

Capacity Building on National and Subnational Planning for Sustainable Disaster Risk Reduction, Climate Change Adaptation, and Mitigation

January 30- February 1, 2024 Maldives National University Campus, Male Hybrid (MS-Teams)

Introduction:

Asia and the Pacific region is experiencing some of the greatest threats of climate changeinduced disasters. Over the past decades, floods, tropical cyclones, heatwaves, droughts, and earthquakes have become more frequent and intense, leading to terrible losses of lives, displacing communities, damaging people's health, and pushing millions into poverty. Immediate collaborative action is required to prevent and respond to disaster risks before climate resilience becomes unfeasible.

In this respect, the Maldives, as a low-lying island nation, is among the most vulnerable countries in the world. Maldives is regularly exposed to hydro-meteorological hazards such as drought, storms, monsoonal heavy rain and related floods, cyclones, and storm swells. Maldives has the lowest terrain in the world, with more than 80% of its islands less than 1 m above the mean sea level. Given the global sea level rising at the rate of 3 to 4 millimetres per year, 31-50% of the population in the Maldives are likely to be exposed to sea level rise and related events such as coastal storm surges and coastal inundation more frequently by 2100 under business-as-usual scenario (SSP2). Considering this situation, the most pressing need would be to understand the risk and to be able to identify the risk hotspots so that appropriate action plans and policy decisions can be made. Simultaneously, the technical capacity of the relevant government institutions and other stakeholders in the country needs to be strengthened to understand the relevant data and use those data to produce scientific and data-driven evidence to support policies and plans.

ESCAP and UNDP are jointly implementing a two-year (2022-2023) SDG-funded project to strengthen the integration of Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) with the national and sub-national development planning to ensure better achievement of SDG and Agenda 2030 in the Maldives. Under this project, ESCAP has developed an updated risk profile of Maldives based on high-resolution climate projection information and geospatial techniques to provide technical advisory to the Government on strengthening existing data and information products and support evidence-based policy making for DRR and CCA and design interventions. ESCAP, through its Risk and Resilient Portal (RRP)¹, provides the users with access to the landuse/landcover maps of the Maldives, climate

¹ https://rrp.unescap.org/



projections, population distributions, and more to assist local councils in implementing island-level disaster management plans and vulnerability assessments.

To ensure that the stakeholders are well-equipped to use, apply, and update the developed database and the planning tools, a series of training workshops were designed to enhance the institutional capacity of the government institutions, Local Councils, other stakeholders, and youth. As a part of the technical training, ESCAP conducted a webinar on "Introduction to Geographic Information Systems & Getting Started with QGIS" on June 15, 2023, covering the basics of GIS.² The second technical training of the series was a hands-on training held in Male on August 14&15., 2024. This workshop was designed to help the participants enhance their basic knowledge of climate models, climate change projections and scenarios, along with the methodology to use that information for climate risk assessment for Maldives. It also targeted helping to build the participant's technical capacity and knowledge on using QGIS to generate and use current landuse/ landcover maps and use the climate risk information for risk-informed landuse plans.

This training, in collaboration with Maldives National University, is the concluding event of this project, concentrating on enhancing the capacity of stakeholders to access the data and decision-making tools through the ESCAP's Risk and Reslient Portal while providing an opportunity for further discussions on how to translate the available data and information into policy and action.

In addition to these trainings, ESCAP has developed some guidebooks to assist the stakeholders in their DRR and CCA efforts. The available manuals are as follows:

- I. Beginner's Handbook on Introduction to Geographic Information Systems and QGIS Software (English)
- II. Guidebook for Landuse/ Land Cover Mapping And Climate Risk Assessment for Small Island Developing States Using Geospatial Techniques (English)
- III. Beginner's Handbook on Operationalizing Impact-Based Forecasting and Warning Services (IBFWS) (English)
- IV. Introduction to the Risk and Resilient Portal (English, Dhivehi)

 $^{^2\} https://www.unescap.org/events/2023/strengthening-national-and-subnational-capacity-sustainable-disasterrisk-reduction-0$



Goal:

- i. Concluding the project and providing the stakeholders with a summary of findings and recommendations
- ii. Enhancing the stakeholder's ability to use the data and the Risk and Resilient portal's decision-making tools
- iii. Provide a policy forum to discuss the use and applications of the data and tools.

Administrative Aspects:

This Event will be held in hybrid mode from Male. The Event will be in English. The final report of this meeting will be shared on ESCAP's Website.

