

Climate Change Adaptation Process

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Overview

There are two main policy responses to climate change: mitigation and adaptation. Mitigation addresses the root causes, by reducing greenhouse gas emissions, while adaptation seeks to lower the risks posed by the consequences of climatic changes. Both approaches will be necessary, because even if emissions are dramatically decreased in the next decade, adaptation will still be needed to deal with the global changes that have already been set in motion.

Humans have been adapting to their environments throughout history by developing practices, cultures and livelihoods suited to local conditions, However, climate change raises the possibility that existing societies will experience climatic shifts (in temperature, storm frequency, flooding and other factors) that previous experience has not prepared them for.

Adaptation measures may be planned in advance or put in place spontaneously in response to a local pressure. They include large-scale infrastructure changes – such as building defences to protect against sea-level rise or improving the quality of road surfaces to withstand hotter temperatures – as well behavioural shifts such as individuals using less water, farmers planting different crops and more households and businesses buying flood insurance.

The IPCC describes vulnerability to climate change as being determined by three factors: exposure to hazards (such as reduced rainfall), sensitivity to those hazards (such as an economy dominated by rain-fed agriculture), and the capacity to adapt to those hazards (for example, whether farmers have the money or skills to grow more drought-resistant crops). Adaptation measures can help reduce vulnerability – for example by lowering sensitivity or building adaptive capacity – as well as allowing populations to benefit from opportunities of climatic changes, such as growing new crops in areas that were previously unsuitable

Paris Agreements and adaptation planning

December 2015, 175 UN member states met at the Paris climate conference (COP21), adopted the first-ever universal, legally binding climate agreement, which sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global temperature well below 2°C. Countries communicated Intended Nationally Determined Contributions (INDC) with emission reduction target and indicating measures, additionally they have to assess their progress every five years and communicate new and more ambitious plans

The Paris Agreement builds upon the UNFCCC Convention and – for the first time – brought all nations into a common cause to undertake ambitious efforts to combat climate change and adapt

to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort.

The new global goal on adaptation is defined in Article 7 of the Paris Agreement as “enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in Article 2.” The goal aligns with Sustainable Development Goal (SDG) target 13.1 (Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries).

A key issue, especially for non-Annex I Parties, is how to develop national strategies for adaptation to climate change that are easy to integrate into sustainable development plans. Most national vulnerability and adaptation studies to date have focused on the selection of climate change scenarios and impact studies – an approach that has not always resulted in policy-relevant options for adaptation responses.

National Adaptation Planning Process

Adaptation has been described extensively in the literature, and yet there is no universal agreement on a precise definition. Adaptation planning and design is closely linked to development planning. In most practical cases, adaptation to climate change is naturally embedded in the fabric of development, it can take the form of activities designed to enhance the adaptive capacity of a system, or actions that modify socioeconomic and environmental systems to avoid or minimize the damage caused by climate change. Methods for achieving this include implementing new activities that are exclusively in response to climate change, and modifying existing activities to make them more resilient to current, as well as future, climate change risks (“climate-proofing”).

The “framing” of adaptation therefore varies case by case, owing to the complex nature of adaptation. It is therefore very important for a wide range of stakeholders to be involved in the process of planning and implementing adaptation activities to ensure that the assessment and subsequent results are understood and are useful in decision making. In this sense, adaptation can be seen as a way to help stakeholders to achieve their collective development and adaptation goals considering a changing climate.

The NAP process is envisioned as a better way of doing business, of fully considering climate change concerns in planning and decision-making processes. It will encompass all the arrangements necessary to develop the knowledge to support decision-making, and required capacity-building to facilitate all actions that are needed for a strategic country-owned adaptation planning process. As with any planning process, the NAP process may have variable and specific outputs at given points in time, including comprehensive national adaptation plans, programmes and policies. The structure and form of these national adaptation plans will vary by

country, and may include sectoral plans and sub-national plans to provide the necessary guidance in addressing adaptation needs where they matter.

However, UNFCCC has defined steps and elements on this matter:

Element A. Lay the Groundwork and Address Gaps

This element on laying the groundwork and addressing gaps aims to create a national mandate and strategy for the NAP process that establishes clear responsibilities for government ministries and departments. This element also aims to identify weaknesses and gaps in “enabling environments” that are necessary for the formulation of comprehensive adaptation plans, programmes and policies

Actions of which can be:

a) Initiating and launching of the NAP process b) Stocktaking: identifying available information on climate change impacts, vulnerability and adaptation and assessing gaps and needs of the enabling environment for the NAP process; c) Addressing capacity gaps and weaknesses in undertaking the NAP process; d) Comprehensively and iteratively assessing development needs and climate vulnerabilities

Element B. Preparatory Elements

This element also aims to identify weaknesses and gaps in “enabling environments” that are necessary for the formulation of comprehensive adaptation plans, programmes and policies. During the execution of the second element of the NAP process, a country is encouraged to conduct an in-depth impact, vulnerability and adaptation assessment, which can be integrated to sectoral, subnational and national plans and strategies

Actions of which can be:

a) Analysing current climate and future climate change scenarios; b) Assessing climate vulnerabilities and identifying adaptation options at the sector, subnational, national and other appropriate levels c) reviewing and appraising adaptation options d) Compiling and communicating national adaptation plans e) Integrating climate change adaptation into national and subnational development and sectoral planning

Element C. Implementation Strategies

Work during this part of the process would focus on prioritizing adaptation actions within national planning, identifying synergies and developing and enhancing the country's long-term capacity for planning and implementing adaptation. Work on capacity-building, institutional arrangements, data-gathering, assessment and communications initiated in earlier stages would continue.

Actions of which can be:

a) Prioritizing climate change adaptation in national planning b) Developing a (long-term) national adaptation implementation strategy; c) enhancing capacity for planning and implementation of adaptation; d) Promoting coordination and synergy at the regional level and with other multilateral environmental agreements

Element D. Reporting, Monitoring and Review

The fourth element on reporting, monitoring and review would collect information on the NAP process, assess it through a national M&E system and provide outputs for the reporting on progress to the COP.

Actions of which can be:

a) Monitoring the NAP process; b) reviewing the NAP process to assess progress; effectiveness and gaps; c) Iteratively updating the national adaptation plans; d) Outreach on the NAP process and reporting on progress and effectiveness