

**Cambodia** is a country in Southeast Asia covering an area of 181,035 km² and bordering with Thailand, Laos, Viet Nam, and the Gulf of Thailand. It has a population of 16.5 million people and is administratively divided into 25 provinces and municipalities<sup>ii</sup>, 185 districts, and 1,646 communes<sup>iii</sup>.

Cambodia experienced an average GDP growth rate of 8 percent per year between 1998 and 2018, which decreased the poverty rate from 53 percent in 2004 to 14 percent in 2014, as the result of higher income and consumption. However, based on the estimates of the Multidimensional Poverty Index 2019 that considers deprivations across health, education and standard of living, 37.2 percent of the population still experience multidimensional poverty. Over half of the

population is employed through the informal economy. Agriculture, industry (garments, construction) and services (mainly tourism) sectors comprise 94 percent of the GDP $^{vi,vii}$ .

The annual average temperature in Cambodia is 27°C, rising to 38°C in late spring (April-May) and falling to 14°C in early winter (December-January)<sup>viii</sup>. The dry season lasts from mid-November to mid-May and the rainy season from mid-May to mid-November. The country has high biodiversity and large areas of primeval woods; however, under extensive deforestation, it has lost 2.2 million hectares of forests and 11.7 percent of its protected areas between 2001 and 2018<sup>ix</sup>.

### Climate change risks

Based on the Global Climate Risk Index 2020, Cambodia ranks as the 12<sup>th</sup> most vulnerable country to climate change globally, having witnessed the rising frequency of floods, droughts, and windstorms in recent years\*. As of 2015, climate change was already responsible for the loss of 10 percent of the country's GDPxil.

The average temperature in the country is projected to increase between 1.0 and 2.6 °C by 2050 leading to longer droughts and more frequent tropical storms<sup>xii</sup>. Based on modelling, a temperature rise of 2°C by 2100, under current investment in adaptation, could result in 9.8 percent loss of the GDP by 2050, with 57 percent of it coming from reduced labour productivity<sup>xiii</sup>.

The country is particularly vulnerable to flooding due to large seasonal variations in water levels, aggravated by hydropower developments<sup>xiv</sup>, deforestation, and charcoal production<sup>xv</sup>. With 435 kilometres of coastline, it may also experience impacts of sea-level rise, such as

erosion of beaches, loss of livelihoods, and relocation expenditures<sup>xvi</sup>. Further, decreased food security driven by reduced fish and crop yields, land degradation, outbreaks of pest and diseases, and changes in rainfall patterns may put 70 percent of the rural population under severe pressure<sup>xvii</sup>. Finally, health risks are going to exacerbate in complex ways. Increased exposure to heat stress particularly threatens older people and those with non-communicable diseases<sup>xviii</sup>. The health system will likely face pressure from the rise in tropical diseases such as dengue fever<sup>xix</sup> and malaria<sup>xx</sup> transmitted by mosquitos, which increase in numbers and spread to more temperate climates. As the surface water levels drop facing warmer climate and longer droughts, groundwater extraction increases. Higher use of groundwater also leads to an overall transition to lower quality of drinking water<sup>xxi</sup>, while the high-quality water that is left becomes scarcer under growing demand.







# Groundwork for supporting the NAP process



### Policy, planning and budgeting

National Adaptation Planning (NAP) is interlinked with the National Strategic for Plan on Green Growth for 2013-2030, emphasising inclusive development, greening of investments, technology and jobs, as well as good governance and education for sustainability<sup>xxii</sup>. Its overarching aim is for Cambodia to achieve the status of a developed country by 2030. In terms of NAP, the strategy emphasizes efforts to improve understanding of climate change impacts, address sea-level rise and coastal erosion and the need to ensure the effective reduction of disaster risks<sup>xxiii</sup>.

Based on the experience of aggravating climate change impacts, Cambodia was one of the first countries to carry out a Climate Public Expenditure and Institutional Review (CPEIR), which helped to build national capacities for climate change cost-benefit analyses<sup>xxiv</sup>. Despite the efforts, climate budgeting lacks coordination, with 148 of 171 actions from Cambodia's Climate Change Action Plans (CCCAPs) remaining unfunded in its Sectoral Climate Change Strategic Plans (SCCSPs). To overcome this, the Department of Climate Change developed a National Adaptation Plan Financing Framework and Implementation Plan (NAPFFIP) to ensure integrated finance and transparent budgeting. There is an increasing awareness that sustainable finance requires political leadership, local ownership within the country, and effective monitoring of climate change adaptation measures<sup>xxv</sup>.

