The background features a stylized landscape with rolling green hills and two large, leafy trees with brown trunks. The sky is a light yellow-green color with white clouds. The text is centered in the upper half of the image.

# DETAILS OF CASE STUDY

**Forest and Wildlife Department Gurugram**  
Project- Soil and Moisture Conservation Works /  
Scheme -NPV

## Location / Project Site (State)-



In the endeavor to conserve soil and moisture, 3 ponds has been dug at Rojka Gujjar in area notified under section 4 &5 of Punjab Land Preservation Act,1900.

- 1.Surya Mandir Johar, Rojka Gujjar
- 2.Kankar wala Johar. Rojka Gujjar
- 3.Bada Mandir Johar, Rojka Gujjar

## Latitude Longitude of Project Site-

- 1.28021'00.7"N, 77008'06.2"E
- 2.28018'54.5"N, 77008'55.7"E
- 3.28019'37.1"N, 77008'39.0"E



## Useful stats and facts about the region.

The work was started in the year 2020-21. After hydrological assessment, suitable sites were selected for ponds to have optimum location for the purpose of storage of runoff during the rainy season and ground water recharge .is done.

## Background on project:



The project landscape in Gurugram comprises of Aravali hills which is the oldest mountain system of Indian sub-continent. Increasing population of human and cattle, injudicious use of natural resources, unscientific mining activities, uncontrolled grazing and unfavorable climatic conditions resulted in the present state of ecological deterioration.



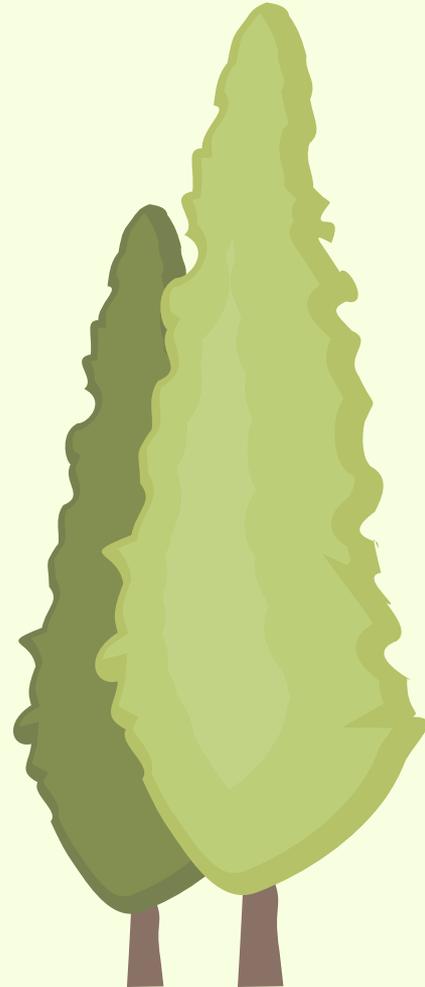
Area is semi-arid in nature with low average annual rainfall levels of 300 - 450 mm. A very important part of this natural infrastructure for soil and water conservation is the Ponds or Jhod/Johad. During summer, Johads dry up with the result that village community faces acute shortage of water.



The ground water is characterized by high fluoride and other salts contents that are known to be hazardous to health. The traditional ponds have over the years become silted and hold lesser and lesser quantities of water with each passing year.



Thus, there is urgent need to revive the traditional water harvesting system through repair, renovation and rehabilitation of existing Johads.

