### A Project Report (TD 695)

on

# Jalswaraja and ground water "Thane district"

Submitted in Partial fulfillment of the Requirement for the Degree of

M.Tech. (Technology & Development)

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#### **CERTIFICATE**

This is to certify that the Project report entitled Jalswaraja and ground water "Thane district" submitted in partial fulfillment of the requirement for the degree of Master of Technology in Technology & Development of the IIT Bombay, Mumbai - 400 076 is a record of bonafide work carried out by Nilesh Prakash Naik (07335402) under our supervision and guidance.

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# LIST OF ABBREVIATIONS

APL	Above Poverty Line
ARWSP	Accelerated Rural Water Supply Program
BPL	Below Poverty line
CTARA	Centre for Technology alternatives for Rural area
DAMT	District Appraisal and Monitoring Team
DSR	District Schedule of rates
GOI	Government of India
GOM	Government of Maharashtra
GS	Gram Sabha
GP	Gram Panchayat
GSDA	Ground Water Development Agency
GW	Ground Water
IEC	Information Education and Communication
JS	Jalswaraja
JSS	Jalswaraja scheme
Lpcd	Liters per capita per day
MJP	Maharashtra Jeevan Pradhikaran
MOU	Memorandum of Understanding
NGO	Non Governmental Organization
OB	Observation Well
OMT	Operations and Monitoring Team

O&M	Operation and Maintenance
PIP	Project Implementation Plan
PRA	Participatory Rural Appraisal
PRI	Panchayat Raj Institution
PWD	Public Works Department
RWSS	Rural Water Supply and Sanitation
SHG	Self Help Group
SO	Support Organization
SRP	Sector Reform Program
VAP	Village Action Plan
VP	Village Panchayat (same as Gram Panchayat)
VWSC	Village Water and Sanitation Committee
WSSD	Water Supply and Sanitation Department
ZP	Zilla Parishad

#### ABSTRACT

**Jalswarajya**, a solution for providing drinking water for rural people was been launched in the year 2003, by Government of Maharashtra which was designed to strengthen the implementation of the reform approach all over the Maharashtra State. To verify the objectives proposed by Jalswaraja which are incremental increase in water availability, saving in time for availing water, extension of water supply facilities for tribal population in state, to check the sustainability of ground water for domestic use and to avail actual scenario of Jalswaraja progress, primary field data was collected by CTARA, IIT Bombay and Prayas, NGO Pune in Thane district in the month of May 2008.

This report is an analysis of above primary data and its correlation with the ground water data which we have collected from GSDA. Thus in other words we have analyzed Jalswaraja in Thane district in the view point of implementation, good practices, success/ failure reasons and then related it with ground water data obtained from GSDA. To study actual ground realities, we have also personally visited few Jalswaraja schemes to understand the technicalities and reasons behind the success / failure and to find out good practices for JSS.

Based on above data it is found that overall surface water schemes under Jalswaraja as compared to that of ground water based schemes have a good success rate. Analysis of data showed that there is an increase in water consumption and marginal saving in time for availing domestic water as compared to the villages in which Jalswaraja scheme was not implemented. From GSDA data for Thane district for the month of May it clearly reflected an reduction in ground water table inspite of increase in rainfall , and when the same data is plotted from 2004 onwards ground water table found to be reducing for most of the talukas in Thane district.

Finally based on above, few conclusions with suitable remedies has been suggested so as to help in implementation of project in an effective, efficient and sustainable manner and to aid in achieving objectives and benefits proposed by Jalswaraja scheme to the fullest.

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