Cambodia's first nationally determined contribution (NDC) was submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in 2017, highlighting the actions planned to reduce greenhouse gas emissions, and adapt to climate change, as well as presenting climate financing and budget tracking strategies for Cambodia. The key sectors identified within the NDC for adaptation include forestry, fisheries, water, human health, agriculture, and infrastructure<sup>xxvi</sup>. The document outlines multiple priority actions, including community-based adaptation, ecosystem restoration and support to protected areas, flood protection, climate-resilient agriculture, combating water-borne and food-borne diseases, and mainstreaming of climate action.



### **Preparing for adaptation planning**

Building on its Initial (2002)xxxiii and Second (2015)xxxiii National Communications to the UNFCCC, Cambodia has made steady progress in its NAP process. It currently builds upon the Cambodia Climate Change Strategic Plan (CCCSP), the National Strategic Development Plan (NSDP), CCCAPs, SCCAPs, NAPFFIP, along with climate mainstreaming initiatives at the sub-national level.

As the "first-ever comprehensive national policy document" on climate change, the CCCSP promoted a systematic approach through a focus on strengthening institutions, stakeholder participation, and capacity development\*\*. In fact, Cambodia associates the CCCSP as its first NAP (see also NAP process and timeline) As an extension of these efforts, the NAPFFIP, provided an in-depth analysis of the global and national climate adaptation finance landscape, introduced a common approach and process for climate finance, including identification of financing needs and sources and integration of adaptation into the budgeting, as well as outlined 40 priority actions for the NAP process\*\*.

The implementation of Cambodia's NAP process is supported by the development of a NAP Readiness and Preparatory Support Proposal for submission to the Green Climate Fund (GCF). The country-driven process is focused on advancing multi-sectoral coordination and cooperation<sup>xxxi</sup>, implementation of the programmatic approach beyond small-sized projects, integration of a gender dimension, and development of a solid knowledge base for adaptation<sup>xxxii</sup>.

### Implementation of adaptation actions

Adaptation actions in the country to date have been mostly implemented through a variety of country-specific, tailored projects. Examples (non-exhaustive) include:

- Reducing the Vulnerability of Cambodian Rural Livelihoods through Enhanced sub-national Climate Change Planning and Execution of Priority Actions (2015-2020): the project is implemented in 89 communes and facilitates investments in small-scale water management infrastructure, technical assistance for resilient agriculture and food production in home gardens.
- Strengthening Climate Information and Early Warning Systems
  to Support Climate-Resilient Development in Cambodia
  (2015-2020): is a nation-wide project focused on expanding of
  the hydro-meteorological monitoring through the installation of
  53 hydrological and meteorological stationsxip, the introduction
  of drought risk management (trained 1300 farmers), the involvement
  of women in disaster risk reduction efforts, establishment of
  Drought Information Hubs, and improved climate forecastsxiv.xxxx.
- Scaling Up Climate Amition in Land Use and Agriculture through NDC and NAPs (SCALA) Programme (2021-2025): this programme will support Cambodia to strengthen coordination on climate action between ministries, the private sector and community-based organizations to support transformative change in the agriculture and land use sectors in alignment with adaptation and mitigation priorities outlined in the NDC and NAP.

# Challenges and successes

### Support programmes

National efforts are supported by the GEF funded, UNDP-UN Environment-led NAP-GSP, GIZ, GCF, EU, Global Climate Change Alliance+ (GCCA+), Germany's International Climate Initiative (IKI) through the FAO-UNDP SCALA programme, the Government of Denmark, the Swedish International Development Cooperation Agency (SIDA), the United States Agency for International Development (USAID), the Forest Investment Program (FIP), and the Global Environment Facility (GEF), Least Developed Countries Fund (LDCF).

### Challenges

Among major challenges are low coordination of adaptation planning, particularly between ministerial staff and the working groups within the ministries, lack of information on sectoral vulnerabilities, insufficient capacities to effectively conduct monitoring, assessments

# April 2006

The National Climate Change Committee (NCCC) is established by the Government to coordinate policies, strategies, and programs that address climate change.

# February 2010

The CCCA is launched with support from the United Nations Development Programme (UNDP) and the European Union (EU).

# February 2014

Requested by the MOE, a stocktaking mission is jointly conducted by the NAP Global Support Programme (NAP-GSP) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

# August 2017

NAPFFIP is published to better integrate adaptation planning into sectoral policies and budgeting.

