



Empowering communities for sustainable groundwater management



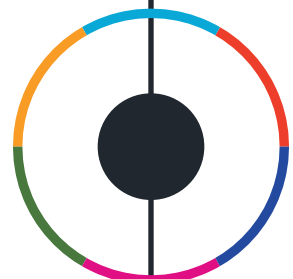
OBJECTIVE OF THE PROJECT:

The objective of our project is to further the principles of United Nations’ SDG 6, by setting up a model for monitoring groundwater quality, to empower users, allow for potential policy change and better water infrastructure. Our target population includes rural communities in India that are heavily dependent on groundwater supplies.



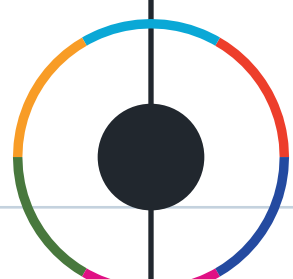
Problem addressed

In a population of 1.39 billion in India, nearly 80% rely on groundwater for everyday use. Groundwater water quality assessments are carried out yearly in India. Illnesses associated with fecal contaminants, heavy metals and diffused pesticides are far more frequent, with remediation delayed by long. Very often, communities remain unaware and have generalized health concerns that are preventable. The current system of monitoring can do with some change, especially in terms of regularity. Our project aims to tackle this dearth of knowledge and data, through a model based on joint action.



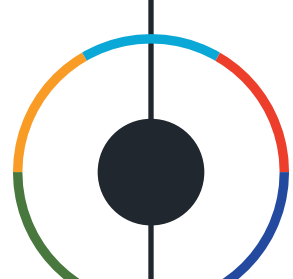
Solution proposed

Our solution is envisioned to be carried out in two broad phases:
Phase 1 begins by initiating dialogue within the target community about the purpose of a groundwater quality monitoring system; followed by basic training workshops. An initial assessment of the area is performed in collaboration with the volunteers, identifying the most prevalent contaminants through the use of probes and testing kits. This, accompanied by relevant crowdsourced data would be analyzed, and parameters for long term monitoring determined. Phase 2 sees routine water quality tests conducted independently by the community, alongside systematic data reporting. Where feasible, remote sensing probes will also track water quality. A cloud-based setup enables sharing of the data generated on a public-platform. Users are notified of potentially dangerous readings via app/SMS alerts.
Once the system is established and functional, implementation of remedial measures, modes of augmenting existing water supplies through conservation techniques and reuse of greywater is considered; suited to resource availability.



Expected impacts

Prevention of health concerns (ideally both short and long term) through the consumption of contaminated groundwater, is our aim. In a country where approximately 27 million wells serve as sources of drinking water for 85% of the nation’s population, an efficient system of monitoring is a necessity. We sincerely believe that conversations about water quality would eventually lead to better attempts at management of water reserves. We hope to widen our scope as we go and reach out to communities that can benefit from such a system in place.



Current state of development and What is the project looking for?

The first prototype and software proof of concept have been developed. We have also established connections with key contacts working in the field for support. Currently, we are looking for local NGOs/activists to pick pilot location, as well as mentor(s) to guide on-field implementation, besides capital.

Contacts

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