



# National Adaptation Plans in focus: Lessons from Egypt



**The Arab Republic of Egypt** is located in the north-eastern corner of Africa and south-western Asia. The total land area is 1,002,000 km<sup>2</sup> and the Egyptian coasts stretch over 3,500 km.<sup>(1)</sup> About 43.1 percent of the almost 97 million inhabitants of Egypt live in urban areas and about 15 percent in coastal zones (World Bank, World Development Report, 2018).<sup>(2)</sup> The annual population growth rate is estimated to remain constant until 2040, when the Egyptian population should reach 116 million inhabitants. The economy is one of the most diversified of the Middle East and includes the agriculture, industry, tourism and service sectors. The service sector attracts 51 percent of Egypt's 26 million labour force followed by the agriculture sector (32 percent) and the industrial sector (17 percent).<sup>(3)</sup> The economy is gradually improving with the annual rates of GDP growth reaching 4.3 percent in 2015/2016, up from an average of only 2 percent during 2010/11-2013/14.<sup>(4)</sup> The overall budget deficit declined in the first half of 2017 to 5.4

percent of GDP, down from 6.4 percent in the same period in 2016.<sup>(5)</sup> Egypt is placed in the medium category of the human development index, ranking 111 out of 188 considered (UNDP, 2015).<sup>(6)</sup> High population density and growth, and rapid urbanisation place high pressure on the country's land and water resources. The general climate of Egypt is dry, hot, and desertic, with a mild winter season with rain over the coastal areas, and a hot and dry summer season. The only differences between the seasons are variations in daytime temperatures and changes in prevailing winds.<sup>(7)</sup>

*National adaptation planning is a driver towards sustainable transformation, for a decent life for all people.*

*Dr. Khaled Fahmy  
Minister of Environment, Arab Republic of Egypt*

## Climate change risks

Egypt is highly vulnerable to climate change impacts. According to the Intergovernmental Panel on Climate Change (IPCC), Egypt's Nile Delta is one of the world's three "extreme" vulnerability hotspots, and future projections indicate that Egypt will suffer from the following climate change impacts: sea level rise; water scarcity and deficit; and an increase in the frequency and intensity of extreme weather events such as heat waves, flash floods, heavy rains, sand and dust storms. This will lead to major impacts on infrastructure, beaches and fertile land in the Nile Delta as they are subject to erosion, salt water intrusion and inundation. Consequently, food security, human health, economy and ecosystems in Egypt are at risk.

Sectors which are projected to be particularly affected include water resources, agriculture and fisheries, health, housing and settlements, biodiversity, telecommunications, energy, tourism, as well as coastal zones and coral reefs. In the agriculture sector, crops will consume more water as the evaporation rate increases, leading to a decrease in productivity of staple food (wheat, maize, rice, tomatoes), and also sugar cane and milk. Reduction in the growth rates of cattle and poultry are also anticipated. Sea level rise is projected to lead to the loss of a sizable proportion of the northern part of the Nile Delta due to a combination of inundation and erosion, with consequential loss of agricultural land, infrastructure and urban areas.



# Groundwork for supporting the process to formulate and implement NAPs

## Policy, planning and budgeting

Egypt has a strong policy framework, underpinned by the 2011 National Adaptation Strategy (NAS) and high-level political institutions consisting of line ministries which have the mandate to implement it. The strategy aims to increase the flexibility of Egypt to tackle the risks and negative impacts of climate change in various sectors. In addition, the country has developed a 'Sustainable Development Strategy (SDS) — Egypt's Vision 2030'.

The SDS aims to implement an ambitious programme of financial reform, which is expected to increase the government's general budget, and improve the integration of adaptation into national budgeting and planning processes. Climate finance is mobilised from multilateral, bilateral, public and private sources. This will be secured to supplement domestic finance allocated to sectors for adaptation. The projects and programmes for economic and environmental development by 2030, identified in the SDS, which are related to climate change concern the following areas: sustainable agriculture, protection of coastal establishments, and the efficient use of water resources.

The Ministry of Environment (MOE) in cooperation with the Ministry of Planning is currently undertaking initiatives to integrate climate change adaptation into development planning processes. This will ensure alignment between climate change adaptation strategies, action plans and the national development strategies, plans and budgets.

