

# Groundwater Resources Management

#Water Security #Groundwater Recharge



## Gurugram | INDIA | 2023-2024

Climate change and the growing unpredictability of weather patterns, along with the rising sea level, pose significant threats to groundwater levels.

HUMANA India, in collaboration with WaterLab India, is actively tackling this challenge through its innovative initiative, the Groundwater Resources Management project.

Access to climate information plays a pivotal role in assisting and empowering vulnerable communities to make informed decisions about their water usage while contributing to the preservation of water resources.

The project utilizes app-based digital monitoring of groundwater to empower farmers and to enhance their understanding of groundwater dynamics and related agricultural practices in four villages in the Gurugram district.

The primary focus is to build capacity for sustainable and climate-resilient agricultural practices, equipping farmers with knowledge and data regarding groundwater levels.

In response to the impacts of climate change in the region, the project also emphasizes water conservation efforts, including the construction of rooftop rainwater harvesting structures and pond recharge facilities to enhance groundwater levels.

The project collaborates with Krishi Vigyan Kendra to provide:

- updated insights on crops;
- high-yield production techniques;
- tangible advancements in farming practices, further promoting climate-resilient agriculture in the area.



# Access to Clean Energy, Improved Agriculture Practices & Better Income through Biogas Plants

#Clean Energy #Integrated Farming Systems



## Rajasthan | INDIA | 2010-present

Biogas is as a clean, safe, and sustainable energy source for rural communities in India.

The project Biogas as a Renewable Energy Source in Indian Villages launched in 2010 in Dausa (Rajasthan) to counter the detrimental impacts of climate change and to promote biogas as an alternative to firewood and cattle-dung cakes for cooking fuels.

In its subsequent phases in 2014-16 and 2017-19, the project extended beyond constructing biogas plants:

- to assisting local farmers, especially rural women;
- to establish organic farms and boost household income through financial literacy;
- micro-enterprise development;
- market promotion;
- improved horticulture practices.

Throughout the project, 120 FCs were established, and by 2021-22, with the addition of 151 new plants, the total number of biogas plants reached 1,300. The initiative also enhanced soil health on over 300 hectares of land by utilizing bio-slurry, a by-product of the anaerobic digestion process of the biogas plants.

