



SCHOOL OF WATER AND WASTE

**AAETI**

## PAN-ASIA-AFRICA ONLINE GLOBAL TRAINING **USING GIS TOOLS** TO LOCATE AND PLAN RECHARGE OPTIONS FOR SUSTAINABILITY OF DRINKING WATER IN RURAL AREAS

**Dates:** December 1-10, 2021 | **Last date to apply:** November 25, 2021 | **Platform:** Zoom

Groundwater is the most accessed source of freshwater around the world, including for drinking water as well as water for agriculture and manufacturing. It is the primary source of water in rural regions of Asia and Africa, where most of the people of these continents live. Hence, managing groundwater in rural areas – ensuring that it remains contamination-free and is used sustainably – is of critical importance.

According to a recent report, a mere 30 per cent of drinking water sources in Sub-Saharan Africa are safely managed. The poor quality of drinking water gives rise to diseases like cholera, diarrhoea and even skin lesions and cancer. This, in turn, impacts the economic growth of the countries/regions.

Advanced tools and technologies can prove to be instrumental in acting as decision support systems for sustainable management of drinking water – starting from protection of sources and sustainable flow to ensuring quality. Among the latest available technologies, remote sensing techniques along with Geographic Information System (GIS) has become popular for locating and planning groundwater recharge options. GIS offers many tools to extract information about the groundwater prospects of an area by integrating data regarding geological structures, geomorphology, soil, lithology, drainage, land use, vegetation etc. The benefits include improved communication and efficiency as well as better management and decision-making.

Centre for Science and Environment (CSE), one of the Global South's leading think tanks on environment and development, has a legacy of over 30 years of work on water and sanitation management in South Asia and Africa. CSE and its School of Water and Waste is inviting applications for its online training programme on using GIS tools to plan recharge options for sustainability of drinking water demand in rural areas. The programme is open to organisations and individuals from countries in Asia and Africa.

The course will comprise of content hand-picked from years of CSE's work in the field. The mode would be self-study, with the help of learning tools such as presentations, audios and videos featuring the most relevant case studies; online forums for discussion; quizzes and assignments. The participants will get chance to interact with in-house experts as well.

### What does the course offer you?

- Basics of Remote Sensing (RS), Geographical Information System (GIS) and Global Positioning System (GPS)
- Overview of technologies to recharge drinking water sources
- Role of GIS and RS in planning watershed management
- Basic watershed designing concepts with the help of GIS tools

### Course fee

This is a fellowship-based course. Candidates will be chosen based on their profile and departmental nomination. Please apply with your CV, explaining how you would be using the knowledge gained in this course.

### Open to

Government officials, academics, researchers, students, consultants, water management practitioners, and members of non-profits and corporate social responsibility agencies

### Special feature

The top three performing participants will get a free annual subscription of digital Down To Earth, the development and environment magazine from the Global South which CSE helps publish. Participation e-certificates will be provided to all those who complete the course successfully.

[CLICK HERE TO REGISTER](#)

### COURSE COORDINATOR

**Pradeep Kumar Mishra**, Programme Officer, Rural Water-Waste Management

**Email:** pradeep.mishra@cseindia.org, ruralwater@cseindia.org, **Whatsapp:**+91 8085443793/+91 9708887214/+91 8860933075