# July 2021

Submission to the UNFCCC Secretariat of Cambodia CCCSP to be considered as Cambodia's First NAP.

and modellingxxxxiii, and insufficient government fundingxxxix. Due to the low scientific elaboration of potential climate change scenarios, most measures are planned for business-as-usual, which reduces the understanding of possible effects and the adaptive capacities neededxi. Difficulties in upscaling pilot projects, insufficient interest in climate mainstreaming by different ministries, and insufficient availability of locally adapted communication tools and materials further complicate progressxii.

#### **Successes**

Cambodia is one of the first Least Developed Countries (LDCs) seeking to directly access GCF support for their NAP process. Further, significant achievements have been realised within several adaptation-related projects. The SIDA-UNDP Cambodia Community-Based Adaptation Program (CCBAP) has tested a micro-grant approach aimed at reducing climate vulnerability at the community level. Sectoral climate change mainstreaming has been effectively explored within the Promoting Climate-Resilient Water Management and Agricultural Practices in Rural Cambodia, financed by the LDCF<sup>xiii</sup>.

# October 2008

Cambodia is among the first countries to launch the Pilot Program for Climate Resilience (PPCR) supported by the Strategic Climate Fund (SCF) of the Climate Investment Funds (CIFs).

## November 2013

The CCCSP for 2014-2023 is launched by the DCC.

# March 2014

Cambodia's National Adaptation Plan Process Stocktaking Report with recommendations for a roadmap for advancing Cambodia's NAP process is published.

# February 2019

The MOE, with the support of UNDP, starts to prepare a readiness proposal for NAPs. UNDP conducts a field visit to facilitate the development of a grant proposal to the GCF to support the country's NAP process. The proposal is submitted in 2020 for review.

# The process to formulate and implement NAPs in Cambodia

NAP process in Cambodia is overseen by the Department of Climate Change (DCC) of the Ministry of Environment (MOE), as well as the National Council for Sustainable Development (NCSD). The NCSD consists of 38 high-level representatives from relevant government ministries, institutions, and agencies, as well as provincial governors. The Cambodian Climate Change Alliance (CCCA) provides support to the DCC on policy development, coordination, and awareness-raising activities, while coordinating inputs from various development partners. The CCCA works to mainstream climate change into legal frameworks and sub-national planning processes, and to manage and coordinate climate change finance. These organisations support a medium- and long-term approach to NAP and facilitate the strategic integration of adaptation into national priorities.

### Opportunities and next steps

Further integration of the activities across ministries and sectors based on identifying potential synergies and co-benefits can significantly contribute to scaling up and coordinating actionxiii. Cambodia's National Adaptation Plan Process Stocktaking Report also highlighted the potential of standardising data collection, modelling, projections, and assessments<sup>xliv</sup>. Another important step is the development of capacities and ensuring local ownership, as well as mainstreaming adaptation activities into environmental impact assessments and large development projectsxiv. It is further important to enhance stakeholder collaboration and explore the potential of private joint ventures and international networksxlvi. Finally, it is crucial to facilitate effective distribution of roles and responsibilities, support awareness-raising efforts, and improve project management and institutional capacities of all key stakeholdersxlvii.

### **Key documents**

- Cambodia's Initial National Communication to UNFCCC (2002)
- National Strategic for Plan on Green Growth for 2013-2030 (2012)
- Cambodia Climate Change Strategic Plan 2014-2023 (2013)
- Sectoral Climate Change Strategic Plans (2014 and 2015)
- Cambodia's Climate Change Action Plans (2014-2016)
- National Adaptation Plan Financing Framework and Implementation Plan (2014)
- Cambodia's National Adaptation Plan Process Stocktaking Report (2014)
- Cambodia's Second National Communication to UNFCCC (2016)
- Cambodia's Nationally Determined Contribution (2017)
- Cambodia National Adaptation Plan Financing Framework and Implementation Plan (2017)
- National Adaptation Plan Process in Cambodia (2017)

267,000 hectares of rice fields destroved by flash floods in 2011xlviii

**146**<sup>th</sup> out of 189 in the Human Development Index 2019xlix

Up to **5.3°C** increase in maximum daily temperature in the Mekong Delta by 20501

43% of communes are highly vulnerable to climate change<sup>li</sup>

377,354 households affected by flash floods in 2013lii with US\$356 million in calculated damagesliii

69,800 additional people may be at risk of river floods annually by 2030liv

#### Notes

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### 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.



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