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Strengthening Sri Lanka's Capacity for Climate Change Adaptation

Having emerged as an environmental concern, climate change is now regarded worldwide as an overarching development challenge. It can seriously affect the economic growth, food security, public health, social stability and even the national security of countries. As a developing island nation, Sri Lanka is particularly vulnerable to these impacts.

Scientists are still studying the full extent of climate change impact on Sri Lanka, but there is growing recognition that climate change can threaten or reverse the significant achievements the country has recorded in the last 20 years in increasing incomes and reducing poverty.

Living and coping with uncertain impacts of climate change is no longer a choice; it is an imperative. Sri Lanka needs to adapt to climate change to ensure that its economic development can continue without disruption or setbacks, and investments in poverty reduction, food and water security and public health will not be undone.

Climate change impacts

Scientific analysis and projections indicate that climate change can affect Sri Lanka in different ways.

For example:

- Raised temperatures and unpredictable monsoon rains are already affecting the country's food production efforts and can lead to a decline in crop yields.
- The quantity and quality of water can be affected, adding further stress on freshwater resources.
- More frequent and severe droughts, as well as extreme weather events like floods, can disrupt public life and damage property.
- In the longer term, rising sea levels can impact the island's highly populated coastal areas, threatening human settlements, economic infrastructure and coastal/marine ecosystems.

Adverse impacts of climate change are highlighted in the Government's Green Lanka programme as priority areas requiring action. Several government departments and research institutions are also engaged in studies to understand and manage the climate impacts. Such insights are also needed to decide what the optimal policy, technical and grassroots interventions should be.

Sri Lanka is an active participant in international responses to climate change, covering both:

- **Mitigation:** reducing the emission of greenhouse gases that cause global warming; and
- **Adaptation:** living with the many impacts that are inevitable in the coming years.

Changing Climate in Sri Lanka

Climate is a long term phenomenon, so it takes time and many observations to discern changes in climate. However, the broad trends in climate change are well established from the work of thousands of scientists around the world.

For example, the UN Climate Panel (UN-IPCC) has reviewed all climate related studies for South Asia and suggested some likely scenarios. Within this bigger picture, further research is needed to figure out exactly how Sri Lanka could be impacted by climate change.

The impacts we can expect (and in many instances are already experiencing) include:

- changes and greater unpredictability in rainfall patterns;
- increases in both the frequency and intensity of disasters such as floods, droughts and landslides
- increases in temperature; and
- a gradual rise in sea levels.

Changing weather patterns are an indication of the longer term changes in climate. The Department of Meteorology, which has been analyzing weather data for 150 years, says that air temperature has already increased by almost one degree Celsius during the past 70 years.

In the global context, Sri Lanka's contribution of greenhouse gases is very small and our ability to mitigate is therefore very limited. However, our high vulnerability to climate change impacts requires us to invest much time, effort and funds in climate adaptation.

The Ministry of Environment, through its Climate Change Secretariat (CCS), is the apex policy body mandated to coordinate these activities at national level.



Strengthening Capacity for Climate Change Adaptation Project



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In 2009, responding to a request from the Government of Sri Lanka, the Asian Development Bank (ADB) initiated a technical assistance project titled “Strengthening Capacity for Climate Change Adaptation”. Working with and through the Climate Change Secretariat, the project aims to increase Sri Lanka’s resilience to climate change impacts, whilst pursuing sustainable economic development and natural environment conservation. It also hopes to stimulate improved effectiveness of environmental management and better organization of stakeholders to address climate change adaptation in Sri Lanka.

The Project, which revolves around the formulation and mobilization of resources to implement a National Climate Change Adaptation Strategy, followed a highly consultative process that involved key stakeholders in public, academic, corporate and non-governmental sectors. The process went through three phases:

1. Sector Vulnerability Profiles (SVPs) were prepared for five key sectors, reviewing the main climate change risks in:
 - Agriculture and Fisheries
 - Water
 - Human Health
 - Urban Development, Human Settlements & Economic Infrastructure
 - Biodiversity and Ecosystem Services
2. A participatory process was followed -- through working groups representing stakeholders, as well as consultations with key individuals -- to refine the SVPs and to identify and prioritize areas for future interventions.
3. These sector based analyses were then synthesized into a cohesive National Climate Change Adaptation Strategy, which includes a clear, time-bound programme for future action and investment.