Target Participants:

Government Institutions; Atoll Councils and Local Councils; Academia and Researchers; CSO & NGO Organizations; Private Sector organizations in Maldives; United Nations agencies



Tentative Program

DAY 1	
Time	Agenda
8:00 am-8:30 am	<u>Registration</u>
8:30 am-9:30 am	 Session I: Opening Session (Hybrid) Moderator: Dr Nadhiya Abdullah - Research Associate, Research Development Office - MNU Welcome Remarks Ms Mikiko Tanaka, Head, ESCAP South and South-West Asia Office Mr Enrico Gaveglia, Resident Representative, UNDP Maldives Opening Remarks Mr Ibrahim Mimrah, Minister of State for Climate Change, Environment and Energy / Maldives Meteorological Service Dr Aishath Shehenaz Adam, Vice-Chancellor, Maldives National University Inaugural Address Mr Hisan Hassan, Chief Executive, National Disaster Management Authority
9:30 am-10:15 am	Photo Session + Tea Break



10:15 am-11:20 am	 Session II: Introduction of Project Objectives and Progress Made(Hybrid) Dr Leila Salarpour Goodarzi, Associate Economic Affairs Officer, South and South-West Asia Office, ESCAP Presentation Q&A
11:20 am-12:20 am	 <u>Session III</u>: Key Priority Findings and the Future Plan of Action (Hybrid) Ms Prangya Gupta, Consultant, ESCAP Presentation Q&A
12:20 pm-1:30pm	Break, Lunch and Prayer
1:30 pm- 3:45	 Session IV: Access and Use of Data and Decision Making Tools, Risk and Resilient Portal-Part 1 (Hybrid) Presentation An Overview of the Risk and Resilient Portal (RRP), Dr Madhurima Sarkar-Swaisgood, Economic Affairs Officer, ESCAP (Online) Demonstration of the Risk and Resilient Portal for Maldives, Ms Prangya Gupta, Consultant, ESCAP This session will provide the participants with a brief explanation of commonly used terminologies, climate models, scenarios, and projections and will follow with a demonstration of the portal. Upcoming features of the RRP, Dr Frank Paul Janecek, Consultant, ESCAP (Online)



	 Special Intervention
	Presentation: New Tracking System for Hazardous
	Events, Disaster Losses and Damages', Mr Rajesh
	Sharma, Program specialist, UNDP Bangkok
	Regional Hub (Online)
	▶ Q&A
	<u>Session V:</u> Recap of Day 1 (Hybrid)
3:45 pm- 4:00 pm	Dr Leila Salarpour Goodarzi, Associate Economic Affairs
	Officer, South and South-West Asia Office, ESCAP

DAY 2	
Time	Agenda
8:00 am-8:15am	Registration
8:15 am-9:15 am	 Session VI: Setting the Tone for Day 2 (Hybrid) > Welcome and Planning of the Day Dr Leila Salarpour Goodarzi, Associate Economic Affairs Officer, South and South-West Asia Office, ESCAP > Introduction of Some of the Existing Regional, Subregional, and National Climate Change Initiatives & Platforms AP-Plat and ClimoCast ,Dr Yuji Masutomi, Head AP-PLAT, NIES RIMES Initiatives & Decision Support Systems (DSS) for forecasting, Mr Michael De Los Santos Bausas, RIMES (Online) Geodata tools for integral planning coastal zone protection, Dr. Fredrik Huthoff, Associate Professor, Water Resources and Ecosystems Department (Online) > Q&A



9:15 am-11:00 am	Session VII: Access and Use of Data and Decision-MakingTools, Risk and Resilient Portal-Part2 (In-Person)• Ms Prangya Gupta, ESCAP▶ Hands-on Training of the Risk and Resilient PortalThis session will allow the participants to visualize differentclimate scenarios through the RRP in the hands-on training.▶ Q&A
11:00am-11:30am	Tea Break
11:30 am-1:00 pm	 Session VIII Experience Sharing: How Maldives is Planning on Translating the Disaster & Climate Data and Tools into Policy and Action (Hybrid) Moderator: Dr Mostafa Mohaghegh, Senior Coordinator, APDIM, ESCAP Panel Discussion Mr Hisan Hassan, Chief Executive Mr Ali Shareef, Deputy Director General Meteorology, MMS (Online) Ms Aishath Huma, Assistant Director, Ministry of Construction and Infrastructure Mr Mohamed Basheer, President, Noonu Atoll Council Mr Hassaan Mohamed, Deputy Minister, Ministry of Climate Change, Environment & Energy



