Implementation of the Nationally Determined Contributions in Sri Lanka: Updates, Issues and Options

WORKSHOP REPORT 2023

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List of Acronyms

ADPC	Asian Disaster Preparedness Center
CCS	Climate Change Secretariat
GHG	Greenhouse Gas
GoSL	Government of Sri Lanka
MoE	Ministry of Environment
MRV	Measurement, Reporting, and Verification
NDC	Nationally Determined Contribution
UNDP	United Nations Development Programme
DFAT	Department of Foreign Affairs and Trade

1. Summary of Event

Date:	26 October 2022
Venue:	Hybrid (Zoom) On-site: Waters Edge, Battaramulla, Colombo, Sri Lanka Online: Curtin University, Australia and ADPC, Thailand
Duration:	10:00 - 13:30 (3.5 hours)
Co-organized by:	Climate Change Secretariat of the Ministry of Environment, Sri Lanka, United Nations Development Programme (UNDP) - Sri Lanka, ADPC, Thailand, and Curtin University, Australia
Financial Support:	Department of Foreign Affairs and Trade, Australia

2. Background and Introduction

Nationally Determined Contributions (NDCs) are the necessary non-binding action plans on climate change targeted by each country as their long-term goals on reducing emissions and combating climate change impacts. NDCs are intended to be dynamic; countries regularly update them and advance the level of ambition, science, and implementation experience required to meet the long-term temperature goal, in line with the Paris Agreement.

While NDCs form a critical piece towards climate action and pathways to a net-zero economy, it is essential to identify gaps and needs to effectively implement these actions. Initiatives such as policy analysis interlinking with the updated NDC review process present opportunities for synergies, through the alignment of global mechanisms such as the National Adaptation Plans, Sustainable Development Goals, and the Sendai Framework for Disaster Risk Reduction.

Against this backdrop, the Government of Australia's Department of Foreign Affairs and Trade (DFAT) has commissioned Curtin University, Australia and the Asian Disaster Preparedness Center (ADPC) to develop a framework for facilitating NDCs in the Indo-Pacific countries. In this connection, ADPC organized a series of national workshops in Asia to discuss the current status of NDCs, key challenges, and capacity needs to successfully implement the NDCs over the next five years. As a result, the workshops will lead to developing a framework for how Australia can support countries in the Indo-Pacific region in implementing their respective NDCs.

3. Overall Objective

The workshop's overall objective is to understand the current status of the country's nationally determined contributions (NDCs), the impact of climate change on vital economic sectors, mitigation and adaptation targets, and the challenges Sri Lanka face in implementing NDCs.

The following are the specific objectives discussed:

1.1. Understand the current implementation status of NDCs (Mitigation and Adaptation)

1.2. Identify innovative localized climate change solutions

1.3. Discuss capacity-building activities (e.g. training) around estimating the impact of climate change across economic sectors

1.4. Discuss key challenges and identification of capacity needs toward implementing NDCs in Sri Lanka

1.5. Identify best practices for the implementation of NDCs in Sri Lanka

The workshop is expected to help draft a report on the situation analysis of NDCs for Paris Commitments, which includes the following outcomes:

i. Updates on the status of implementation of NDCs as well as a summary of challenges and key capacity needs

ii. Best practices for NDC implementation in Sri Lanka

4. Overview

The consultation workshop started with the moderator welcoming distinguished guests, renowned experts, strategic partners, speakers, and all participants to the workshop.

i. Welcome Address by Dr. Anil Jasinghe, Secretary of the Ministry of Environment, Sri Lanka

Dr. Anil Jasinghe warmly welcomed the Deputy High Commissioner of the Australian High Commission in Sri Lanka, distinguished guests, and other participants to the consultative workshop. He highlighted the discussions held with ADPC and the need to collaborate in achieving targets set by the updated NDCs by 2030. Sri Lanka's NDCs focus on 6 mitigation and 9 adaptation sectors and loss and damage, which need to be achieved through national commitments and international partnerships. Dr. Jasinghe also stated the importance of receiving support from the Government of Australia in this endeavor with the long-standing relationship between the two countries.

