

NOTE

Round Table on Building Climate Resilience in the Hydropower Sector through Early Warning Systems: ICDRI 2024 (In-person/ Hybrid – T.B.D)

Date: 24-Apr-24 Time: 1600-1730 IST

Venue: Studio 3, Bharat Mandapam

Session Abstract

The Community of Practice (CoP) on Resilient Infrastructure for Energy Transition through its focus on Early Warning Systems (EWS) for Building Climate Resilience in the Hydropower Sector aims to promote medium to long-term climate change adaptation and strengthen the resilience of hydropower in flood-prone or drought-prone regions through robust EWS mechanisms.

This round table session focusing on the impacts of climate change on hydropower sector, has been planned to facilitate assessment on current status on this critical topic and generate a series of knowledge products to potentially inform policies and practices on the existing gaps/needs.

Potential outcomes

The focus of this round table is specifically on data for risk assessment and aims to facilitate exchange of best practices with relevant hydropower sector-related stakeholders in the flood-prone and drought-prone regions of the world. It is envisaged that the dialogues will lead to development of decision-support systems for:

- supporting advanced scientific assessments of climate risks and impacts on hydropower to better inform financial decisions.
- improving robustness of hydropower operations, enhancing climate adaptation,
- helping strengthen local capacity needs for dam safety through EWS,
- addressing technical issues including the modernization of EWS for the hydropower sector,
- ensuring better financial flows through potential pipeline projects with MDBs
- better coordination of resilient infrastructure development for achieving mutual benefits for all the stakeholders involved.

Who will be participating in the round table?

The round table is expected to be comprised of stakeholders drawn from utilities operating in the hydropower sector, government agencies such as disaster management agencies, meteorological agencies, and power ministries in the identified countries such as Nepal, Bhutan and Chile.

Session Outline

The round table session is expected to be held at the International Conference on Disaster Resilient Infrastructure (ICDRI – 2024), New Delhi, India in an in-person/ hybrid format for a duration of 90 minutes. The session will deep-dive into the aspects of data for risk assessment as it concerns financial decision making.

Panelists

S No	Panellist Name Designation & Organization	In-Person/ Virtual
1	Kamal Kishore, Head of Department, National Disaster Management Authority (NDMA) & Co-Chair, Coalition for Disaster Resilient Infrastructure (CDRI)	In-Person
2	Ramraj Narsimhan, Senior Director – Programmes, CDRI	In-Person
3	Roberta Boscolo, Climate and Energy Lead, World Meteorological Organization (WMO)	Virtual
4	Jinsun Lim, Energy and Environmental Policy Analyst, International Energy Agency (IEA)	In-Person
5	Marie L’Hostis, Water Resources Specialist, Asian Development Bank (ADB)	Virtual
6	Dario Liguti, Director – Sustainable Energy, United Nations Economic Commission for Europe (UNECE)	Virtual
7	Isabella Villanueva-García, Climate Change Analyst, Ministry of Energy, Government of Chile	In-Person
8	Manjusha Mishra, General Manager, National Hydroelectric Power Corporation (NHPC), India	In-Person
9	Giriraj Amarnath, Principal Researcher – Disaster Risk Management and Climate Resilience, International Water Management Institute (IWMI)	In-Person
10	Daniel Broman, Research Scientist, Pacific Northwest National Laboratory (PNNL)	Virtual
11	Mark Christian, Technical Leader, Hydropower Modernization, Electric Power Research Institute (EPRI)	Virtual
12	Hemlata Bharwani, Scientist, India Meteorological Department (IMD)	In-Person
13	Erica Udas, Ecosystem Specialist, International Centre for Integrated Mountain Development (ICIMOD)	In-Person
14	Belinda Hewitt, Senior Disaster Risk Management Specialist, Asian Development Bank (ADB)	In-Person (Observer)
15	Astha Gupta, Lead India Consultant, International Energy Agency (IEA)	In-Person (Observer)
16	Dr Bhaskar Singh Karky, Consultant, Asian Development Bank (ADB)	Virtual (Observer)

Run of Show

Time (IST)	Duration	Activity	Person
1600-1602	2 Min	Introduction about the round table	Aishwarya Pillai, Lead Specialist, CDRI
1602-1607	5 Min	<p>Introductory comments, opening remarks and context setting. Participant name and designation</p> <p>Keynote</p> <ol style="list-style-type: none"> 1. Kamal Kishore, Head of Department, National Disaster Management Authority (NDMA) & Co-Chair, CDRI <p>Moderator</p> <ol style="list-style-type: none"> 2. Ramraj Narsimhan, Senior Director – Programmes, CDRI <p>Panellists</p> <ol style="list-style-type: none"> 3. Roberta Boscolo, Climate and Energy Lead, World Meteorological Organization (WMO) 4. Jinsun Lim, Energy and Environmental Policy Analyst, International Energy Agency (IEA) 5. Marie L’Hostis, Water Resources Specialist, Asian Development Bank (ADB) 6. Dario Liguti, Director – Sustainable Energy, United Nations Economic Commission for Europe (UNECE) 	Ramraj Narsimhan, Senior Director – Programmes, CDRI

