Success Stories of Soil &Water Conservation Departmental Schemes/Programmes

1.Rural Infrastructure Development Fund (RIDF) NABARD Irrigation Project

The Rural Infrastructure Development Fund (RIDF), established by the National Bank for Agriculture and Rural Development (NABARD), has been a cornerstone in enhancing rural infrastructure across India. Among its various initiatives, the irrigation projects under RIDF have played a crucial role in promoting sustainable agriculture, improving water use efficiency, and enhancing the livelihoods of rural communities. The Office of the Divisional Soil & Water Conservation Officer, Jowai Territorial Division Jowai, under the Scheme RIDF-NABARD had implemented 12 numbers of Small Multipurpose Reservoir in the whole District, two number of projects under RIDF XXV, seven number under RIDF XXVI, namely Shkenpyrsit RVP, Tken SMR, and Amlamar RVP under Amlarem Block, Thwailaroit RVP, Wahshangpet RVP, Moolatyab RVP and Pohsahkhap SMR under Thadlaskein block, Thangsniang RVP and Wah Tyngkla SMR under Laskein block, one project Umlabar RIDF under RIDF XXVII and two others ie Wah Kyntein SMR and Mukhla RVP under RIDF XXIX.

SUCCESS STORY UNDER RIDF NABARD

Intervention: Small multipurpose Reservoir
Name of the Project: Shkenpyrsit SMR, RIDF XXVI, NABARD
Implementing Agency: Office of Divisional Soil and Water Conservation Officer
Jowai Territorial Division Jowai, West Jaintia Hills District, Meghalaya
Name of the village: Shkenpyrsit
District: West Jaintia Hills
State: Meghalaya

Background

The Shkenpyrsit Small Multipurpose Reservoir (SMR) was implemented by Office of Divisional Soil and Water Conservation Officer Jowai Territorial Division 2021-2023.The Soil and WaterConservation Department through NABARD-RIDF identified Shkenpyrsit village due to:

- Before the construction of the reservoir the farmers depend only on rainfall for irrigation purposes reducing production and productivity of the crop in the process.
- Its unavailability of sustained water sources means the farmers could not take up other livelihood activities such as livestock, pasture development, etc. resulting in the farmers depending on external sources for their crop nutrient requirement, etc, increasing their production cost in the process
- The farmers could not take out double cropping due to unavailability of water for irrigation and nutrient deficiency of the soil, as the farmers could not provide irrigation water during dry season and prepare compost, due to unavailability of resources.
- Absence of a water harvesting structure means more run-off and this leads to more erosion and soil degradation

Also considering the fact that Shkenpyrsit village is located midway between Jowai and Dawki village, where Umngot river famous for its crystal-clear water, fish and various tourist spot is located. Realising the potential other tourism development activities may be developed which will definitely boost the village and the adjoining villages economy thereby improving their standard way of living too. The aim of the Small Multipurpose Reservoir is to cater to the following needs:

1. To meet the ever-increasing demand for irrigation water,
2. Rain water Harvesting and reservoir for ground water recharge, etc.
3. Eco-Tourism: Economic upliftment of the people through tourism activities
4. Fishery Development
5. Conservation and sustainable management of natural resources and their uses.
6. Enhancement of agriculture productivity and production in a sustainable manner
7. To reduce the ground water pollution.

Situation Analysis:

Due to the prevailing water stressed situation of the Village in terms of water requirement of both agricultural and domestic purpose. The Shkenpyrsit village is a location of high agricultural activity where the yield per hectare of crops is less than the potential due to absence of appropriate headwork and other water conservation for harvesting measures. The indigenous irrigation techniques have become a hindrance to the crop production due to irregular monsoon rainfall.

Technology Interventions

The Small Multipurpose Reservoir aims at providing Irrigation Facility,Flood Control,conservation ofForests and Fisheries,Water Supply andRecreation. These facilities will help to mitigate the water stressed related issues of the locals. These Small Multipurpose Reservoir Reservoirs can harvest and store water throughout the year. Multipurpose Reservoir are water impounding structure to be made specially to cater to the multifarious needs of the populace such as irrigation, domestic requirement, fishery development, aesthetics and recreational purposes like tourism. Cascading MRs of various sizes are designed and constructed to meet the various water use requirements such as upstream reservoir could be used for water supply for drinking and irrigation purposes and downstream reservoirs for fish farming. Thus, providing employment to the local youths. The project cost ₹56.06825 Lakhs with a tremendous impact has been by impounding massive water body only by a small headwork which highly commendable and is a blessing resource to the Natural Resource management aspect and economy of the local people. The SMR also helps in recharging of ground water besides controlling floods and soil erosion. The SMR after construction has a water spread of about 1.4 Ha where water conveyance GI pipeline of about 1300 running metre is connected to irrigate the downstream paddy field.

Cost-Benefit Analysis or Economic viability of the Project

With a total Budget of Rs 56.05825 lakh was spent over the project. The BCR at Discount rate 10%for a period of 25years of the project is calculated at the B:C Ratio of 1.45:1 which shows the project is worth for investment**.**

Impact: The impact of the Small Multipurpose Reservoir shows increase of 23 Ha of the agricultural land is brought under assured irrigation ensuring increase in production and productivity besides increasing the Gross command area. The farmers can go for Double cropping both Kharif as well as Rabi crop. The SMR after construction has a water spread of about 1.4 Ha. which means that 1.4 Ha of water bodies is available for fish production. The farmers are sensitised on the importance of natural resources and its management hence are taking active part in the catchment protection. A Water user Association was also formed among the SMR beneficiaries for its maintenance and continuous stability. The community as a whole is benefitted directly through tourism, fish culture, livestock rearing, creating an aesthetic and serene beauty to the area, etc. The employment prospects of this project are expected to significantly enhance the socio-economic conditions of the village through the promotion of tourism and agriculture. The Soil and Water Conservation Department with the Small Multipurpose Reservoir constructed under RIDF-NABARD, has laid the groundwork for various departments to work together towards a common goal.

In 2022-23, proposals were submitted to the Deputy Commissioner Planning Department for the establishment of children's park, and an open gym. The Soil and Water Conservation Department, in partnership with Meghalayan Age Limited, is currently constructing a platform base for setting up eight- ten yurts to boost rural tourism. This Small multipurpose reservoir also provides lifesaving irrigation to ten families with agricultural land downstream, thereby improving the overall socio-economic condition of the community. Additionally, the project offers indirect benefits such as groundwater recharge.

BEFORE CONSTRUCTION

DURING CONSTRUCTION

AFTER CONSTRUCTION

PHOTO GALLERY

COMMAND AREA

Ongoing Work for Rural Tourism

Platform Base for setting up of Yurts