The following adaptation action areas are identified in Egypt's Intended Nationally Determined Contribution (INDC) submitted to the UNFCCC in 2015:

Water resources — including water storage, improving irrigation and raining systems, awareness

Agricultural security — changing crop pattern, livestock, and improving the current low productivity of cattle

Integrated coastal zones management and providing job in safe areas

Health sector

Rural areas, population, and roads

Tourism

Energy

Adaptation policies — including building institutional capacities, environmental regulations; monitoring systems and increase awareness

## Preparing for adaptation planning

Egypt has prepared three National Communications to the UNFCCC (1990, 2010, 2016). The second National Communication addressed the vulnerability and adaptation of various sectors in Egypt to potential impacts of climatic changes. The third one updated the vulnerability and adaptation assessment with a focus on health, tourism and biodiversity.

Additional efforts to enhance adaptation policies were made, including:

- A regional Study on Climate Change Adaptation and Natural Disasters Preparedness in the Coastal Cities of North Africa that included Alexandria (2009-2011) conducted by the World Bank;
- The development of a National Wetland Strategy and Action Plan focusing on the conservation of Wetland and Coastal Ecosystems in the Mediterranean Region;
- The development of a Climate Change Risk Management Programme in Egypt (CCRMP).

Egypt is building its national capacities at the individual, institutional and systemic levels. Several research institutions are now enhancing their technical capacities by including climate change adaptation in their work. The National Council for Climate Change and its adaptation taskforce are also progressively building their capacities. Efforts to integrate climate change adaptation in the SDS, and in planning processes of key development sectors, drive systemic capacity development.

## Implementation of adaptation actions

Several sectoral adaptation projects have been implemented within the last ten years, through pilot projects financed by national and international sources, including:

- Sustainable Agriculture Investments and Livelihoods Project (SAIL) (2014-2023) — Global Environment Facility (GEF) / International Fund for Agricultural Development (IFAD) and Ministry of Agriculture and Land Reclamation
- Building Resilient Food Security Systems to Benefit the Southern Egypt Region (2013-2018) — World Food Programme (WFP) Ministries of Agriculture and Land Reclamation and Environment
- Participatory Development Programme in Urban Areas (PDP) (2010-2018) — Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Ministry of Housing, Utilities and Urban Communities and the Ministry of Environment
- Adaptation to Climate Change in the Nile Delta through Integrated Coastal Zone Management (2009-2017) — GEF / UNDP and Ministry of Water Resources and Irrigation
- Enhancing Climate Change Adaptation in the North Coast and Nile Delta Regions in Egypt (2018-2024) — Green Climate Fund (GCF) / UNDP
- Shore Protection Agency has allocated around EGP 1.7 billion (approximately US\$ 97 million) for adaptation measures to protect the coastline of the Mediterranean Sea and Red Sea.





## The process to formulate and implement NAPs in Egypt

### Institutional arrangements

The National Council of Climate Change (NCCC) established in 2015 (Prime Minister Decree #1912) is leading the NAP process in Egypt. This Council replaces the National Committee on Climate Change, its predecessor, which was established in 2007 (Prime Minister Decree #272). In November 2017, the Adaptation Task Force was established to serve as the operational arm of the NCCC.

### Successes

The re-structured NCCC, which brings together stakeholders from various disciplines, is one of the first successes of the NAP process.

The allocation of domestic resources from the national budget for adaptation activities illustrates the country's commitment to fulfil its obligations under the Paris Agreement, by aligning its commitments with national planning and budgeting. Another success drawn from these adaptation efforts is the instigation of more systemic capacity development initiatives to enhance capacities to undertake adaptation planning. Capacity development has been carried out within key sectoral research institutions.

Finally, a multi-stakeholder-participatory-mechanism has been set up, which ensures national ownership and the full engagement of all relevant stakeholders.

### Challenges

Despite consistent efforts to enhance the institutional arrangements to address climate change adaptation, there are still some challenges. The main issues are the limited availability of data and its accuracy, and the limited institutional capacity to undertake enhanced adaptation planning, including through effective cross-sectoral coordination. Furthermore, insufficient financial resources and budgets allocated to adaptation threaten the sustainability and scaling up of adaptation actions.

### NAP support

UNDP, through the GEF-funded National Adaptation Plan Global Support Programme (NAP-GSP), has provided support to Egypt in the preparation of the GCF funding proposal including guidelines for a consultation workshop. A stocktaking report has been produced as a baseline to support the submission of the GCF proposal.