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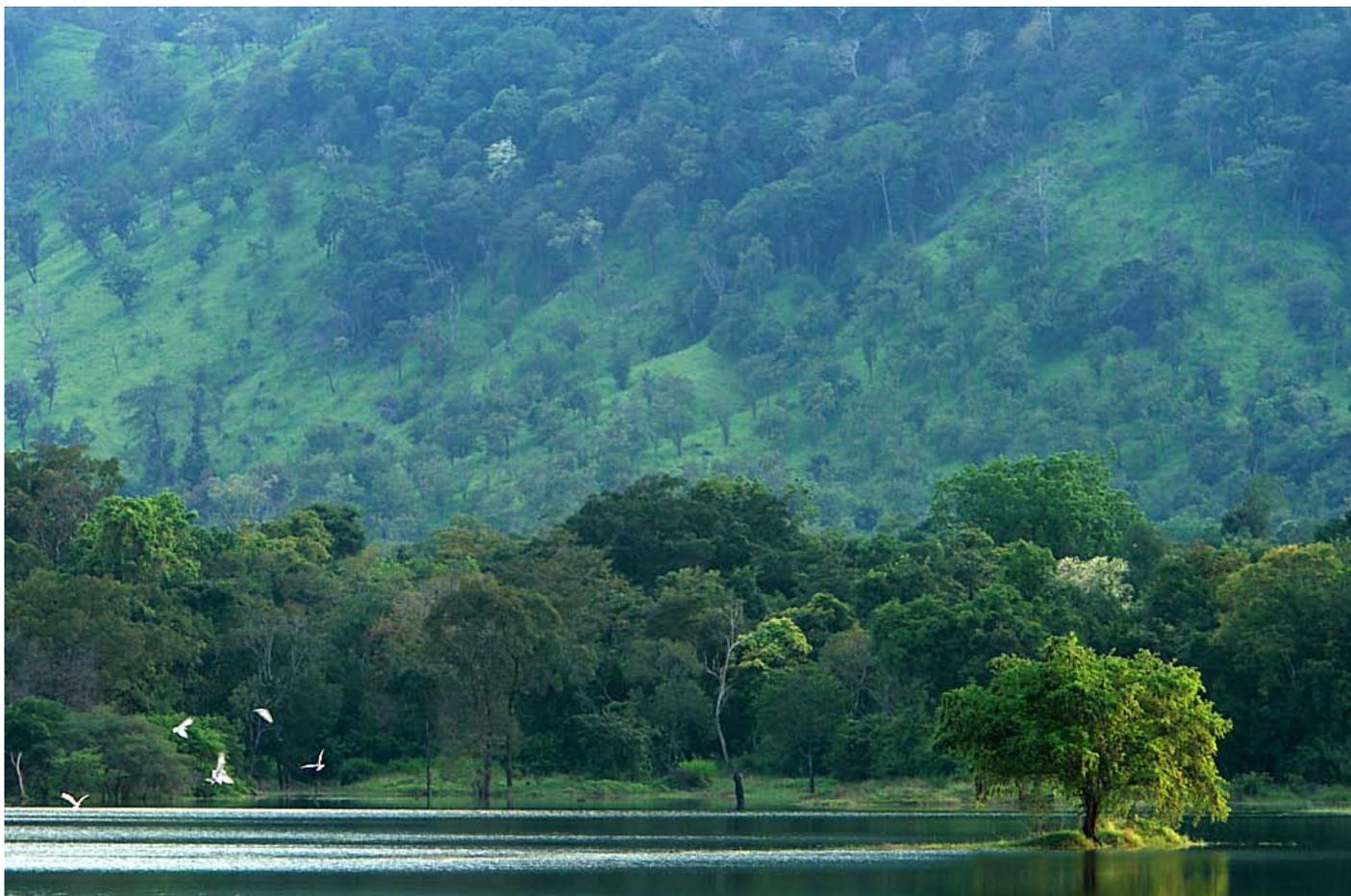


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This process codified the current knowledge base, identified needs and priorities, and helped formulate five Strategic Thrusts which form the basis of the Climate Change Adaptation Strategy (not listed in any order of priority):

- **Mainstream Climate Change Concerns into National Planning and Development**
- **Improve Climate Resilient and Healthy Human Settlements**
- **Minimize Climate Change Impacts on Food Security**
- **Improve Climate Resilience of Key Economic Drivers**
- **Safeguard Natural Resources and Biodiversity from Climate Change Impacts**

These Strategic Thrusts recognize the multi-sectoral nature of climate change impacts, and respond to the need for integrated approaches.

This brochure has been produced based on the work carried out under the Asian Development Bank (ADB) Technical Assistance Project ADB TA 7326 SRI: Strengthening Capacity for Climate Change Adaptation in Sri Lanka.

ADB is working with the Ministry of Environment, Sri Lanka, in formulating a national strategy for climate change adaptation to increase Sri Lanka's resilience to climate change impacts whilst pursuing sustainable economic development. When adopted, the strategy would stimulate improved effectiveness of environmental management and better organization of stakeholders to address climate change adaptation.

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