



Agriculture remains critical for livelihoods and food security in South Asia. Over the last 50 years, agriculture in the region has become more energy-intensive due rapid proliferation of groundwater irrigation. The region is home to 25-30 million agricultural pumps, the largest worldwide. These pumps, powered by either dirty diesel or electricity, have been critical for enhancing agricultural production and supporting livelihoods, but cause substantial carbon emissions in the process. Replacing these fossil fuel-based pumps with solar irrigation pumps (SIPs) is an effective mitigation strategy. While agriculture is a source of emissions that causes climate change, the sector is also highly exposed and vulnerable to the impacts of climate change. As such, climate action in agriculture needs strategies that combine adaptation and mitigation actions. Just Energy Transition is one such strategy which involves moving away from fossil fuels to renewable energy while not compromising the adaptive capacity of the farmers.

International Water Management Institute and its partners are organizing a Regional Knowledge Forum as a part of its Swiss Agency for Development and Cooperation (SDC) funded project titled Solar Irrigation for Agricultural Resilience in South Asia (SoLAR) to deliberate on –

## **Energizing Agriculture and Enabling Just Energy Transitions in South Asia: A Regional Knowledge Forum**

**Venue: Indian Institute of Technology Gandhinagar, Gujarat**

**Date: February 06 - 08, 2023**

### **Conference Partners**



## Format of the Forum

The forum is organized as a two-day conference – on February 06 and 07- comprising plenary and parallel sessions in five thematic areas:

**Theme 1: Solarizing Smallholder Irrigation:** Policy landscape and empirical evidence of the impact of solar irrigation pumps (SIPs) on farmers' incomes and livelihoods.

**Theme 2: Conserving Groundwater Through Solar Irrigation:** Empirical evidence and future projections.

**Theme 3: Connecting Off-Grid to the Grid:** Pilots and lessons from grid-connected solar irrigation projects.

**Theme 4: Renewable energy in agricultural value chains:** Institutional models, policies, and case studies on livelihoods and impacts.

**Theme 5: Making energy transitions inclusive and equitable:** Is renewable energy transition in South Asia GESI (gender, equity, and social inclusiveness) compatible?

Sessions will be held in a hybrid mode (virtual + on-site presentations), depending upon the availability of the session presenters/discussants.

The conference will be followed by a half-day field visit, on February 08, to a local solar irrigation site and the Gujarat Energy Research and Management Institute's (GERMI) training facility.

For more updates, visit our website: <https://solar.iwmi.org/>