

# Community Resource Person: a catalyst in bringing the transformations in practices around groundwater, experiences from Maharashtra, India

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## Abstract

Groundwater plays an important role in the India's water story. The diversity in the hydrogeological setting makes it difficult to develop a blanket model or a framework which can be implemented across the country. There is a need of building the capacity in robust techniques and skills that are required for successful implementation of programs that revolves around groundwater monitoring, assessment, management and governance.

The scientific community have been studying various elements of hydrogeology but the sheer utilitarianess of these studies remains a question. The policies that are designed by decision makers revolves around extraction of the resource than conservation and management of the resource. There are several reasons for such response. One reason is, the classic literature on groundwater that has the potential to get translated to the end user of the resource is either mystified and/or at times trivialized in the path to make it simple. To achieve the balance and to demystify the science of groundwater is key in order to do so. The absence of linking the traditional knowledge to mainstream understanding of the resource is the missing link. A community resource person holds the key in performing the role of a catalyst which holds the potential to merge the traditional knowledge – transferring this knowledge to the community – raising the quotient of the utility of the knowledge thus generated. In transformation sciences, especially in the context of groundwater, is it necessary to understand the role of community resource person and develop an understanding in order to enhance their capacity and role in the mainstream functionary.

A case study approach has been taken which focuses on studies conducted in 5 villages that are located in different agro-climatic zones of Maharashtra. A process of Participatory Groundwater Management is implemented in these villages. The methodology for implementation of PGWM involves scientific understanding of groundwater and social structure. It is an interdisciplinary process that integrates hydrogeological and social sciences to decipher and address the local groundwater problems. The efforts around sensitization, awareness and capacity building programs coupled with skilled training and continued engagement helps in taking one step ahead in achieving groundwater sustainability. The study highlights participatory research methodology in accordance with participatory groundwater management and its role in the transformational sciences especially in attaining transformations to achieve groundwater sustainability.



Periodic monitoring of groundwater sources



Knowledge dissemination to village community



## Background

One of the key elements of Participatory Groundwater Management is training and capacity building. Training and capacity building efforts need to be embedded at various levels of governance and scale of management. Training needs assessment is very crucial in order to understand the existing knowledge base and the gaps in understanding. Such an exercise enables to cater to the specific inputs and knowledge linkage. The diverse hydrogeological and socio-hydrogeological setting requires decentralised approach towards groundwater management and regional training and capacity building mode encourages community members to take an active participation in the groundwater management programs or to design a groundwater management plan that is suitable to local situation.

The studies conducted in the five villages across the different agro-climatic zones of Maharashtra, involves a similar strategy of participatory groundwater management. Starting from east, village Nagloli in Raigad district, Bokud Jalgaon in Aurangabad district, Moha, Nitrud and Takarwan in Beed district, each case study gives an insight on developing a cadre of local water professionals through the capacity building efforts, that helps in bringing transformations in practices around groundwater and sustain the soil and water conservation efforts. Community resource persons (CRPs) were selected from each of these locations and trainings were organised to introduce them to basic concepts of groundwater. They were involved in conducting periodic surveys, regular monitoring of groundwater and rainfall and disseminating the knowledge to larger community of the village. Each of the CRP presented the outcomes from the study at the taluka or district level in order to utilise the knowledge earned for implementation of effective water conservation activities.

## Conclusions

- ① Active participation in the monitoring stage instill the sense of ownership of the resource, bringing a necessary behavioural change.
- ② The knowledge gained from the regional training programs in addition to the traditional knowledge works as an important decision making tool that helps in taking informed decisions around groundwater management.
- ③ The role of a CRP becomes crucial in building institutional capacity at the village level.
- ④ A cadre of water professionals is built at the grass root level that are skilled in bringing about a necessary adaptation of good practices around groundwater resource.
- ⑤ The community resource persons were key in taking forward the advocacy around groundwater at local level with the immediate district authority, this led to the convergence of various programs.