Further, the country has the opportunity to increase the civil society involvement to ensure the most effective adaptation planning process. As additional funding is made available, the Government will continue to operationalize measures presented in its national strategies on climate change adaptation. Besides, an additional opportunity arises through the new National Framework for Climate Services<sup>7</sup> supported by WMO and associated climate services research projects including a cooperation with the Potsdam Institute for Climate Impact Research.<sup>8</sup>

#### Key documents

- First National Communication to the UNFCCC (2003)
- National Adaptation Programme of Action (2007)
- National Climate Change Strategy (2012)
- National Environmental Action Plan (2013)
- <u>National REDD+ Strategy (2013) · Zanzibar Climate Change</u> <u>Strategy (2014)</u>
- Agriculture Climate Resilience Plan 2014-2019 (2014)
- Second National Communication to the UNFCCC (2015)
- Intended Nationally Determined Contributions (2015)
- NAP Stocktaking Report (2018)

- <u>Health–National Adaptation Plan (HNAP) to Climate Change</u> in Tanzania 2018 – 2023 (2018)
- First Nationally Determined Contributions (2018)
- National Framework for Climate Services (2019)

#### Notes

- <sup>1</sup> The World Bank (2019). Zanzibar Energy Sector Transformation Project. URL: http://documents.worldbank.org/curated/e n/559931562558781785/text/Concept-Project-Information-Document-PID-Zanzibar-Energy-Sector-Transformation-Project-P169561.txt
- <sup>2</sup> Republic of Tanzania (2014). Second National Communication to the UNFCCC. URL: https://unfccc.int/sites/default/files/r esource/tzanc2.pdf
- <sup>3</sup> World Bank, The World Bank Open Data.
- URL: https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=TZ
- <sup>4</sup> United Nations Development Programme (2019). Human Development Report 2019. URL: http://hdr.undp.org/sites/all/themes/hdr\_theme/country-notes/TZA.pdf
- <sup>5</sup> Republic of Tanzania (2014). Second National Communication to the UNFCCC. URL: https://unfccc.int/sites/default/files/r esource/tzanc2.pdf
- <sup>6</sup> GIZ (2018). Support for the National Adaptation Plan process. Factsheet.
- URL: https://www.adaptationcommunity.net/wp -content/uploads/2017/11/NAP-Factsheet-Tanzania-for-COP23-GIZ-2017.pdf
- <sup>7</sup> https://www.climatelearningplatform.org/sites/default/files/resources/national\_framework\_for\_ climate\_services\_tanzania\_final\_26\_july\_2018\_0.pdf
- <sup>a</sup> International Climate Initiative (IKI) (2019). URL: https://www.international-climate-initiative.com/ en/details/project/clim ate-capacity-building-risk-anticipation-and-minimization-3007
- <sup>9</sup> Global Climate Change Partnership (2011). The Economics of Climate Change in the United Republic of Tanzania. URL: http://economics-of-cc-in-tanzania.org/reportsandpublications.html
- <sup>10</sup> Global Climate Change Partnership (2011).
- <sup>11</sup> United Republic of Tanzania (2012). Tanzania Climate Change Strategy.
  <sup>12</sup> Mrema, S., Shamte, A., Selemani, M., & Masanja, H. (2012). The influence of weather on mortality in rural Tanzania: a time-series analysis 1999-2010. Global health action, 5, 33–43. doi:10.3402/gha. v5i0.19068 13 Global Climate Change Partnership (2011).

#### The 2005/6 drought had estimated costs of at least **1% of GDP**<sup>9</sup>

By 2030, annual cost of adaptation estimated at US\$1b

#### More than 70% of all

climate-related disasters are linked to droughts and floods 72% of variation in malaria is related to changing mean rainfall patterns **90%** of

national energy supply through wood fuel and charcoal is provided by forests

NAP-GSP

### About the NAP-GSP

The joint UNDP-UN Environment National Adaptation Plan Global Support Programme (NAP-GSP) was launched in June 2013, financed by the Global Environment Facility (GEF) Least Developed Countries Fund (LDCF), and the Special Climate Change Fund (SCCF). The NAP-GSP, together with partners, are assisting developing countries to identify technical, institutional and financial needs to integrate climate change adaptation into medium and long-term national planning and financing. The NAP-GSP provides technical expertise and guidance on country NAP processes, and opportunities for knowledge exchange on NAPs.

#### Email:

Rohini.Kohli@undp.org\_ Mozaharul.Alam@unep.org

For media enquiries / dissemination: Melanie.Pisano@undp.org

#### Website:

http://globalsupportprogramme.org/nap-gsp