#### March 2017 –

Information required to prepare a stocktaking report was examined during a workshop convened by the MOE, which was attended by experts from various ministries. Participants provided recommendations to advance the NAP process in Egypt. A stocktaking report was prepared shortly after the workshop.

#### April 2017 –

NAP-GSP provided support to prepare the GCF funding proposal.

#### June 2017 –

Submission of GCF NAP Readiness Project Proposal.

#### November 2017 –

An Adaptation Task Force was established to act as the operational arm of the NCCC. All key line ministries are represented in the Task Force.

## What is the process to formulate and implement NAPs?

The Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) established the National Adaptation Plan (NAP) process in 2010, to enhance country-led planning and preparedness for climate change adaptation (CCA) in the medium and long-term. The objectives of the NAPs are to reduce vulnerability to the impacts of climate change and to facilitate the integration of adaptation into all levels of development planning. The NAP process is multi-sectoral, involving Ministries of Environment as well as Planning and Finance, in addition to other key ministries. By bringing greater institutional integration and coordination to adaptation planning, NAPs can enhance ongoing national development planning processes, safeguard development gains, and build resilience.



## Opportunities

Egypt's INDC and SDS 2030 provide a general framework for adaptation interventions. In the context of the NAP process, they present several opportunities. The NCCC with its Adaptation Task Force are institutional anchors for coordinating adaptation planning. National research institutions working on climate change-related issues provide operational support in terms of data collection, analysis and monitoring in several sectors/fields, including agriculture, water resources, coastal zone, and meteorology. These should continue to be well capacitated. The updating of the SDS 2030, which is underway, is an opportunity to mainstream climate change into national strategies, which will lead to better national budget allocation across key development sectors.

## Key documents

- [Intended Nationally Determined Contribution \(INDC\), 2015 GCF Funding Proposal 'Enhancing Climate Change Adaptation in the North Coast and Nile Delta Regions in Egypt', 2017](#)
- [Third National Communication, 2016](#)
- [Egypt's National Strategy for Adaptation to Climate Change and Disaster Risk Reduction, 2011](#)

## Next steps

Essential next steps towards advancing adaptation planning and implementation in Egypt include the development of a fully integrated capacity development plan and sectoral action plans. Climate tracking needs to be integrated into the domestic budget. Climate projections should be developed under the various IPCC scenarios. Sectoral vulnerability assessments should be conducted, and regularly updated. A continual and iterative monitoring and evaluation process must also be integrated into adaptation projects.

## Notes

- (1) [The Arab Republic of Egypt. General Information about Egypt.](#) (Accessed March 2018)
- (2) [World Bank. 2018. World Development Report 2018: Learning to Realize Education's Promise.](#) Washington, DC: World Bank.
- (3) [The World Bank Data. Egypt Country Data.](#) (Accessed March 2018)
- (4) [The World Bank Data. Annual GDP Growth – Egypt.](#) (Accessed March 2018)
- (5) [The World Bank. The World Bank in Egypt.](#) (Accessed March 2018) [United Nations Development Programme \(2016\). Human Development Report 2016.](#)
- (6) [Egyptian Environmental Affairs Agency \(2016\). Egypt Third National Communication under the United Nations Framework Convention on Climate Change.](#)
- (7) [Olivier J.G.J., Janssens-Maenhout G., Muntean M., Peters J.A.H.W. \(2016\). Trends in global CO2 emissions; 2016 Report.](#) The Hague: PBL Netherlands Environmental Assessment Agency; Ispra: European Commission, Joint Research Centre

0.6%

of total global emissions

7

national adaptation projects are under implementation

29

adaptation measures in INDC

10

sectors involved in the NAP process

24

research institutions involved in the NAP process

## 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 provides opportunities for knowledge exchange on NAPs.

Email:

[Rohini.Kohli@undp.org](mailto:Rohini.Kohli@undp.org)

[Mozaharul.Alam@unep.org](mailto:Mozaharul.Alam@unep.org)

For media enquiries / dissemination:

[Esther.Lake@un.org](mailto:Esther.Lake@un.org)

Website:

<http://globalsupportprogramme.org/nap-gsp>

**NAP-GSP**  
NATIONAL ADAPTATION PLAN GLOBAL SUPPORT PROGRAMME