

Research Meeting of the Asian Irrigation Governance and Management Network on
“Resilient Community Irrigation Management in Context of Climate Change and
multifunctional Rural-Urban Water Use competition in Asia”

Ostrom Center for Advanced study in Natural Resources Governance (OCeAN)
Asian Institute of Technology (AIT)
July 12-15, 2024

The Theme

Throughout Asia, degradation of natural resources is happening at an increasing rate and is a primary environmental concern. Recent tragedies associated with climate change have clear footprints on the land degradation and water course changing. A significant proportion of water resources are consumed through irrigation activities, where water resource degradation and water pollution are often the result of overexploitation and contamination by industrial users who make resource-use decisions based on a complex matrix of options and potential outcomes.

Asia is among one of the most dynamic regions in the world. The fundamentality of political and socioeconomic settings has been altered following the financial and economic turmoil in the region. The economic growth, infrastructure development and industrialization are swelling impacts on water resources in the form of resource degradation and social conflict at many stances. The water resource bases are decreasing at the cost to produce economic output. In a way, a part of these challenges have been offset by enhancing natural resource use efficiency and technology extension. However, the net end results are prominent in terms of increasing resource depletion and social unrest. Furthermore, climate change impacts have demanded further the need for adaptation and mitigation measures to consequences of erratic precipitation and temperature fluctuations, increased irrigation needs and extreme events such as floods and droughts, which ultimately affects the livelihood of both rural and urban communities.

In addition, in the quest for delivering the SDGs, Governments, NGOs, and academics have been searching for appropriate policy recommendations that will mitigate the trend of water resource degradation while meeting the resource demand. By promoting effective policy and building the capacity of key stakeholders, it is envisioned that sustainable development can be promoted at both the top-down and bottom-up perspectives. Capacity building in the field of water resource management and poverty alleviation is hence an urgent need for suggesting policy alternatives.

The importance of informed policy guidance in the sustainable governance and management of water resources in general have been recognized due to conflicting and competing demand and uses of these resources in the changing economic context in Asia. This is because water resources are public in partnership with state and local community but the benefits are at the individual and private level in day-to-day basis. In the larger virtual environmental context, however, the benefits and costs have global implications. There are several modes of governance and management arrangement of these resources in partnership of private-public range. Several issues related to governance and management need to be addressed that can directly feed in the ongoing policy efforts of decentralization and poverty reduction measures in Asia.

Through this research focus, the following issues are of interest to seek answers to:

- a. How can economic growth be prudent together with holding water resources intact?

- b. How has decentralization of water management rights affected the resource conditions?
- c. How can the sustainability of efforts to improve the productive capacity of small-scale irrigation systems be assessed in the context of current debate on the effects of climate change and initiative and implementation of new programs?
- d. What are the effective polycentric policy approaches for governance and management of water resources that are environmentally sustainable, and gender balanced?

We propose to organize a four day writing meeting on issues related to the governance of irrigation systems in Asia to be participated by the Ostrom Center Associates from five Asian countries (Indonesia, Thailand, Nepal, India and Pakistan). Based on the presentation, we intend to bring these issues forward for global audiences and policymakers in planning a special issue of International Journal of the Commons, and Ostrom Center's continuing publication of volume VI on natural resources governance and management issues in Asia by Elsevier.

In addition, the Nepal Irrigation Institutions and Systems (NIIS) database is a key repository of data for the study of Common-Pool Resources (CPR) and Social-Ecological Systems (SES) initiated by Elinor Ostrom and her colleagues from Nepal and Workshop in Political Theory and Policy Analysis at Indiana University. The database includes data on 233 separate irrigation systems in 29 of the 75 districts of Nepal. The number of cases which ranges from irrigation systems shared by 25 households to 5,000 households, and the number of questions (509). The database is one of the largest databases on irrigation systems in Nepal that has ever been established and analyzed. Furthermore, the database includes systems in which rules were primarily made by farmers (farmer managed) to those in which the rules for using the canals were made, fully or partly, by government agencies. This is also one of the only databases in this field of study that includes longitudinal data collected repeatedly over the last three decades. In addition, the NIIS database is an adaptation of and utilizes the same variables adopting the CPR forms. The database has provided important empirical evidence for studies of water management in Nepal and the region (Lam, 1998; Ostrom and Shivakoti, 2002; Shivakoti, et al., 2005; Ostrom, et. al., 2011).

The Asian region biennial IASC meeting in 2019 concluded that NIIS database is an important source of information for the study of water management and, hence, should continue to be updated and maintained. With the changing social-ecological systems in Nepal and the emergence of new challenges and uncertainties in Asia, there is a need for developing an Asian Irrigation Institutions and Systems (AIIS) database, building upon the structure, design and methods of NIIS. The AIIS database, which captures the eccentricity of irrigation systems across Asia, will enable researchers to conduct comparative analysis of water institutions and management, with particular reference to how water systems can be robust and resilient to shocks and disturbances. Geographical diversity within Asia will be a distinctive feature of the database which will cover irrigation systems fro India, Indonesia, Nepal, Pakistan, and Thailand.

