

Rainwater Harvesting Project Report

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Introduction

Panchkrushi Vidyalaya, Loham (Jawale School) has been actively connected with the NGCPR School Education Project since 2023 and has continuously participated in various environmental and awareness programs. The school has successfully developed a Kitchen Garden with the help of NGCPR.

The school has participated in the “Mukhyamantri Majhi Shala – Chief Minister My School Program,” an initiative of Maharashtra State Government-led competition, where the school is supposed to implement different environmental and sustainable practices in the school. At the end of the year, the school is rated and the highest score whichever school that gets is awarded with a cash prize of a few lakhs.



While fulfilling various activities under this program, the school decided to have a Rainwater Harvesting concept on the school campus for water conservation and groundwater recharge. For technical guidance and support, the school approached the Naoroji Godrej Centre for Plant Research (NGCPR).



Through the support and donation provided by Ashwath Sumana Trust in collaboration with NGCPR, it was decided to establish a Rainwater Harvesting model within the school premises. Some part of the funding came from the Inner Wheel Club of Poona Downtown.

Under the guidance of Dr. Kranti Yardi, Head of NGCPR, an initial site visit and technical assessment was conducted. Based on the observations, the project design and required quotations were prepared and submitted to Ashwath Sumana Trust for sponsorship approval. After receiving approval and transfer of Rs 25,000/- on 31 March 2026, the implementation work was initiated.

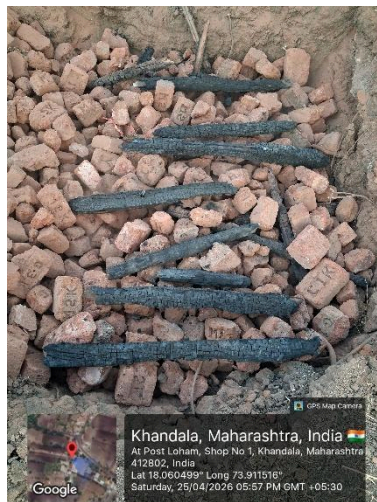
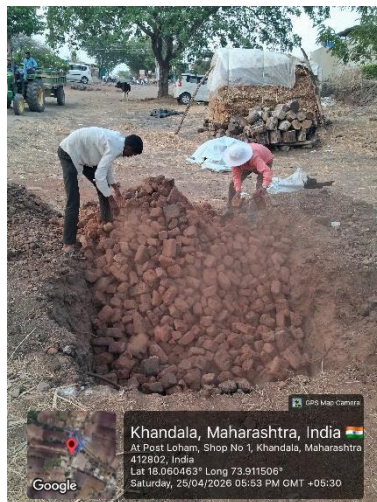
Project Implementation



School roof top area was surveyed & measured -Water collection points were identified.



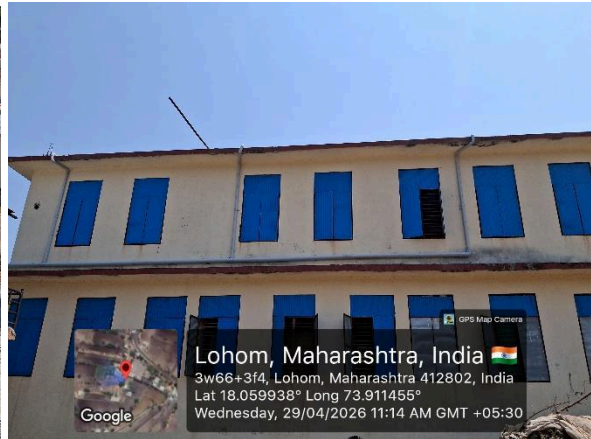
Place for constructing a soak pit was identified.



Soak Pit

The total terrace area of the school is approximately 4500 square feet. Initially, the terrace area was cleaned properly, and plumbing materials were arranged for pipeline connections. For efficient rainwater collection, five outlet points were identified across the terrace area, and the collected water was directed towards a soak pit through a properly connected outlet system. To ensure smooth water flow and collection, single-brick side constructions with proper finishing were completed near all five inlet points.

For groundwater recharge, a soak pit measuring **12 × 8 × 10** feet was constructed. The soak pit was filled using 3 trolley loads of broken red bricks, 20 kg of coal, and 9-inch small stone gravel to support natural filtration and percolation of rainwater into the ground. Double-brick side wall construction with finishing was also completed around the soak pit for structural support and durability.



Inlet & Outlet Pipe

Considering the total terrace area and the region's average rainfall, it is estimated that the project will recharge more than **1 lakh litres** of water annually into the ground. Through this initiative, the Rainwater Harvesting project was successfully completed and established as a practical model for water conservation.



Acknowledgments

We sincerely express our heartfelt gratitude to Ashwath Sumana Trust and Inner Wheel Club of Poona Downtown for their generous funding support toward the successful implementation of the Rainwater Harvesting project. Their valuable contribution played a vital role in transforming this initiative into reality.

This support not only helped establish an effective groundwater recharge system but also encouraged environmental awareness and sustainable practices among students and the school community. Their commitment to environmental conservation has created a lasting positive impact for both the school and the surrounding region.

