Terms of Reference (ToRs)
Real Time Monitoring System

BACKGROUND

Water availability for ever increasing population is becoming a challenge in Pakistan, particularly in the Lahore city. Due to over-abstraction and un-regulated pumping of groundwater associated with impacts of climate changes; stress level on groundwater in Lahore has increased. Groundwater level is depleting at an alarming rate of about one meter per annum.

Keeping in view these considerations, WWF-Pakistan in partnership with PepsiCo has initiated a project ‘Community Water Stewardship: Replenishing Groundwater Resource of Lahore’. The project aims to develop the groundwater replenishment system in the vicinity of Lahore by 2021 that has the potential to store or recharge rainwater up to a capacity of 27,000 m³ per annum. This target is envisaged to achieve by rainwater harvesting, groundwater recharge, establishing wetlands, recycling of ablution water in mosques and community awareness program.

PURPOSE OF CONSULTANCY

The main objective of consultancy is to develop a real time monitoring system to assess water quantity and quality being replenished in the vicinity of Sundar Industrial Estate.

KEY OUTPUTS/DELIVERABLES

1. Designing and Installation of real time monitoring system including water quantity and quality measuring devices
   a. Integration of Flowmeters for water quantity assessment
   b. Integration of Water Quality Probes (TDS, pH, Turbidity and DO) for water quality assessment
2. Site installation and monitoring performance of instruments
3. Development of a digital interface to assess and monitor field data virtually