Equipping Students with Information on Rainfall Measurement

Development Alternatives (DA) with support from the Danish Ministry of Foreign Affairs - DANIDA Fellowship Centre is implementing a Research Project titled, ‘Integrated Water Resources Assessment of Upper Berach Basin (Ahar River), Udaipur District’. Under this project, training sessions on rain gauge installation and rainfall measurement for school students organised by us in collaboration with our local partner, Vidya Bhawan Polytechnic (VBP), from 13 to 16 July, 2022. The training was based on preliminary research work and a module that is being developed on ‘Integrated Water Resources Assessment in Udaipur: A Citizen Science Perspective’. This training intended to equip students on rainwater harvesting and make them understand the interlinkages between different water sources.

With the onset of monsoon this year, the key activities under the Integrated Water Resources Assessment - Udaipur Project including a training module development followed by a training session at selected institutions were initiated. Alongside, seven Jal Tara water quality testing kits were provided to the selected institutions in Ahar River Watershed area.

A rainfall module, which was prepared to train and guide students, local people, and teachers, has the following pivotal concepts that resonate with the theme of the project on understanding interlinkages between various water sources (how one augments the other), knowledge sharing among researchers and communities for effective understanding, and management of water resources:

1. Understanding the water cycle, taking rainfall as a starting point.
2. How rainfall is measured, and why is it necessary in the context of Udaipur?
3. Why engaging students and other citizens is important in water resources assessment?
4. Understanding the interlinkages between rainfall and groundwater recharge.
5. Understanding the importance of rainwater harvesting in the context of Udaipur.
6. Methods of rainwater harvesting – traditional/modern in rural and urban areas.

Eight private schools were selected, covering the upper, middle, and lower basins of the Ahar River and their students were trained. In each school, a resource person was identified as a contact person.
and the one who would assist the research team in guiding students. A team of three researchers was appointed to train students on rainfall measurement techniques and the basics of water quality testing such as PH measurement, TDS (total dissolved solids), and temperature testing. A group of 10–15 proactive students was selected from each school to volunteer for daily measurement and record-keeping of rainfall. Out of them, two were assigned the duty of monitoring daily record-keeping and ensuring consistency in taking measurements. The students were trained on how to install rain gauges and take measurements through live demonstrations at the installation site. The training session also tried to prepare students for future water worries in Udaipur and institutionalise rainwater harvesting practices. The sessions also resolved to continue training on water quality testing, well monitoring, tracing sources of pollution, and capacity-building workshops on integrated water resources management.