



5.1 Climate Action - Adaptation Fund



From Struggle to Strength: Fostering Sustainable Practices for Small Farmers

Name of the Project: Enhancing Adaptive Capacity and Increasing Resilience of Small and Marginal Farmers in Purulia and Bankura Districts of West Bengal.

Implementing Entity: Development Research Communication and Services Centre

Area Covered: 40 Mouza Villages of Purulia and 22 Mouza Villages of Bankura Districts of West Bengal

Total Financial Outlay: USD 2.51 Million

Year of Sanction: 2015

Year of Completion: 2022

Name of the Fund: Adaptation Fund

- ❖ In recent decades, the region shifted towards a rice-based economy due to the influence of Green Revolution practices.
- ❖ Low adaptive capacity, poor education, and reliance on temporary labour have led many households to depend on remittances from migrant workers.



Challenges Addressed

- ❖ Sparse vegetation and deforestation worsened topsoil erosion due to poor rainwater absorption.
- ❖ Challenges in rainwater conservation and soil erosion restrict growth of agriculture, with rice being the sole Kharif season crop.
- ❖ Extreme summer heat and heatwaves hinder pre-Kharif farming activities.
- ❖ Water scarcity, unpredictable weather, and unsustainable farming limit Rabi crop cultivation.
- ❖ The population comprises historically marginalised groups who once practised low-water agriculture before the Green Revolution.

Impact

The project resulted in reduction of Climate Vulnerability of 5,000 households (22,596 beneficiaries) of small and marginal farming communities.

1. Hyper-local Weather Forecast & Agro-Advisory:

Local weather forecasts (10 km radius) are more effective than district-level ones in reducing crop losses. Weather data, translated into Bengali and shared via SMS and community meetings, helps farmers make informed decisions.

- 2. Improved Water Security:** Water structures like ponds, wells, and cisterns have enhanced water availability for drinking, irrigation, and livestock. 300 ha of fallow land brought under Soil-Water Conservation structures.
- 3. Crop Diversification:** Increase in farm productivity has been reported by 30% for at least 60% beneficiary families (3,000 HHs). A total of 1,192 hectares of single-crop land has been converted into double-cropped areas. Further, an additional 347 hectares have been brought under summer cropping.



- 4. Improved Nutrition & Health:** Initiatives like nutrition gardens and fish rearing in ponds have increased access to diverse, nutritious foods, reducing hunger and improving community health.
- 5. Livelihood Diversification:** Support for 2,672 households in raising indigenous small ruminants and birds has diversified income, resulting in an 80% increase in income for beneficiary households.
- 6. Reduced Migration:** Improved water security, diversified income sources, and enhanced agricultural productivity have reduced seasonal migration.
- 7. Women's Empowerment:** The formation of women's self-help groups (SHGs) and their collective efforts, such as digging ponds, maintaining accounts, and performing community work, played a crucial role in initiating and sustaining developmental activities.
- 8. Strengthened Social Capital:** The project has fostered strong social bonds, cooperation, community ownership of resources, and pride in agricultural achievements among group members.