Dr. Jasinghe made an open appeal to all agencies in Sri Lanka to provide their full cooperation in achieving the country-driven NDC targets, and participants to provide their insights to make the consultative workshop a success. He thanked the Government of Australia, ADPC, Curtin University, Australia and UNDP-Sri Lanka for collaborating and organizing this important workshop.

ii. Welcome Remarks by Ms. Amanda Jewell, Deputy High Commissioner, Australian High Commission in Colombo, Sri Lanka

Ms. Amanda Jewell thanked the Ministry of Environment, Sri Lanka, UNDP-Sri Lanka, and Curtin University for the kind invitation extended to attend this important national workshop and warmly welcomed participants. Highlighting the impacts of climate change, Ms. Jewell invited all parties to join hands in climate action in terms of mitigation, adaptation, and loss & damage. Reducing GHG emissions has become the order of the day with technological advancements in various fields of study coupled with efforts to adapt to a changing climate.

The Deputy High Commissioner congratulated Sri Lanka for its efforts to be carbon neutral by 2050. She further expressed confidence that Sri Lanka would be on the correct path in the development agenda of mainstreaming climate action and that the Government of Australia will support Sri Lanka's efforts to implement the NDCs targets set to be achieved by 2030.

iii. Professor Therese Jefferson, Head of School, School of Accounting, Economics and Finance, Curtin University, Australia

Professor Therese Jefferson provided opening remarks from Curtin University. She mentioned the importance of NDCs and their critical component of policies and actions towards the shared global goal of a net zero economy. This requires an international collaborative effort that has been embodied by this project being implemented. The project also aligns with the three strategic pillars of Curtin University – Partnership, Planet, and People.

She expressed her sincere thanks to DFAT and representatives of the High Commission for their leadership in enabling climate action throughout the Indo-Pacific region and for collaborating on this project, and the Ministry of Environment in particular Dr. Anil Jasinghe, Secretary, for co-hosting this event with ADPC and Curtin University.

iv. Dr. Senaka Basnayake, Director, Climate Resilience, Asian Disaster Preparedness Center (ADPC),

Dr. Senaka Basnayake welcomed the Deputy High Commissioner of the Australian High Commission in Colombo, Sri Lanka, the Secretary of the Ministry of Environment, and other distinguished guests and participants to the Consultative workshop to assess the progress of activities to date and to understand the challenges and issues faced by the entities that implement NDCs. Dr. Basnayake presented the leadership role taken by the ADPC in supporting countries in the wider Asian and particularly South Asian region in addressing the issues related to the NDC implementation. He also congratulated Sri Lanka for the efforts taken to develop the NDC implementation roadmap in achieving the set targets in mitigation, adaptation, and loss & damage.

Dr. Basnayake pledged the full cooperation of the ADPC to Sri Lanka's efforts in the implementation of NDCs and becoming a carbon-neutral nation.

v. Dr. R.D.S. Jayathunga, Additional Secretary, Ministry of Environment, Sri Lanka

Dr. Sunimal Jayathunga presented the objectives of the workshop and requested the participants' utmost support to achieve those. The objectives highlighted were (a) to understand the current implementation status of NDCs (Mitigation and Adaptation); (b) to identify innovative localized climate change solutions; (c) to discuss capacity-building activities (e.g., training) on estimating the impact of climate change across economic sectors; (d) to discuss key challenges and identify capacity needs for implementing NDCs in Sri Lanka; and (e) to identify the best practices for implementation of NDCs in Sri Lanka.

vi. Professor Buddhi Marambe, Faculty of Agriculture, University of Peradeniya, Sri Lanka

Professor Buddhi Marambe, who served as the moderator for the workshop, presented its expected outcomes. The workshop intends to help draft a report on the situation analysis of NDCs for Paris Commitments that will include the following outcomes:

a. Updates on the status of implementation of NDCs as well as a summary of challenges and key capacity needs

b. Best practices for NDC implementation from Sri Lanka

vii. Updates on the status of implementation of NDCs as well as a summary of challenges and key capacity needs

On the invitation of the moderator, Professor Thusitha Sugathapala as the Team leader of the Consultation team from the Industrial Solutions Lanka Limited, who is developing the NDC Implementation Plan for Sri Lanka made a presentation and conducted a workshop session on the Present status of the NDC Implementation, and Monitoring Plans and Achievements. The extracts from the presentation highlighting the status of NDC implementation are presented in Table 1. The session was followed by a discussion on the progress of achievements for the verification of data.

