



## Soil Moisture Conservation

In mining affected districts, water conservation initiatives support in recharging groundwater and retaining moisture in the soil. Such interventions result in reducing the environmental impact of mining and solving water related issues for local communities. Therefore, OMBADC has contributed Rs. 348.89 crore through the FE&CC Department for soil & moisture conservation projects. The main goal is to reduce water runoff and treat drainage areas to improve water retention in the soil.





**Prabhasuni RF, Doegarh Range, Deogarh:**

The “Concrete Check Dam” has treated more than 100 to 120 hectares of land by conserving water and slowing down streams, which increases groundwater levels and supports nearby wildlife and plants. It prevents soil erosion, improves the local climate by keeping the area moist, and provides water for nearby communities.

**Badampahar Reserve Forest, Dushiani Range, Mayurbhanj:**

In this location, “Staggered Trench” has been dug in a slope area which restricts the speed of rainwater, allowing it to soak into the ground and reduce runoff. This increases groundwater levels, supports plant growth, and prevents soil erosion, keeping the forest soil healthy. The trenches also reduce flooding and create small water sources for animals, improving the overall forest ecosystem. A total of 50.00 Hectare has treated through this activity.



**Sundurua Demarcated Protected Forest (DPF), Bhuyan Juanga Pirah Range, Keonjhar (Approximately 1127.00 Hectare Treated Area):**

The structures i.e., “Wire Mesh Loose Boulder Check Dam” has been constructed in the correct location for controlling erosion and managing water flow in areas prone to soil degradation and runoff. These structures effectively slow down water flow, reducing erosive forces and retaining sediment, thereby preventing soil loss and enhancing soil fertility. Additionally, they promote water infiltration, stabilize stream channels, and create habitats for aquatic life, contributing to ecosystem health and resilience.



**Toda Japti Reserve Forest, Bonai Range, Sundargarh (100 Hectare Treated Area Approximately):**

In this location, “Graded Bunds” are constructed in the inclined area to control water flow through the slanting land, diminishing the flow of rainwater to reduce soil erosion and improve water percolation. This improves soil moisture, supports plant growth, and helps replenish groundwater, which benefits forest vegetation and wildlife. Graded bunds also prevent nutrient loss in the soil, keeping it fertile.

