Artificial Recharge in Hard Rock Terrain of Deccan Basalt

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The availability of ground water source depend on the type and location of aquifer unplanned expansion of urban areas and rapid industralisation has leads to competing and complicting demand on ground water. Drought situations have encouraged greater utilisation of ground water leading to its critical depletion of aquifer in some pockets particularly the water depletion is recorded in consolidated formation. The annual rate recharge decreases due to un even distribution of rainfall in the terrain. Due to excess of withdrawal some watersheds are identified as semicritical and over exploited.

The groundwater potential with present status of each watershed needs to be assessed carefully in the different provinces. The sustainable source of location is a matter of first consideration in the hard rock terrain like Deccan Basalt. It is necessary to adapt an appropriate methods of artificial recharge at small scale like mini and micro watersheds.

An attempt has been made to implement the water conservation measures to recharge the groundwater in hard terrain like Deccan Basalt in the watershed of **GV-46** of Aurangabad and Gangapur talukas of Aurangabad district. The area is showing depletion trend of water level in post monsoon period. From the last five years (-0.72) there is drop in water levels of (-) 4.74 m in the Daulatabad jambhala observation wells. To maintain sites for the original water levels and sustainability of groundwater sources the water conservation measures like check weirs, gabbian, percolation tanks etc have been suggested as per recommendation these measures have been implemented by water reservoir department and the result is quite encouragive after carrying out detailed geohydrological survey by Department of Geology, Deogiri college, Aurangabad (M.S.) India.