Table 1. Progress of NDC implementation for the year 2022

Category	Sector	% Completion
Mitigation	Agriculture	82*
	Energy	90*
	Forestry	87*
	Industry	100
	Transport	100
	Waste	98**
Loss & Damage		45*

*as of 7th October 2022; **as of 13th October 2022

Category	Sector	% Completion*
Adaptation	Agriculture	100
	Biodiversity	100
	Coastal & Marine	100
	Fisheries	99
	Health	100
	Livestock	94
	Tourism	96
	Urban	100
	Water	97

- The achievements so far are largely due to unconditional targets that have been identified in national plans and programmes with domestic investments, while there is limited evidence on conditional targets that require external support including financing, technology transfer, and capacity building.
- As the conditional NDCs form the majority of the actions in several sectors, it is crucial to address the challenges of obtaining external support in realizing the NDC targets.
- The gaps in the data availability have hindered the inclusion of further activities that are in progress or planned, thus undervaluing the country's contribution to GHG mitigation. Thus, it is important to enhance the data management capabilities as well as mainstream Monitoring, Reporting, and Verification (MRV) systems in all the NDC sectors.
- The other key challenges to implementing NDCs include the economic crisis and issues related to the availability of adequate investments, the absence of baseline information for many NDC sub-activities proposed, inadequate awareness among the general public on NDCs, and the absence of coherent policies.
- The fuel shortage and fuel-rationing are expected to make a significant impact on the total GHG emission that will also be significant from the predicted baseline conditions.
- The capacity building needs were, (a) to promote low-cost transport modes by using different media platforms; (b) technical knowledge on emission calculations; (c) use of energy-efficient technologies; (d) use of battery-operated storage technologies; (e) waste management technologies; and (f) use of GIS technologies.

Sri Lanka has also initiated developing the implementation pathway towards net zero in 2050. Prof. Niranjalie Ratnayake, representing the consultants from the Institute of Environmental Professionals Sri Lanka presented the initiative taken by the Ministry of Environment.

vii. Best Practices for NDC Implementation in Sri Lanka – based on results of the questionnaire survey conducted during the workshop

The questionnaire survey captured innovative solutions for both mitigation and adaptation sectors, but a lengthy discussion was held on the mitigation sector. This is because the mitigation and loss & damage NDC implementation measures were quantitative and those of adaption measures were qualitative. Hence, only the innovative solutions adopted in the six mitigation sectors in the NDCs are presented in this report:

(1) Transport

- Introducing IoT solutions on an institutional basis to connect people through distance modes
- Implementation of park-and-ride concepts in the city regions
- Introducing electric vehicles
- Implementing green-port concept and reducing the vehicle movements within the ports
- Introducing flexible timetable for public and private busses

(2) Energy (Power)

- Capacity addition for electricity generation from renewable energy sources such as solar, wind, biomass, etc.
- Initiatives are taken to reduce transmission and distribution network losses leading to GHG emission reduction
- Encouraging the use of electric cars
- Adopting solar rooftops in residential areas and public sector institutions
- Introduction of efficient LED lamps for the domestic category
- Introducing of electricity-driven 3-wheelers

(3) Industry

- Increasing the use of fly ash beyond the initial predictions by introducing Sri Lanka Standards (SLS) for fly ash use in cement manufacturing (SLS 1697) in 2021
- Fuel switching initiatives from fossil fuel to sustainable biomass in the industrial steam boilers, driven by the price hike of fossil fuels and to reduce GHG emission
- Introducing mobile driers in selected locations on a pilot scale to reduce post-harvest losses of paddies
- Industry application of absorption chillers and switching to high-efficient chiller applications contributing to GHG emission reductions
- Minimizing transport of agricultural produce by lorries and promoting the use of railways where possible
- Promote the use of renewable energy for small industries

(4) Waste

- Promote composting at the household level & community level using household waste
- Adopt mechanisms to improve waste recycling in city regions
- Noticeable development in waste-to-energy

(5) Forestry

The reported reduction in deforestation rates, new forest plantations by various stakeholders, various programs on the trees-out-side forest, and new rubber plantations have led to improvements in the GHG sequestration capacity of the forestry sector.

