









Climate Change, Agriculture and **Food Security**



FACTSHEET

CLIMATE SMART ILLAGES

Scaling Up Resilient Agricultural Practices, Technologies and Services in the Vulnerable Areas of India

USAID/ India has partnered with The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), South Asia, for a four-year intervention (October 2016 - September 2020) to scale out weather-resilient agricultural interventions through the Climate Smart Village (CSV) approach. The focus was on a basket of synergistic options, rather than on single technology to improve cropping and livestock development in targeted areas as a means of enhancing resilience to climate variability. Scaling through local institutions and convergence with government programmes has been a key strategy to promote resilience building at a larger scale. CCAFS provided technical leadership and overall guidance to BAIF (an NGO) which was implementing the project on the ground. The project demonstrated a portfolio of weather resilient technologies, practices and services in 75 villages of Uttar Pradesh (Mathura district), Bihar (Nalanda district) and Madhya Pradesh (Betul district).

PROJECT OBJECTIVES

- To scale out weather resilient agricultural technologies, practices and services 75 clusters of villages in eastern India; Bihar, Uttar Pradesh, and Madhya Pradesh to build additional evidence for scaling out weather-smart agriculture
- To develop new business and institutional models on the CSV approach involving local organizations, agriculture departments and the private sector (input suppliers, insurance and ICT companies, and agri-business entrepreneurs) to reach scale
- To reach scale by strengthening the capacity of farmers-producers' groups (FPOs), local organizations (community-based organizations and NGOs), agencies dealing with CSR Funds, national and international weather adaptation funds, local government involved in adaptation to weather change in implementing CSV approach
- To promote South-South cooperation to enable other developing countries (especially Nepal and Bangladesh) to adopt and learn from lessons in India for reaching scale in their own countries on weather-smart agriculture

PARTICIPATION IN THE PROJECT

Betul

Tribal district, gender hotspot, prone to drought (monsoon), heat wave and increased hailstorm frequency (winter)

Mathura

Livestock focused, prone to excess rains (monsoon) and increased hailstorm frequency (winter)

Nalanda

temperatures (winter)

Prone to pre-monsoon drought (monsoon) and increased average



Project Location

PROJECT FOOTPRINTS

SCALING CLIMATE SMART VILLAGES



- More than 11,250 farmers benefitted from a suite of 16 climate resilient agricultural technologies and best practices in 75 villages though three portfolios of Super Champion, Champion and CSA.
- Established 4,200 number of demonstration plots covering 627 Ha of agricultural land through 75 farmer-led Climate-Smart Village Committees.
- Overall average yield improvements of 69% with 96% improvements in gross incomes (\$819 per hectare) four seasons and key crops (Rice, Wheat, Bajra and Gram) in demo plots.
- Improved average nutrient use efficiency by 140% and 55% reduction in overall CO2 emission per ton of crop production across four seasons and key crops (Rice, Wheat, Bajra and Gram) in demo plots.

BUILDING INSTITUTIONAL MODELS



- Established 13 Custom Hiring Center (CHC) involving 136 women farmers through a business-oriented technology transfer model.
- More than 800 farmers used agricultural machinery over 387 hectares of cropped rea.
- Established 3 Cattle Development Center (CDC) to scale out agricultural machinery and livestock focused interventions at community level benefitting more than 6,200 farmers.
- Converged an amount of approximately INR 393.04 lakhs (approx. \$537,478)
 through multiple government schemes benefitting 12,786 farmers.
- 11,250 farmers got access to ICT based agro-advisory and weather information.

STRENGTHENING STAKEHOLDER CAPACITY



- The project held 444 trainings and 84 farmer field schools (FFS), farmer fair & exposure visits activities.
- Total 3,314 farmers registered to insure key crops under The Pradhan Mantri Fasal Bima Yojana (Prime Minister's Crop Insurance Scheme) as a result of awareness campaigns.
- Trained 18 Community Resource Persons (CRP) who will continue to be a common link among stakeholders beyond project life.

PROMOTING SOUTH-SOUTH COOPERATION



- Conducted two events with 75 stakeholder including representatives from the scientific community, government, NGOs and donor agencies from four major South Asian economies, including India, Nepal, Bangladesh and Bhutan.
- Presented project related results in three global and regional conferences and featured in four high impact publications.

GENDER INTEGRATION



- The project has involved more than 4,500 women farmers across different activities.
- A total of 318 women farmers are engaged in entrepreneurial activities through 182 enterprises as a result of capacity building and institutional development interventions.
- Women participation in training and capacity building activities improved from 17% to 40% during the project period.
- Key outcomes include improvement in agency, leadership and community participation, increased incomes and reduced drudgery.

SUSTAINABILITY



- Community ownership through 13 CHCs, 3 CDCs, 182 enterprises, farmers contributions (up to 25% of technology cost) will continue to benefit at least 11,250 beneficiaries beyond project life.
- Horizontal and vertical linkages including implementation of convergence plans have the potential to reach up to 0.5 million farmers across three districts.