# JAL SANRAKSHAN:

## Your Personalized Water Security Report

Empowering You to Harvest Every Drop

Date: 22-09-2025
Assessed Location: Patiala
Generated by: RWHGenius App

## 1. Executive Summary

Your property holds significant potential to contribute to water security and reduce your water bills!

**Overall Feasibility: HIGHLY SUITABLE**

Estimated Harvestable Water (Annual): 247,095 Liters
Recommended Structure: Recharge Shaft
Estimated Payback Period: ~4 Years

## 2. Site Assessment

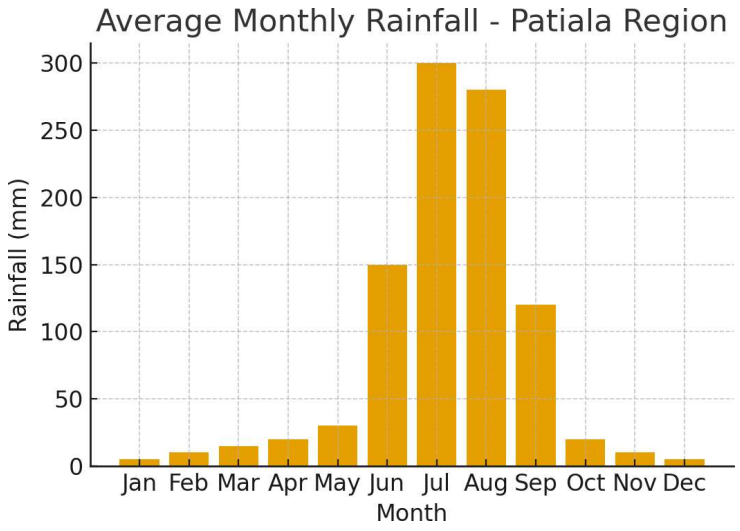
| | |
|---|---|
| User Name | CHAITANYA |
| Phone Number | 98XXXXXXXX |
| Location | Patiala |
| Rooftop Area | 360 sq. meters |
| Roof Material | RCC (Runoff Coefficient: 0.85) |
| No. of Dwellers | 4 |
| Open Space | 220 sq. meters |
| Primary Purpose | Water storage and usage |
| Estimated Budget | ₹50,000 - ₹1,00,000 |

## 3. Harvesting Potential

Your rooftop can capture over 247,095 Liters of precious rainwater annually! Enough water for a family of 4 for over 60 days!

## 4. Hydrogeological Profile

Your local environment is perfectly suited for effective groundwater replenishment.




Local Rainfall: 950 mm/year (Source: IMD Data)
Soil Type: Alluvial (Excellent infiltration potential)
Principal Aquifer: Deep Alluvial Aquifer (Ideal for recharge)
Groundwater Depth: ~20 meters

## 5. Economic Analysis

| | |
|---|---|
| Total Project Cost | ₹50,000 - ₹75,000 |
| Excavation & Labor | ₹25,000 - ₹35,000 |
| Lining & Filter Media | ₹15,000 - ₹25,000 |
| Pipes & Connectors | ₹5,000 - ₹10,000 |
| Annual Water Bill Savings | ₹15,000 - ₹20,000 |
| Payback Period | ~4 Years |

## 6. Recommended Structure & Design

Given your deeper groundwater, a Recharge Shaft is the most efficient solution to replenish aquifers directly.

| | |
|---|---|
| Type | Recharge Shaft |
| Diameter | 1.5 meters |
| Depth | 18 meters |
| Construction | Lined with concrete rings/bricks, filled with graded filter materials |