PROGRAM SCHEDULE

Resilient Community Irrigation Management in Context of Climate Change and multifunctional Rural-Urban Water Use competition in Asia

Bi-annual Writing retreat organized

By

Ostrom Center for Advanced study in Natural Resources Governance (OCeAN)

Asian Institute of Technology (AIT)

July 12-15, 2024

11 July (Thursday) (Afternoon)		
15.00-21:00	Arrival and Registration of Participants	(AITCC Lobby)
Day 1: 12 July 2024 (Friday)		
Session 1: 09:00-12:00 (Coffee break@10:30-11)	<p>Inauguration and Professor Helmi and Professor Ren Xio Dong Memorial Speeches</p> <p>Ganesh Shivakoti: Background and objectives</p> <p>Dean/SERD: Remarks from AIT</p> <p>Prof Mokbul Morshed: Development and Sustainability issue research and training at AIT and Ostrom Center Activities</p> <p>Prof Rajendra Shrestha: Vote of Thanks</p> <p><u>Keynote speeches:</u></p> <p>Dr. John Ambler, Ford Foundation, USA Tribute to Helmi and keynote speech (to be recited by Yonariza)</p> <p>Bryan Bruns: Groundwater governance and community irrigation management in the context of climate change and water competition: Six synergies as starting points to consider.</p> <p>Personal reflections: Prof Mini Bahar</p> <p>Dr. Chen Huyan, Tongji University, Tribute to Professor Ren and key note speech</p> <p>Personal reflections: Zhu Ting (University of Shanghai via Zoom)</p>	(Room E-220 SERD Building)
12:30-13:30	Lunch Break	
Session 2: 13:30-17.00	<p><u>This session will be devoted to reviewing country progress in AIIS Research network and immediate future plan.</u></p> <p><u>Professor Asif and Dr. Raza Ullah will present their first round of data analysis results based on the Household and system level research tools developed during 2022 meeting in AIT and Chiang Mai. Ram C Bastakoti and Juthathip will present their earlier research findings from Nepal and Thailand using NIIS explore expansion possibility of AIIS dataset in their field research setting. Sukit and Jitima will</u></p>	(E- 220 SERD Building)

	present their recent research findings from Muang Fai in Chiang Mai valley using AIIS research tools.	
17:00-17:30	Wrap-up for day and Group leader announcement for Journal editors, book editors, USAID/RDMA_Bangkok and SEI_Bangkok Proposal writing.	(E-220 SERD Building)
Day 2: 13 July 2024 (Saturday)		
Session 3: 09:00-10:30	<i>Panel Discussion on the Future Activities for the AIIS Governance and Management in Asia</i> (Moderator: Ganesh Shivakoti, OCeAN) Asif Kamran PK Viswanathan Yonariza Juthathip Chalermphol Ram C Bastakoti	(E206)
10:30-10:45	Coffee Break	
Session 4: 11:00-12:30	Elsevier volume VI Book progress: Raza Ullah Theme and plan for volume VII: R. Shrestha, Yonariza and Juthathip IJC theme and paper submission: Viswanathan, Yuerlita and Raza Ullah	(E206)
12:30-13:30	Lunch Break	
Session 5: 13:30-17:00 (coffee break@15.00)	Group Break up for Proposal writing: Ram C Bastakoti will present preliminary draft of the proposal (modified version of earlier Philomathia proposal) to fit in the USAID requirements based on his earlier experience with the USAID RDMA project funded to AIT. Ram will be joined by Rajendra, Chandra Sekhar, Asif and Yonariza. Raza Ullah and Yuerlita will present SEA_Bangkok proposal draft (Yuerlita has grant from SEA_Bangkok and she has experience) based on the Philomathia Foundation proposal. Raza and Yuerlita will be joined by Visu, Ganesh and Jutha.	(E206)
7.00 pm	Dinner	
Day 3: 14 July 2024 (Sunday)		
8.30-3.30	Both Team for USAID_RDMA_Bangkok and SEA_Bangkok will divide responsibilities and finalize first draft among the team members.	(E206)
Day4: 15 July 2022 (Monday)		
9:00-12:00	Ram Bastakoti and Raza Ullah Groups present the power point and distribute word file of the proposal to the participants followed by discussions on Asian Irrigation Institutions and Systems on Future Activities of AIIS with respect to:	(E206)

	<ul style="list-style-type: none">• Adaptation experience of NIS Forms to AII Forms: Raza Ullah• Country collaboration and Data storage and retrieval: Ram Bastakoti• Future Network Meetings and Fund raising: Ganesh Shivakoti <p>Closing</p>	
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