

Guide lines for Conjunctive Use of Canal Water in Deccan Basalt Terrain

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To achieve maximum benefit from the assured supply of canal water from Waghdam, arrangements have been made to divert some quantity of canal water in the area of Mahatma Phule Society in Ozar, Dist. Nashik . During each rotation that lasts for 8 days, the canal water is being diverted in Satwai nala for 2 days and for 6 days water is supplied through field channels and distributaries in the area of Mahatma Phule Society and this practice is being followed till today. The diverted water was stored by constructing series of 6 K. T. weirs across Satwai nala. This method of utilizing canal water during every rotation through field channels by way of automatic percolation from the six K. T. weirs is termed as “**Conjunctive Use of Canal Water.**” Since by using canal water by conjunctive method, wells in the areas started yielding good amount of water and remarkable rise in area of cultivation was observed, ultimately the economical condition of the farmers improved considerably.

The investigations carried out in the area shows that, highly weathered, sheet jointed, vesicular amygdaloidal basalt flows are occurring. Due to weathering, secondary porosity was developed in them and the flows became highly permeable. This condition is very much favourable for percolation of water and played a vital role in increasing the ground water level of the area.

In the present paper, detailed discussions are made on geohydrological conditions that act as guidelines for **Conjunctive Use of Canal Water** in Deccan basalt terrain.

If such guidelines are followed, it may prove to be beneficial for the welfare of the farmers.

Key words: Mahatma Phule Pani Watap Sanstha, Conjunctive Use, T.I.A.B. flows, K. T. weirs, Geo hydrological studies.

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