

Beyond Diesel: Navigating an Equitable and Sustainable Irrigation Landscape in Bangladesh

National stakeholder workshop by IWMI- SDC-SoLAR project and CGIAR TAFSSA Initiative

Venue: InterContinental Hotel, Dhaka

Date: 6th March 2024

Time: 10:00 am – 3:30 pm BST

Background

The announcement by the honourable Prime Minister of Bangladesh to reduce dependency on diesel and convert all diesel irrigation pumps to solar power is a commendable vision. At present, there are approximately 1.3 million diesel irrigation pumps in Bangladesh, serving an irrigated area of 3.0 million hectares. In contrast, the total installed solar capacity stands at around 50 MW, irrigating less than 1% of the net cultivated area. This stark contrast underscores the magnitude of the change envisioned, emphasizing the need to outline a rapid and equitable transition to solar-powered irrigation pumps (SIPs), ensuring economic and environmental sustainability. Also, simultaneous rapid electrification efforts will significantly impact the groundwater irrigation market and the transition away from diesel. In this context, it is crucial to comprehensively assess the implications of both SIP and electric pumps on broader issues such as equity, groundwater preservation, land use, food security, etc.

Workshop Partners

To understand these issues, the [International Water Management Institute \(IWMI\)](#), under the “[Solar Irrigation for Agricultural Resilience \(SoLAR\)](#)” project in South Asia, funded by the [Swiss Agency for Development and Cooperation \(SDC\)](#), is organizing a national stakeholder workshop in Bangladesh in collaboration with the [Infrastructure Development Company Limited \(IDCOL\)](#), [NGO Forum for Public Health](#), and the CGIAR initiative, [Transforming Agrifood Systems in South Asia \(TAFSSA\)](#).

The SoLAR project is a South Asia regional initiative involving Bangladesh, India, Nepal, and Pakistan, implemented by IWMI and funded by the Global Programme of SDC. The project aims to support the climate-compatible development of energy and water systems in rural South Asia for resilient livelihoods. IWMI is partnering with IDCOL to mainstream solar irrigation in Bangladesh.

IDCOL is the pioneer organization in financing renewable energy in Bangladesh and has contributed immensely to the solar irrigation sector in the country.

NGO-Forum is a non-governmental organization in Bangladesh engaged in promoting WASH, nutrition, health, governance, humanitarian responsiveness, safe migration, and climate resilience to improve public health and safety, especially for the poor, marginalized, and excluded segments of society.

TAFSSA is a CGIAR initiative with aims to support actions that improve equitable access to sustainable healthy diets, improve farmers’ livelihoods and resilience, and conserve land, air, and water resources in South Asia.

Workshop Format and Agenda

The workshop will be conducted in a hybrid mode (virtual + on-site). The purpose of this workshop is to facilitate deliberations to strengthen the policy research on the challenges and opportunities of Bangladesh's evolving groundwater irrigation sector.

Time	Presentation/panel		Duration
09:30 – 10:00	Registration		
10:00 – 10:05	Welcome remarks from Md. Enamul Karim Pavel (IDCOL)		5 min
10:05 – 10:10	Welcome remarks from Divya Kashyap Sharma (SDC)		5 min
10:10 – 10:15	Welcome remarks from S.M.A. Rashid (NGO Forum)		5 min
10:15 – 10:20	Welcome remarks from Shreya Chakraborty (TAFSSA)		5 min
10:20 – 10:25	Welcome remarks from Darshini Ravindranath (IWMI)		5 min
10:25 – 10:40	Opening remarks from Chief Guest - Mr. Mohammad Hossain (Director General, Power Cell)		15 min
Tea Break (20 mins) 10:40-11:00			
Session 1 – Transitioning away from diesel-powered irrigation			
11:00 – 11:20	Transitioning to solar-powered irrigation in Bangladesh: Challenges and opportunities	Archisman Mitra + Faiz Alam (IWMI)	20 min
11:20 – 11:30	Q+A		10 min
11:30 – 12:15	<p>Panel discussion: Empowering the marginalized through micro-SIP models</p> <p><i>This panel discussion aims to delve into the potential of micro-SIP models in bridging the energy gap for the poor and marginalized communities, particularly focusing on farmers, women farmers, and those residing in remote locations. Through sharing experiences from around the world and Bangladesh, this session aims to identify successful strategies, challenges, and opportunities for leveraging micro-SIPs to improve agricultural productivity and livelihood in Bangladesh.</i></p>	<p>Martina Groenemeijer (Futurepump) - online</p> <p>Victor Lesniewski (Khetworks) - online</p> <p>Ashok Kumar Biswas (DAE)</p> <p>Md. Sarwar Hossain (BADC)</p> <p>Md. Jahangir Alam Khan (BMDA)</p> <p>Moderated by Darshini Ravindranath</p>	45 min
12:15 – 12:40	Trends and impacts from the electrification of groundwater irrigation in Bangladesh	Deepak Varshney (IWMI)	25 min
12:40 – 13:00	Discussion facilitated by Shreya Chakraborty		20 min
Lunch Break (1 hour) 13:00 – 14:00			
Session 2 – Mini policy hackathon: Reducing diesel dependency in Bangladesh's irrigation system (Group Activity)			
Facilitated by Archisman Mitra and Shreya Chakraborty			
14:00 – 15:15	<p>Objective: Group discussions to explore various aspects of policy pathways and generate solutions for key challenges for reducing dependency on diesel irrigation in Bangladesh's irrigation system and transition towards clean energy solutions.</p> <p>Participants will be divided into four groups, each focusing on one of the following issues:</p> <ul style="list-style-type: none"> • Groundwater sustainability while transitioning from diesel to affordable irrigation • Increasing capacity utilization of SIPs: incentivizing grid integration and others • Financial sustainability of SIPs: reducing costs, tariffs, taxes • Ensuring equitable and inclusive access to non-diesel irrigation <p>Groups will engage in discussions focusing on their assigned question. Each group identifies and formulates solutions to the challenges discussed and then presents their solutions to the entire session audience.</p>		75 mins
15:15 – 15:30	Closing remarks and Vote of thanks – Darshini Ravindranath		15 min
End of Event			