

## IWMI's First Monitoring Visit to SIP Implementation Sites in Bangladesh

From 21<sup>st</sup> February to 1<sup>st</sup> March 2022 a two-member team from IWMI, SoLAR – Bangladesh visited 10 sites, five each in Northwest and Southwest Bangladesh. These visits were to monitor the progress of the implementation work carried out by NGO Forum, and to measure the flow rates of the SIP vis-à-vis the diesel pumps.

### Northwest

**Sites visited:** *Boro Bochapukur, Birganj, Dinajpur; Koykuri Uttar Kandor, Bochaganj, Dinajpur; Nonagram Kamarpara, Birol, Dinajpur; Jamubari, Badarganj, Rangpur and Dolua, Badarganj, Rangpur*

In all the sites, the team selected 3 outlets for monitoring that had flow meters installed, and the concerned SIP operator was trained to maintain an irrigation logbook. Individual diesel farmers selected in nearby areas and were also provided with logbooks to maintain.

- In 4 out of 5 sites SIP operators were found to maintain the logbook, while in 2 out of the 3 sites with piezometers, operators were found to take correct reading of flow rates.
- Quality of data on flow rates could be affected if SIP operators do not monitor outlets at full flow as could be variation in the flow rates across outlets when these are not operating at full flow.
- The team had selected 8-9 diesel farmers for monitoring and out of them they visited 2 farmers. Logbooks for those were maintained and the team measured the flow at their pumps. For most, flow rates were ~ 5 l/s except for one site in Dolua Rangpur where pumps have higher depth and flow rates were ~ 10 l/s.





## Southwest

**Sites visited:** Singairbil Math, Kushtia Sadar, Kushtia; Kuripole-1, Mirpur, Kushtia; Dighirpar-1, Gangni, Meherpur; Chatter-1, Meherpur Sadar, Meherpur and Jambaganer Math, Alamdanga, Chuadanga

- Selection of monitoring outlets was similar to that in the Northwest
- As the sites were not conducive to installing flow meters, monitoring was based on the logbooks maintained by SIP operators and outflow rate tests carried out by the team.



- The team did not monitor individual diesel farmers here but surveyed diesel water sellers to water use in SIP and diesel command
- areas
- Flow rates at sites where outlets were piped and above ground, were found to be much higher at 20-25 l/s, than in the Northwest.
- Flow rates were found to be high in diesel pumps also ( $\sim 15$  l/s), especially with high capacity pumps.
- Distance between sites can act as a deterrent for efficient monitoring since it may constrain the local personnel from visiting two to three sites simultaneously, and carry out overall monitoring more frequently.







**Some areas of concern**

- Lapses on part of the operator in recording flow rates and logbooks
- Flow tests for underground outlets
- Maintenance of SIP panels
- Incidence of theft of flow meters
- Shallow groundwater level
- Water quality, such as high level of iron in water, clogs pipelines
- Unreleased payments for unused solar power in the grid