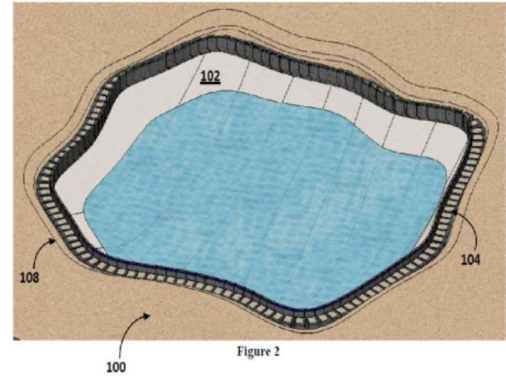


GRANTED**(IN368133)**

A system and method for purifying and collecting rainwater under natural slopes



NEED

In India, over 80% of rainwater is lost due to runoff on sloped terrains, causing water scarcity in rural and hilly regions. Current systems fail to filter and store water efficiently on uneven land. But what if slopes became natural water purifiers and collectors?

TECHNOLOGY OVERVIEW

This patented system uses alkali-activated concrete cloth and layered pervious concrete blocks to purify and store rainwater directly on sloped land. The cloth conforms to the terrain, while integrated screens and sand filters remove contaminants. This approach enables localized rainwater harvesting without needing tanks, pipelines, or pumps.

TECHNOLOGY KEY FEATURES

Terrain-conforming concrete cloth, multi-layered filtration, and on-site water storage. Eliminates need for flat land, tanks, or electricity. Filters suspended solids using coarse screens and sand-pervious blocks. Prevents water loss via infiltration shield.

[Read more here](#)

MARKET ANALYSIS

India's rainwater harvesting market is growing at 7.3% CAGR; globally, the market is projected to reach \$6.7B by 2033 at 6.1% CAGR. Key drivers include water scarcity, decentralized water solutions, and sustainable infrastructure. (Sources: IMARC 2024, Allied Market Research 2023)

Target Industries

1) Rural infrastructure planners and civil contractors enabling off-grid water systems; 2) Environmental solution integrators building terrain-based water conservation modules; 3) Research institutions and eco-tech developers working on sustainable water reuse and localized harvesting.

AT A GLANCE

- SDG 6 (Clean Water), SDG 11 (Sustainable Cities), SDG 13 (Climate Action)

Technology is available for licensing/ co-development.

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