(6) Agriculture

- Promote the use of solar-powered water pumps for irrigation
- Promote transport of agricultural produce by railways
- Introduction of energy-efficient storage systems for agricultural produce
- Support the production and use of biogas as a renewable energy source
- Promote compost production from livestock manure
- Recycle and reuse wastewater in the agriculture sector
- Adopt the use of alternate feed resources and feed conservation mechanisms (e.g. Silage making)

Following best practices have been adopted to support the implementation of NDCs

- Development of NDC implementation and monitoring plan, and launching of developing the pathways towards "net zero in 2050"
- Use of social media to promote NDC implementation activities
- Conducting school programs on fuel-free transportation
- Provision of incentives to users of sustainable solutions
- Use of evidence-based data (research) for baseline setting

5. Recommendations and Way Forward

The following recommendations were put forth during the workshop:

- The NDCs for Sri Lanka require rapid transformation and investments leading to achieving targets set for 2030 and net zero pathways in 2050.
- Strong policies and regulations are required to implement NDCs to comply with commitments and achieve targets involving relevant stakeholders and localize their implementation.
- There is a need to enhance the capacity for data management as well as mainstreaming monitoring, reporting, and verification (MRV) systems in all the NDC sectors through the establishment of SMART indicators.
- Sri Lanka needs to upgrade activities for gender responsiveness in NDC planning & implementation and also the development of KPIs for social inclusion in related activities/sub-activities.
- Overall, Sri Lanka requires assistance from the global community to access climate financing, technology transfer, and capacity building to support the NDC implementation in 6 mitigation sectors and 9 adaptation sectors, especially to achieve the conditional NDCs.

6. Annex: Workshop Agenda

Implementation of Nationally Determined Contributions in Sri Lanka: Updates, Issues and Options
Workshop Agenda

Time	Agenda	Responsible Person
09:00- 09:30	Registration	
09:30- 09:40	Welcome Address	Dr. Anil Jasinghe Secretary, Ministry of Environment
09.40- 09.50	Welcome Remarks	Ms. Amanda Jewell Deputy High Commissioner, Australian High Commission - Colombo
09:50-10:00	Welcome remarks from Curtin	Professor Therese Jefferson Head of School School of Accounting, Economics and Finance, Curtin University, Australia
10:00-10:10	Address by Asian Disaster Preparedness Center (ADPC) Bangkok	Dr. Senaka Basnayake Director, Climate Resilience ADPC
10:10-10:20	Workshop Expectations and Objectives	Prof. Buddhi Marambe Member. National Expert Committee on Climate Change of Environment
10:20-10:55	**Tea Break**	
	Current status of NDCs in Sri Lanka: Key Priorities, Policies and Issues	
10:55-11:10	Present status of NDC implementation, and monitoring plans and achievements	Dr. A.G.T. Sugathapala, Senior Lecturer, University of Moratuwa and Member, National Expert Committee on Climate Change Mitigation
11:10-12:15	Sector-wise group discussions (20-30 minutes) NDC implementation progress UNFCCC CoP27	UNDP Climate Promise Project Sector Experts
12:15-12:30	Sharing of best practices on innovations for climate resilience in Sri Lanka on context to Market-Based Mechanisms	Moderated by Prof. Buddhi Marambe

12:30-12.45	Pathways towards Net Zero by 2050	Prof. Niranjalie Ratnayake President, Institute of Environmental Professionals Sri Lanka Past President, The Institution of Engineers, Sri Lanka Emeritus Professor Department of Civil Engineering University of Moratuwa Moratuwa, Sri Lanka
12:45-13:20	Open Discussion on Prioritizing Mitigation and Adaptation sectors with capacity building needs	Moderated by ADPC and MoE
13:20-13:30	Vote of thanks and wrap up	Ms Kumudini Vidyalankara Director, Climate Change Secretariat, Ministry of Environment
13:30	**Lunch**	