Time (IST)	Duration	Activity	Person
		<p>7. Isabella Villanueva-García, Climate Change Analyst, Ministry of Energy, Government of Chile</p> <p>8. Manjusha Mishra, General Manager, National Hydroelectric Power Corporation (NHPC), India</p> <p>9. Giriraj Amarnath, Principal Researcher – Disaster Risk Management and Climate Resilience, International Water Management Institute (IWMI)</p> <p>10. Daniel Broman, Research Scientist, Pacific Northwest National Laboratory (PNNL)</p> <p>11. Mark Christian, Technical Leader, Hydropower Modernization, Electric Power Research Institute (EPRI)</p> <p>12. Hemlata Bharwani, Scientist, India Meteorological Department (IMD)</p> <p>13. Erica Udas, Ecosystem Specialist, International Centre for Integrated Mountain Development (ICIMOD)</p> <p>Observers</p> <p>14. Belinda Hewitt, Senior Disaster Risk Management Specialist, Asian Development Bank (ADB)</p>	

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		15. Astha Gupta, Lead India Consultant, International Energy Agency (IEA) 16. Dr Bhaskar Singh Karky, Consultant, Asian Development Bank (ADB)	
1607- 1610	3 Min	Keynote address	Kamal Kishore, Head of Department, National Disaster Management Authority (NDMA) & Co-Chair, CDRI
1610-1612	2 Min	Showcasing the CoP - Hydropower Sector Resilience on DRI Connect Platform	Aishwarya Pillai, Lead Specialist, CDRI
1612- 1636	24 Min (8 X 3 min each)	Opening Remarks by Panellists 1. Roberta Boscolo, Climate and Energy Lead, World Meteorological Organization (WMO) 2. Jinsun Lim, Energy and Environmental Policy Analyst, International Energy Agency (IEA) 3. Dario Liguti, Director – Sustainable Energy, United Nations Economic Commission for Europe (UNECE) 4. Marie L’Hostis, Water Resources Specialist, Asian Development Bank (ADB) 5. Daniel Broman, Research Scientist, Pacific Northwest National Laboratory (PNNL)	

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		<p>6. Mark Christian, Technical Leader, Hydropower Modernization, Electric Power Research Institute (EPRI)</p> <p>7. Isabella Villanueva-García, Climate Change Analyst, Ministry of Energy, Government of Chile</p> <p>8. Manjusha Mishra, General Manager, National Hydroelectric Power Corporation (NHPC), India</p>	
1636-1725	44 Min	Deep dive on the theme of data for risk assessment:	
		<p>Question 1</p> <p>What data is required for modelling future climate risks to guide financial decisions?</p>	<p>Panellists</p> <ul style="list-style-type: none"> • Roberta Boscolo, Climate and Energy Lead, World Meteorological Organization (WMO) • Manjusha Mishra, General Manager, National Hydroelectric Power Corporation (NHPC), India • Mark Christian, Technical Leader, Hydropower Modernization, Electric Power Research Institute (EPRI)
		Question 2	<p>Panellists</p> <ul style="list-style-type: none"> • Marie L'Hostis, Water Resources Specialist, Asian Development Bank (ADB)

Time (IST)	Duration	Activity	Person
		How can we establish a climate event database or knowledge centre to safeguard existing hydropower investments from severe climate impacts?	<ul style="list-style-type: none"> • Mark Christian, Technical Leader, Hydropower Modernization, Electric Power Research Institute (EPRI)
		<p>Question 3</p> <p>What initiatives or collaboration platforms will be needed to assess climate risks and impacts?</p>	<p>Panellists</p> <ul style="list-style-type: none"> • Dario Liguti, Director – Sustainable Energy, United Nations Economic Commission for Europe (UNECE) • Marie L’Hostis, Water Resources Specialist, Asian Development Bank (ADB)
		<p>Question 4</p> <p>How can localized factors be integrated into projections to enhance understanding of hydropower generation risks and impacts across various geographical locations?</p>	<p>Panellists</p> <ul style="list-style-type: none"> • Jinsun Lim, Energy and Environmental Policy Analyst, International Energy Agency (IEA) • Hemlata Bharwani, Scientist, India Meteorological Department (IMD) • Isabella Villanueva-García, Climate Change Analyst, Ministry of Energy, Government of Chile • Giriraj Amarnath, Principal Researcher – Disaster Risk Management and Climate Resilience, International Water Management Institute (IWMI)

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		<p>Question 5</p> <p>What challenges exist for cross-sectoral and multi-country data collaboration in this area, and what solutions do you propose to overcome them (e.g., governance of data)?</p>	<p>Panellists</p> <ul style="list-style-type: none"> • All
1725-1730	5 Min	Sum up by Moderator including future focus and call to action.	Ramraj Narsimhan, Senior Director – Programmes, CDRI