

Interview Series Newsletter Issue 12

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What is your role in the project?

I have been working on the Pakistan component of the project as Research Officer – Policy and Water Governance since July 2020. I am based in IWMI's Lahore office, Pakistan. My project activities are not confined to a specific component rather I am involved in several tasks. From designing surveys, collecting field data, and conducting data analysis, I have contributed to developing reports and policy briefs. Also, I have supervised installation of in-situ instrumentation on solar and non-solar pumps in three districts of Punjab, Pakistan. As part of my responsibilities, I have been a part of various stakeholder consultations and events conducted under this project.

Which aspects of the project interest you the most personally and why?

One aspect of the project that interests me is exploring the possibility of alternate use of solar pumps to make groundwater abstraction sustainable. Net metering is one of the options explored in detail through choice experiments. If implemented, net metering can act “as killing two birds with one stone” – groundwater abstraction can be reduced, and farmers can get an alternate income source. Another aspect of the project that is of interest is exploring ways to make use of groundwater sustainable while farmers adopt solar technology. Field trials for precision surface irrigation have been instrumental in investigating the possibilities of saving groundwater while focusing on maintaining the yields.

The most interesting aspect of the project is interacting with farmers and listening to their stories and struggles of dealing with shortage of surface water and deteriorating groundwater levels. This has been a great learning curve and with the option of solar technology available, it is rewarding to contribute to a pool of knowledge that will eventually lead to sustainable agriculture and the betterment of the farmers.

What are the critical questions that your country team is trying to answer?

There are two main questions that we are trying to answer in the Pakistan component of the project. First, is there any difference in the behaviour of farmers, primarily related to groundwater abstraction using solar pumps as compared to farmers using non-solar pumps? Second, is there any unused solar capacity with solar pump farmers and what is the willingness to sell that extra electricity back to the grid?

Three rounds of surveys have been conducted to answer the first question whereas choice experiments have been conducted to answer the second question. To verify the results of the data collected through various surveys, in-situ instrumentation has been installed on solar and non-solar pumps to measure actual pumping levels and excess solar power generated by the solar pumps.