Minutes of Meeting – Community of Practice on Energy Infrastructure Resilience (Virtual)

Date of Meeting: 18 July 2024

Attended by:

1. Roberta Boscolo, WMO
2. Jinsun Lim, IEA
3. Gianluca Sambuca, UNECE
4. Manjusha Mishra, NHPC
5. Giriraj Amarnath, IWMI
6. Mark Christian, EPRI
7. Amit Tripathi, CDRI
8. Aishwarya Pillai, CDRI
9. Avinash Venkata, CDRI

Points of Discussion:

- The agenda of the check-in was to discuss the two immediate milestones for the CoP: the second proposed technical dialogue following from the hybrid round table held on the sidelines of the ICDRI '24; and the proposed knowledge product, *Recommendations for Resilience of Hydropower Infrastructure*.
- The technical dialogue (virtual), as part of CDRI's webinar series -**DRI Dialogues**, is proposed to be held tentatively in the 3rd or the 4th week of August '24, on CDRI's digital learning, knowledge exchange and co-creation platform, **DRI Connect.** The CDRI team will be sharing a draft outline to gather inputs from the CoP on the proposed points of discussion and flow of the dialogue.
- It was also reiterated during the check-in that the scope of the **envisaged knowledge product will be limited to Early Warning Systems (EWS) for Hydropower Sector for 2024-25**, in conjunction with the original objectives of the agreed upon sub-theme of the CoP and as a logical follow-up to the ICDRI 2024 round table.
- It was agreed that the technical dialogue will be a deep dive into the question of **Modernization of EWS with focus on Hydropower Sector**; and the agenda, along with the necessary questions for inquiry and the run of show for the same, will be co-created by all the stakeholders.
- The draft of the knowledge product will be co-created with the CoP members representing diverse perspectives on the critical topic of resilience of hydropower sector.
- It was also discussed that initial findings, collated from the ICDRI 2024 round table and the proposed technical dialogue on modernization of EWS for hydropower may be disseminated at an upcoming high-level event, preferably the COP30 at Baku, Azerbaijan.
- Initial ideas discussed for the proposed knowledge product include:
    - National Hydroelectric Power Corporation (NHPC), India has established a master control room with focus on EWS for the hydro-electric assets. The experiences/ learnings from this initiative can be shared and built upon through the CoP's activities.
    - Regarding decision-making within the hydropower sector, both extremes of water availability - excessive water leading to floods and insufficient water resulting in droughts - play a significant role, as these affect key functions of

the hydropower plants including generation, supply, irrigation etc. These extreme scenarios pose challenges to the optimal operation and management of hydropower resources and will need to be explored further along with transboundary issues. Climate extreme events should be included in the scope of the CoP's planned deliverables, specifically the

- An ex-post evaluation of dam break issues can provide valuable insights into the challenges faced and the effectiveness of the solutions implemented. This evaluation could include an analysis of the causes of the dam break, the immediate and long-term impacts, the response strategies employed, and the effectiveness of these strategies in mitigating the impacts.
- Post-colonial periods have seen limited expansion in hydropower storage capacity to tackle climate extremes. While enhancement of EWS has been possible, mitigation measures are insufficient due to constraints in storage capacity, infrastructure upgrades, financial resources, policy frameworks, and institutional capacities. These factors need to be addressed for comprehensive climate resilience in the hydropower sector.
- An asset-centric approach can be adopted to map and understand vulnerabilities of hydropower assets, from a chronological attributes point of view, and to understand the implications for disaster preparedness at the community level.
- A country landscape analysis may be conducted to better inform the findings.
- The scope of the CoP in terms of focus on technical capabilities of the hydropower assets versus multi-stakeholder perspective on the problem statement needs to be clearly articulated.
- Policy actions to address gaps including lack of investment, environmental clearances for hydropower plants and community-level engagement is essential.
- In terms of way forward for the CoP, the recommendations distilled from the CoP deliberations as part of the focus on EWS for hydropower resilience can be potentially used for resource mobilization towards a collaborative project.

Next Steps:

- The core group members will help co-create the agenda and the topics of discussion for the proposed virtual technical dialogue on modernization of EWS for hydropower resilience. The dialogue is proposed for mid-August 2024.
- The core group members will help co-create the broad outline of the proposed knowledge product. CDRI will share a draft table of contents to initiate the process which can then be used for iterations and development of the document.
- CDRI in discussion with the core group members will onboard a writer with domain expertise to compile the knowledge product.
- Proposed timeline for the knowledge product:
  - Contract external consultant writer for knowledge product – August '24
  - Source inputs from CoP core group members and drafting – August '24 – January '25
  - Review and finalization of document – January – February '25
  - Design and print-ready version – March '25
  - Launch at ICDRI 2025 – April '25