

## Workshop on Ecological Health Monitoring

**D**evelopment Alternatives jointly conducted a workshop with Vidya Bhawan Polytechnic (VBP) in Udaipur on 11 January 2023 with a broader focus on participatory learning and knowledge sharing through the Citizen Science approach. This workshop was part of an ongoing Integrated Water Resource Management study, which is supported by the Danish Ministry of Foreign Affairs - DANIDA Fellowship Centre. To conserve and improve the water resources such as lakes, wells, *baolis*, and rivers of Udaipur, 45 students and 15 teachers from 12 schools and 2 universities, 6 water management experts, along with many citizens, youth, and engineers came together to formulate plausible solutions.

The session started with a Participatory Learning and Action exercise wherein students and experts, who are a part of citizen science network in Udaipur, shared their learnings on water resource assessment done by them with assistance from researchers from DA and VBP. During this session, participants were divided into six groups, who then did a detailed study of three waterbodies in the city, namely, Fateh Sagar Lake, Swaroop Sagar Lake, and Gumania drain. In the study, contamination from various sources like drains, households, and industries was found. At the same time, some plant species that can treat contaminated water through the process of bioremediation were also identified.



Citizen scientist collecting water quality sample data at Fatehsagar Lake

Ms Gitika Goswami, Associate Vice President & Lead Policy Research & Planning, Development Alternatives, appreciated the spirited participation of students and young volunteers in the workshop. She stressed on the significance of Citizen Science as a tool to strengthen community ownership by involving them in water resource assessment and management processes.

Dr Anil Mehta, Principal, Vidya Bhawan Polytechnic and Lead Researcher, DANIDA-IWRM Project, remarked that this citizen engagement exercise and study will be helpful for improving and conserving the Ayad river basin, including the Gumaniyan drain.

Dr Anurag Priyadarshi, CEO, Vidya Bhawan Society; Dr Alex Aisher, Environmental Anthropologist, University of Sussex and; Mr Arvind Singh Kanawat, Senior City Planner also encouraged students to be a part of the citizen science activity in Udaipur. The other experts who attended the workshop were Ms Tanya



Citizen Science Network stakeholders in Udaipur

Issar, Ms Vaishali Kanojia, Ms Nidhi Sehrawat, and Mr Pankaj Saini from Development Alternatives, Dr Anita Jain, Botanist, Vidya Bhawan Rural Institute, Mr Tej Shankar Paliwal, Lake Restoration Expert,

Mr Nand Kishore Sharma, Director, Gandhi Manav Kalyan Samiti; Mr Kushal Rawal, Director, Abhinav Sansthan, Dr Vikram Singh Kumawat, Polymer Science Expert, VBP, Dr Sangeeta Chaudhary, GIS Expert, Geetanjali Institute of Technical Studies, and several teachers from Government Schools from in and around Udaipur, who put forth their views on participatory water management.

The participants discussed parameters such as water quality, rainfall patterns, and groundwater levels of the Ayad River Basin in Udaipur from Madar, Sisarma to Vallabh Nagar region. Also, they conducted on-site Ecological Health Assessment of Fateh Sagar Lake, Swaroop Sagar Lake, and Gumania *Nala*. The students shared their experiences and observations at the plenary session organised at the Town Planning Department of Udaipur.