1:0 pm-2:00 pm	 Session IX: Round Table Discussion on Mainstreaming Gender in Disaster Risk Resilient and Climate Change Adaptation (Hybrid) Moderator: Ms Mikiko Tanaka, Head, ESCAP South and South-West Asia Office Panel Ms. Mariyam Shizna , Director-Programs, Research and Advocacy, Emergency Management, National Disaster Management Authority Ms Aishath Afa, Senior Social Protections Officer, Ministry of Social and Family Development Mr Isy Faingold, Deputy Representative, UNICEF Ms Portia Hunt, Programme Advisor, United Nations Environment Programme (Online) Mr Ibrahim Shameel, Manager, Programmes & Services, Maldivian Red Crescent
2:00 pm-3:00 pm	Break, Lunch and Prayer
3:00 pm-4:00 pm	 Session X Bringing data into DRR and CCA (Hybrid) Moderator: Dr Leila Salarpour Goodarzi Presentation Data Governance, DRR, Dr Mostafa Mohaghegh, Senior Coordinator, APDIM, ESCAP Disaster Related Statistics in CCA and DRR, Mr Teerapong Praphotjanaporn, Statistician, ESCAP (Online) Downscaling hazard projection data for national planning, Dr Yuji Masutomi, Head of AP-PLAT, NIES Collecting data on subnational level, Ms Fathimath Lahfa, Head of Exploration, UNDP Maldives Accelerator Lab Q&A



	<u>Session XI-</u> Recap of Day 2 (Hybrid)
4:00 pm-4:05 pm	Dr Leila Salarpour Goodarzi, Associate Economic Affairs Officer, South and South-West Asia Office, ESCAP

DAY 3	
Time	Agenda
8:10 am-8:20 am	Registration
8:20 am-8:30 am	Welcome and Planning of the Day (Hybrid) Dr Leila Salarpour Goodarzi, Associate Economic Affairs Officer, South and South-West Asia Office, ESCAP
8:30am-10:30 am	 Session XII: Early Warning for All (Hybrid) Moderator: Ms Faroosha Ali Naseer, Director, Emergency Management, National Disaster Management Authority Impact Based Forecasting for Maldives under the SDG-Funded project, Ms Prangya Gupta, Consultant, ESCAP Some of the ongoing initiatives Introducing the Early Warning for All Initiative, Mr Harold Rice, Associate Program Officer ,UNDRR & Mr Ahmed Fizal, National Consultant for DRR and CCA, UNDRR ESCAP Trust Fund for Tsunami, Disaster and Climate Preparedness, Ms Temily Baker, Program management officer, ESCAP (online)



	 Panel Discussion 	
	Dr Sanjay Srivastava, Chief, Disaster Risk	
	Reduction, IDD, ESCAP (Online)	
	Mr Ahmed Rasheed, Director Meteorology,	
	Maldives Meteorological Services	
	• Ms Mariyam Vishama, State Minister, Ministry of	
	Agriculture and Animal Welfare	
	 Mr Ahmed Fizal, National Consultant for DRR and CCA, UNDRR 	
	 Mr Mohamed Azan Abdulla, Environment 	
	Analyst, Ministry of Climate Change, Environment	
	and Energy	
10:30 am-10:50 am	Tea Break	
	 Session XIII Financing in DRR and CCA (Hybrid) Moderator: Ms Mikiko Tanaka, Head, ESCAP South and South-West Asia Office 	
	\succ Panel	
	Ms Subathirai Sivakumaran, Chief of Financing for Development Section, Macroscopomic Policy and	
	Development Section, Macroeconomic Policy and Financing Division, ESCAP	
	 Mr Mohamed Shahudh, Economist, UNDP 	
	Maldives	
	• Dr. Fazeel Najeeb, Assistant Professor, Research	
	Development Office, MNU (Former Governor of	
10:50 am-12 pm	MMA, Central Bank)	
	 Mr. Alper Aras, Economic Affairs Officer, UNDRR (Online) 	
	 Mr Mohamed Basheer, President of Noonu Atoll council 	
	• Mr Thibyan Ibrahim, Assistant Director, Ministry	
	of Environment	
	≻ Q&A	
12:00 pm- 1:15 pm	Break, Lunch and Pray	
1:15 pm-2:45 pm	<u>Session XIV</u> Policy Dialogue on Cooperation and Collaboration Among Various Stakeholders for DRR and	



	 CCA Successful Planning and Implementation (Hybrid) Moderator: Dr Nadhiya Abdullah - Research Associate, Research Development Office - MNU This session provides an opportunity for discussion around how Research Institutions, Universities, and other non- Governmental organizations can contribute to DRR and CCA Panel Dr. Zeeniya Kamil, Assistance Professor - Faculty Of Engineering Science and Technology Maldives National University Mr Madin Mohamed Maseeh, President, Maldives Space Research Organisation Mr. Umar Moosa Fikry, Deputy Chief Executive, National Disaster Management Authority Mr Maeed Mohamed Zahir, Advocacy Director, Ecocare Maldives Dr Leila Salarpour Goodarzi, SSWA ESCAP
2:45 pm- 3:15 pm	 <u>Concluding Session</u> Mr Enrico Gaveglia, Resident Representative, UNDP Maldives
3:15 pm-3:30 pm	<u>Feedback</u>