# JWF Fund 2021 – Project Outline

### 4. Rehabilitation of existing groundwater recharge system in Thallykothanoor village, India

- Organization: Tamil Nadu Board of Rural Development (TNBRD) (#298)
- Location: Thallykothanoor village, Thally, Krishnagiri district, Tamil Nadu state, India
  - Cost: US\$3,695 (JWF Fund: US\$1,500, contribution from TNBRD: US\$2,195)
- Number of direct beneficiaries: 500 people (men: 180, women: 170, children: 110)
- Background:

Thallykothanoor village is located on sloping land 930 metres above sea level. Its average annual rainfall is 855mm. The major problem faced by the villagers was water scarcity in the summer season. Soil in the village is sandy loam and there is significant soil and water erosion. Water harvesting structures, including a check dam, a gabion structure, and a percolation pond were previously constructed in the area in order to conserve soil and water. They play a major role in increasing the ground water table to meet irrigation and drinking water requirements. These water storage structures were more than fifteen years old and poor maintenance was causing problems, such as the spread of weeds, silt deposition, and deterioration of the surroundings, which was interfering with operation of the facilities. This leads to a gradual reduction in water storage capacity and less water for agriculture and drinking.



Before: Poorly maintained check dam



After: Gabion structure after rehabilitation

- Main activities of the project:
  - -Inception meeting with stakeholders
  - -Establishment of a watershed committee
  - -Training on operations and maintenance with the committee

-Rehabilitation and cleaning of the check dam (10m width x 4m depth), gabion structure (8m width x 2m depth), and percolation pond (10m width x 10m length x 5m depth)

Sustainability activities: The watershed committee will continue to maintain and monitor the structures.

# JWF Fund 2021 - Results of Follow-up Observations

<u>4. Rehabilitation of existing groundwater recharge system in</u> Thallykothanoor village, India

### [Current situation]

- The water harvesting structures are functioning as planned and are providing irrigation water for agriculture, as well as drinking water for farmers and livestock, with more than 1500 indirect beneficiaries. Due to groundwater recharging, the availability of water in wells and borewells has increased. This has led to more fallow land being converted to agricultural activities, which can lead to more employment opportunities in the village.
- The watershed committee is playing an important role in sustainable management of watershed areas, which are vital for water conservation, agriculture and overall environmental health. They cooperate on planning, execution and monitoring of watershed development programs. They identify issues, prioritize problems, and develop action plans for sustainable watershed management. The committee is responsible for maintenance of water harvesting structures and educating the community about the importance of long-term maintenance and sustainability of the structures. The committee is involved in mobilizing funds received from government schemes, non-governmental organizations, and other sources, in order to support watershed development activities. They maintain records of activities, expenses and outcomes. They prepare reports on the progress of watershed development projects. They are involved in resolving conflicts related to water use, land ownership, and resource allocation within the watershed area. They act as mediators and facilitate discussions to resolve disputes. They also help market produce.

## [Changes]

Significant improvements in water conservation have been observed, mitigating the effects of drought and elevating water levels within the village due to the water harvesting structures made in this project.

Access to quality drinking water for both humans and animals has been enhanced, accompanied by improved resources for irrigation.

The increased water availability may have led to the adoption of better hygiene practices among villagers. This could include regular handwashing, maintaining cleaner surroundings, and potentially adopting more hygienic habits when handling water for various purposes.

### [Other Points]

The organization TNBRD received a request regarding a water crisis in a neighboring village. The people of that community were pleading for the same type of help and funding received by Thallykothanoor village. JWF Fund 2021 was helpful, requesting that the funding be provided if possible.



Check dam retaining rainwater



Percolation pond retaining rainwater



Mr. Sankarappa cultivating vegetables

# JWF Fund 2021-Results of Follow-up Observations

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## Voices of the beneficiaries (Excerpts)

Mr. Sankarappa, 51 years old

I am a small-scale farmer, and my family consists of 12 people. I have 4.5 acres of land, 8 head of livestock, and one 750-foot borewell. The borewell is our only source of irrigation and drinking water. Two years ago, before the project, the water was just sufficient to grow a single crop on half an acre of land. We were planning to move to a nearby town in order to secure a regular income. During that time, TNBRD and the JWF made repairs and renovations to the water harvesting structures in our village. Now I can grow vegetable and flower crops on my land, using a drip irrigation system with technical support from TNBRD and financial support from the JWF. I can even provide employment for nearby farmers. I'm going to buy another two acres of land soon.



Mr. Malesh, 51 years old

Our main source of income is agriculture. I have 2.5 acres of land on which I grow flower crops. My land is adjacent to a percolation pond, which retains rainwater throughout the year. Soil erosion from my land is now completely prevented. I'm getting enough water for irrigation and drinking purposes. I'm practicing mixed-crop cultivation with the assistance of TNBRD. My income has gradually increased, and I can provide good higher education for my children. My family wishes to buy four milking cows for additional income and family needs.

### Mr. Rangannathan, 64 years old

Basically, I'm a rose farmer. Before the JWF's involvement, I was unaware of water saving technologies, drip and sprinkler irrigation systems, and water harvesting structure maintenance. Since the renovation work and completion of water harvesting structures in our village, we have enough water for drinking and irrigation. I have now adopted drip and sprinkler irrigation for my crops and am getting higher yields, better quality products and better prices. My sincere and heartfelt thanks to the JWF and TNBRD for these improvements.