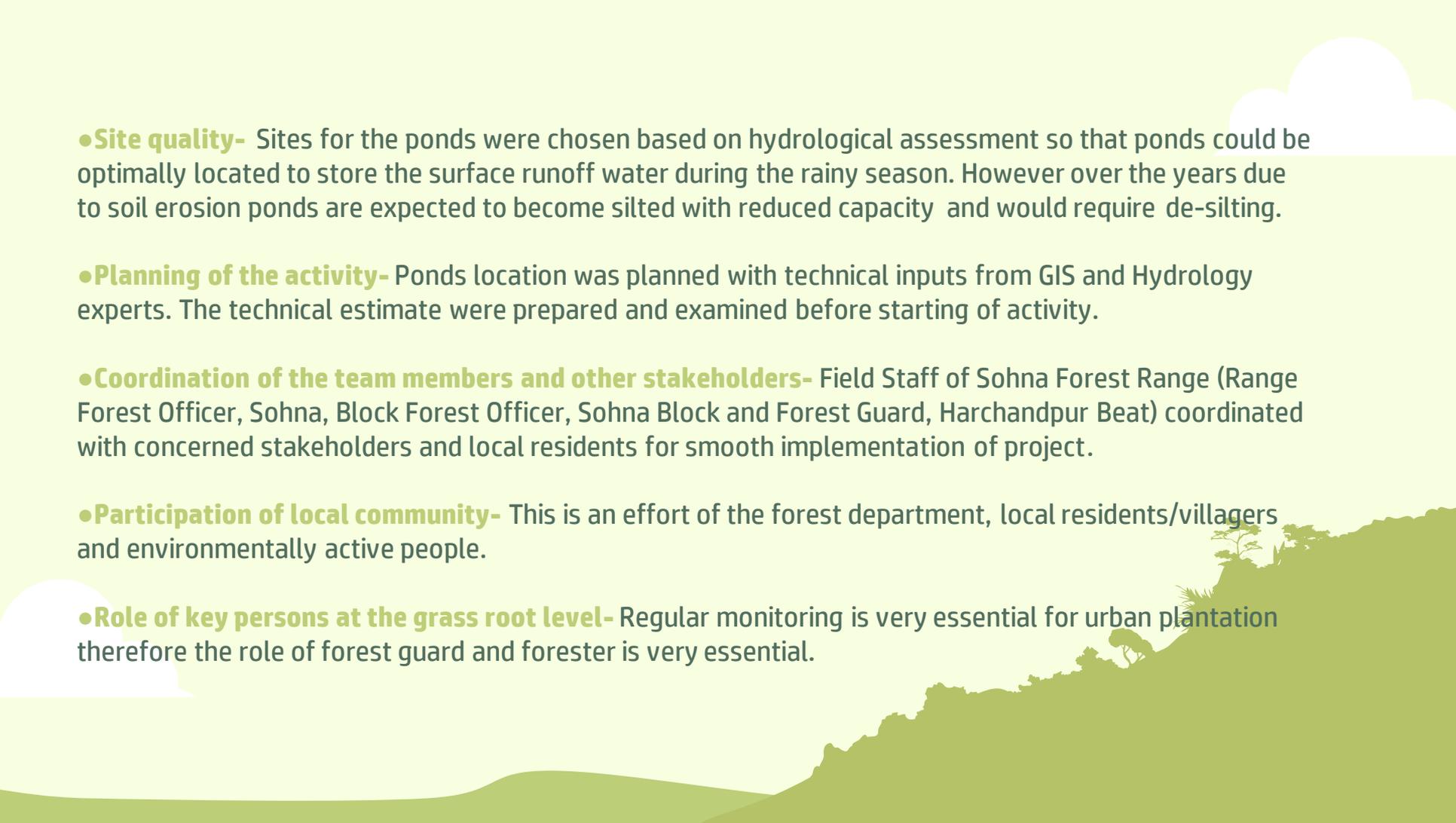


## Who is involved?

Every conservation effort relies heavily on strong community participation for its success. A community-driven conservation effort ensures that the people are directly responsible for their actions, i.e., they have control over their lives and livelihood. Since water scarcity is becoming ever more common there was demand for creating ponds for the purpose of providing drinking water for cattle and wildlife from the local population. Additionally water bodies like ponds can naturally restore groundwater levels. Thus with the effort of the forest department supported by local residents and environmentally active people these ponds were created.



**Surya Mandir Johad**



● **Site quality-** Sites for the ponds were chosen based on hydrological assessment so that ponds could be optimally located to store the surface runoff water during the rainy season. However over the years due to soil erosion ponds are expected to become silted with reduced capacity and would require de-silting.

● **Planning of the activity-** Ponds location was planned with technical inputs from GIS and Hydrology experts. The technical estimate were prepared and examined before starting of activity.

● **Coordination of the team members and other stakeholders-** Field Staff of Sohna Forest Range (Range Forest Officer, Sohna, Block Forest Officer, Sohna Block and Forest Guard, Harchandpur Beat) coordinated with concerned stakeholders and local residents for smooth implementation of project.

● **Participation of local community-** This is an effort of the forest department, local residents/villagers and environmentally active people.

● **Role of key persons at the grass root level-** Regular monitoring is very essential for urban plantation therefore the role of forest guard and forester is very essential.

## Challenges faced in the region

In the initial phase, sensitizing people towards the needs of soil and water conservation remain the biggest challenge. To convince the people of the need to have traditional water conservation structure like pond is major challenge when most there water needs are being met by either by government water supply or from the extraction of ground water and there is fear that among people that water bodies breeds mosquito and may result in outbreak of Malaria and Dengue. However, with efforts the field staff was able to persuade the local people and apprise them with big picture and need of water harvesting for sustainable development.

## Lessons learnt for reorientation of policy and planning of the activity for future replication

People participation is essential for any conservation and sustainability effort.



**Kankar Wala Johad**

## Benefits of the project or initiative to the forest, environment, people and community

**Economic benefits-** Though no evaluation of ecological services provided by these ponds have been attempted in monetary terms but the Ponds shall meet water needs for rearing domestic cattle for the local population thereby reducing drudgery. The ponds shall be improving ground water level, reducing runoff and thus reducing flooding of urban areas during rainy season, water conservation and thereby improving life and livelihood of local population are certain to have monetary value and economic benefit.

**Environmental benefits-** Improving ground water recharge, Reducing runoff and thus reducing flooding of urban areas in rainy season, Ecological regeneration of the landscape, Provision of drinking water for wildlife and thus improvement of Habitat.

**Social impacts-** -By this project around mandays/year has been generated over the last four years. Social Infrastructure has been created for meeting water needs of the domestic cattle being reared.



**Bada Mandir Johad**

A tropical-themed background with a light green sky, a bright sun, and stylized palm trees. The sun is a large white circle in the upper right. The palm trees are dark green with brown trunks. The ground is a solid light green color.

Thanks