

## **Source Sustainability of drinking water sources under Jal Jeevan Mission Program in Maharashtra State**

**State Water & Sanitation Mission**  
**Water Supply and Sanitation Department, Govt of Maharashtra**

The State of Maharashtra has very rugged topography, except parts of Tapti alluvial and other river basin areas. Similarly, 92% of the state area is covered by hard rock geology of igneous and Metamorphic rocks, having very poor aquifer characteristics. In spite of these natural limitations, groundwater resource caters nearly 85% of the rural drinking water needs and about 65% irrigation utilization. Over-exploitation of groundwater, particularly for irrigation, has resulted in significant depletion of water tables. This automatically affects the drinking water supply in the rural areas.

As the state has maximum dependency on groundwater, nearly 28,000 water supply schemes are dependent on groundwater sources. Apart from this, many villages are historically affected by scarcity / droughts, however drinking water has no alternative than groundwater in these areas. For PWS schemes high yielding groundwater sources have been identified but for long-term sustainability of these sources, source strengthening is very essential.

With this background, in FY 2022-23, state has taken up Source sustainability measures (Only direct recharge measures) in 1764 highly scarcity affected villages. Subsequently, for second phase in FY 2023-24, Source sustainability measures in 1440 villages are undertaken where WSS scheme is dependent on groundwater and/or these villages are previously scarcity affected. The implementation of these source sustainability measures is done through State Groundwater Surveys & Development Agency (GSDA) which is specialized in implementation of these schemes.

In Maharashtra, for Source Sustainability, only direct recharge measures such as Aquifer recharge shaft System (ARSS) / Recharge shaft cum trenches etc are implemented under Jal Jeevan Mission Program.

Apart from this, State has also undertaken program for recharge of defunct borewells which are dry at present but previously they were high yielding, through innovative Cross wave technology. For this purpose, two pilot projects are being implemented.

At present, Under **Source Sustainability component**, out of 3204 proposed villages, 26900 direct recharge measures like Aquifer Recharge Shaft System, recharge shafts

and trenches etc in 2981 villages are completed benefiting PWS sources for sustainability of Jal Jeevan Mission Water Supply Schemes.

**Glimpses:**

**1. Source Sustainability measures under Jal Jeevan Mission**



**2. Source Sustainability measures under Jal Jeevan Mission**

