Ministry of Environment, Forest & Climate Change

Adaptation through NAFCC

NABARD

Project Snapshot

Name of the Project : Conserve water through the management of run-off in the river basin to reduce vulnerability and enhance resilience for traditional livelihood in Nuapada

Project Focus : Water Resource Conservation and Management

Location : Naupada District of Odisha

Project Finance : Rs. 20 Crore (USD 3 million). 1 (Conversion Rate: 1 USD = INR 66.52)

Duration : 3 Years (2016-2019)

Name of Executing Entity : Department of Water Resources, Govt. of Odisha

Project Beneficiaries : 600 Nos households along the Jonk River Basin of Nuapada District, Odisha

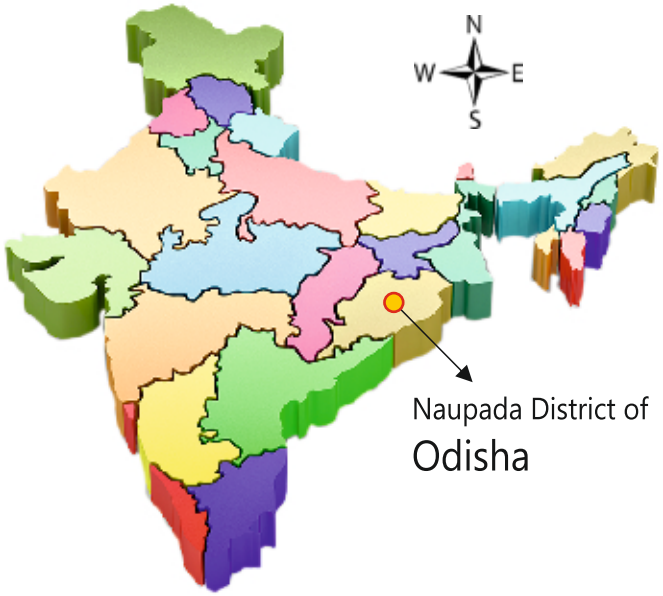

Figure 1 : Deforestation and Mineral Exploration

Figure 2 : Sea Level Rise and Coastline Inundation

The East Indian State of Odisha with 480 km coastline is considered vulnerable due to climate mediated cyclones, coastal erosion, and water resources dependent on the monsoons. About 80-85 % of the state's population is rural dependent on agriculture which is a climate sensitive sector, has 60 % area under rain fed agriculture and water is dependent on rice cultivation. The irrigation intensity of Odisha is only 30.9 % as compared to the National average of 44.3 % (Odisha SACC. 2013).

The project district viz., Naupada falls under the drought prone zone of Western and South Western part of Odisha. The maximum summer temperature of this district goes up to 37.8 ° C and mean minimum temperature in winter goes up to 11.9 ° C. The high gradient of the terrain and poor water distributary system has been causing the problem of perpetual water stress, flash floods, loss of soil fertility, etc. thereby affecting paddy cultivation, food security, and is causing distress migration.

To address the above vulnerabilities, the proposed project envisions to construct water harvesting structures i.e. check-dams to conserve water through the management of run-off in the river basin to reduce vulnerability and enhance resilience for safeguarding traditional livelihood systems.

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Project Approach:

The project is under implementation along the Jonk river basin of Naupada which is facing high monsoon variability, poor run-off management, and decline in agriculture and fishery productivity. Rain water harvesting structures i.e., check-dams would be constructed to conserve water through the management of run-off and achieve multi-sector improvements specifically in water conservation, promotion of horticulture, developing fishery, water use efficiency for reducing vulnerability and enhancing the resilience of the traditional livelihood systems. The major interventions are construction of check dams, drip and sprinkler irrigation systems, crop diversification, promotion of fishery & poultry, use of solar energy, training and capacity building initiatives to build the capacity of the agro-ecosystem, allied activities, and local communities.

Figure 3 : Promotion of Scientific Cropping

Figure 4 : Conservation of Natural Resources

Figure 5: Plantation Drive by Locals

Project Impacts:

- Improved water conservation through construction of 3 check-dams along the Jonk river basin and achieving the command area of 145 ha.
- Facilitate farm level water management through deployment of 100 nos. of drip and sprinkler irrigation systems.
- Introduction of horticultural crops for 500 farmers.
- Introduction of fishery in farm ponds for 100 landless people and 50 units of poultry through Common Interest Groups.
- Formation of 3 nos. of Pani Panchayats and its linking to 500 users for improving water use efficiency.

Figure 5: Alternate Livelihood Generation

- Deployment of 15 Solar pumping system for efficient use of water and promotion of green energy.
- Organization of 10 training programmes on improvement of water efficiency, sustainable agriculture practices, climate risk reduction, alternate livelihoods, etc.

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