



First Announcement
Training workshop on Participatory Groundwater Management
Dehradun, June 11th - June 22nd, 2012

60 per cent of irrigated agriculture and over 80 per cent of the rural and urban water supply in India depend on groundwater.

By 2025, an estimated 60 per cent of India's groundwater blocks will be in a critical condition. Climate change will further aggravate the situation.

Innovative action research in Andhra Pradesh and Gujarat has shown that community management of groundwater can lead to sustainable groundwater use.

Farmers have almost doubled their farming incomes while reducing their water use and still ensuring their drinking water supply and crops.

This has been made possible by an exceptional programme of farmer education which has created “barefoot hydrogeologists.”

Despite abundant rainfall in the Himalayan states, there are areas of water scarcity. These include crestline settlements, deforested slopes and rain shadow areas. Though groundwater is relatively less tapped in these states it is still a major source of water in the form of springs and base flows in the mountain streams.

The Himalayan geology consists of highly fragmented and fractured rocks. This is not conducive to the formation of large underground aquifers. Groundwater occurs largely in disconnected localized bodies in jointed fractured zones. Despite these constraints the management and conservation of groundwater are not considered in mainstream government programmes.

Developmental activities in the Himalayan region, including the construction of dams, tunnels and roads, changes in land use patterns and deforestation are leading to a decline in of water quality and quantity. In many areas springs are drying up or their discharge is declining.

Encouraged by successful results of community managed groundwater innovations in other parts of India People's Science Institute (PSI) has joined hands with other experienced groundwater VOs to initiate a programme on Participatory Groundwater Management (PGWM) in the Himalayan region with financial support from Arghyam.

The good response to PSI's last 12-day training programme in November - December, 2011 has encouraged us to announce a second *12-day training workshop on hydrogeology and water quality* under Arghyam's sponsorship, from *June 11th -22nd , 2012* in Dehradun. The workshop is open to representatives from voluntary organizations engaged in watershed development and livelihood programmes, students and government officials from the Himalayan states.



Aim

The aim of the programme is to promote integration of geohydrology and mainstream watershed management with a key focus on preparing local geohydrologists to enhance equity and quality in groundwater use in the Himalayan states.

Training Objectives

At the end of the training, participants will:

- Understand the fundamentals concepts of groundwater management
- Understand hydrogeology of the Himalayan region
- Carry out geological and hydrogeological mapping
- Design watershed development plans
- Monitor groundwater quality

The curriculum includes theoretical sessions, practicals and field work on hydrogeology and water quality.

Cooperating partners

ACWADAM (Pune), ACT (Bhuj), WASSAN (Hyderabad) and experienced resource persons from WIHG and CSWRTI (Dehradun).

Eligible criteria of the participants:

Graduates, working or planning to work in the areas of watershed management, groundwater management or livelihoods enhancement. In exceptional cases experienced 10+2 pass staff of VOs will be considered.

Training Subjects

The training will consist of theoretical and practical sessions and field work on:

- Environment and water cycle
- Groundwater its nature and importance
- Geology (Earth formation, Himalaya origin and types of rocks)
- Types of Aquifer and springs
- Hydrogeology relation with groundwater and sanitation
- Role of geohydrology and watershed development
- Practical session: Drainage Analysis
- Field visit: Geological and Hydrological Mapping



Field visit: Dip and Angle Measurement of the fracture of the rock and trend of the river by Brunton and Clinometer

Field visit: Stream discharge measurement

Field visit: For social appraisal and GPS reading

Sample collection technique and water quality analysis of the samples collected from the field

Case Studies (Mountain Groundwater Management Issues)

Mode of application

In this training, a maximum of 30 participants will be selected on the basis of early response. Per participant registration fees from VOs in Uttarakhand, Himachal Pradesh and other Himalayan region is Rs 1,500 only and the registration fees per participant from the Universities and Institutes is Rs 5,000 only. Please register soon to the training course, as there are limited seats left. For more detailed information you can contact Dr Sunesh Sharma (8909550037) and Ms Shubhoshree Banerjee (7409633707).

The candidates should send the dully filled registration form by 30th April, 2012 to eqmgpsi@gmail.com