

## **Increasing ground water potential in the hardrock region of Deccan basaltic terrain through community participation**

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Aurangabad district, Maharashtra state, India is covered by Deccan basaltic flows having uncertainty in ground water occurrence. The area receives 600mm average rainfall, which is not uniformly distributed during monsoon period. The area under investigation is sillod tahsil, which is draught prone. In this area the only source of irrigation is ground water through dug wells. The availability of ground water is very uncertain due to variation in geohydrological characters which vary within short distances. Hence to enhance the financial conditions of the farmers in the draught affected area through optimum use of available groundwater, our voluntary organization Swami vivekanand samaj prabhodhan bahauddeshiya sanstha sillod took a lead.

The detailed geohydrological mapping in the selected 6 villages of the tahsil have been carried out with the help of Geoforum. The geohydrological maps were prepared for the six villages indicating ground water potential. These groundwater potential zones fall into three categories 1.Good 2.Moderate 3.Poor. As per the demarcation our voluntary organization makes the action plan to be implemented in these villages with the help of local farmers.

### **1. The area with good groundwater potential**

Here water conservation structures, formation of farm bunds, Rainwater harvesting, artificial recharge of dug wells have been implemented in large scale so that much more ground water is available in every season for taking more crops.

### **2.Area with moderate groundwater potential**

The same program is repeated in selected localities. The cropping pattern as per water availability has been decided so that whatever annual recharge we get naturally or artificially will be sufficient to fulfill the needs.

### **3.Area with poor groundwater availability**

In this area much stress is given on the surface storage structures. The stored water is allowed to be lifted to the location of the stake holders. The quota of water has been fixed depending on the irrigable land available to the stake holders and the cropping pattern.