



JANO

**JOINT ACTION
FOR NUTRITION
OUTCOME**

JANO PROMOTED **CLIMATE-SMART AGRICULTURE (CSA)** TECHNIQUES AND NUTRITION SENSITIVE INTERVENTIONS

JANO's focus on Climate-Smart Agriculture (CSA) aimed to revolutionize farming practices toward sustainability and resilience. They emphasized 13 techniques, especially homestead gardening and crop demonstrations. Fifth-year data showed 34.5% of households

adopting at least three CSA techniques, notably proper fertilizer use (58.4%) and High Yielding Variety (HYV) crops (54.1%). Farmer feedback revealed modern techniques increasing crop yield and reducing labor. Hybrid varieties and raised beds were popular,

along with organic fertilizers and mulching. Enhanced coordination among stakeholders is crucial for long-term agricultural development, emphasizing transparent information exchange and collaboration for effective CSA implementation.

CLIMATE-SMART AGRICULTURE (CSA)

Climate-Smart Agriculture (CSA) is an approach that helps guide actions to transform agri-food systems towards green and climate-resilient practices. JANO promoted CSA techniques are: use of different varieties like submergence-resistant, drought-resistant, short duration, zinc enriched, high yielding and disease-resistant varieties; ribbon retting method, floating bed cultivation on water bodies, growing creeping vegetables on nets over ponds conservation agriculture (zero/minimum tillage), solar-powered irrigation, proper use of fertilizers (right-timing, amount), inter-cropping, year-round aquaculture, Alternative Wetting and Drying (AWD) methods, use of biofuel/biogas, high-efficiency fertilizer application, crop diversification, index-based crop insurances, fodder production, vegetable cultivation on a raised bed, organic vegetable farming, mulching, etc.

JANO project focuses on promoting 13 climate-smart agricultural techniques, particularly emphasizing homestead gardening and crop field demonstrations. **Homestead gardening targeted five specific methods: raised bed vegetable cultivation, inter-cropping, mulching, organic**

vegetable farming, and crop diversification. Crop field demonstrations showcased Zinc-enriched rice, disease-resistant varieties, and fodder production.

The analysis of fifth-year survey data indicates that about 34.5% of households have practiced at least three climate-smart agricultural techniques. The most common climate-smart agricultural techniques were proper use of fertilizers (right-timing, amount) (58.4%), High Yielding Variety (HYV) (54.1%), organic vegetable farming (38.3%), use of disease-resistant varieties (blast) (21.4%), and Vegetable Cultivation on raised beds (24.7%). The percentage of households practicing three or more climate-smart agricultural techniques was found to be higher in the 5th year survey in comparison to the 4th year survey (17.8%), mid-term (13.9%) and baseline study (5%)

Sub-assistant Agriculture Officers provided on-site guidance to 2040 farmers on demo plot management. This approach empowered farmers, particularly women, in adopting sustainable, climate-smart practices and cultivating nutritious vegetables at homesteads.

Up to year five, about 750 women employed these techniques through demonstration plots, with 3000 replicating them. The initiative trained 18,195 farmers, 70% of whom were women. ACI Seeds and JANO provided resources, while farmers contributed labor, organic fertilizer, and land. Cooking demonstrations in 64 unions highlighted dietary diversity. Collaboration with ACI Seed, BARI, BRRI, and DAE facilitated the project's success.

Climate-Smart Agriculture (CSA)

CSA includes both traditional techniques, such as mulching, inter-cropping, conservation agriculture, and pasture and manure management, and innovative practices, programs, and policies, such as improved crop varieties, better weather forecasting, and risk insurance.

CSA AND PRIVATE PUBLIC PARTNERSHIP KEY PROGRESS

- **61.5%** households involved in the production of higher value nutrition products (36.7% at baseline)
- **34.5%** of households are practicing climate smart agricultural techniques (5% at baseline)
- **13** initiatives jointly taken as a result of tripartite engagement (0 at baseline)



In the fifth year, 106 homestead demo gardens, 24 Zinc rice demo plots, and 7 Orange-Flesh Sweet Potato demo plots were established. Women cultivated 10 diverse vegetables during both Rabi and Kharif-1 seasons, including red amaranth, tomato, spinach, sweet gourd, papaya, banana, okra, Indian spinach, yard-long bean, and kangkong, all considered high-value nutrition products.

The analysis indicate that highest percentage of households (46.4%) cultivated a mix of vegetables (cauliflower/cabbage/lady finger/radish/bitter gourd/ cucumber/eggplant/pointed gourd/gourd/snake gourd/ ridge gourd/green papaya/green

banana) in their homestead land, followed by napa/red amaranth/malabar spinach (38.0%), papaya/ banana/ lemon/guava (28.8%), and spinach/data/ bindweed (19.8%) etc.

FGD with Farmers in Rangpur and Nilphamari district revealed that all the farmers, have learned to use modern techniques of cultivation due to JANO project and are producing a greater number of crops in small land holdings compared to number of crops they produced earlier through traditional method in large land area. Majority farmers' use of power tiller for soil preparation and prefer multi crop production in the same land. According to them

modern techniques have reduced heavy work, labour cost and increased crop production.

Farmers prefer hybrid variety as it results in more yield. They grow vegetables in their homestead land as well as wastelands which meet their household's nutritional needs and additional income by selling the surplus. Regarding climate-smart techniques they use raised bed system as it is beneficial in terms of weeding, spraying fertilizer and pesticide, drainage of rainwater and reducing soil erosion. The use of organic fertilizer and mulching has also become popular among the farmers. Some of them use "Pheromone Traps" to control pest infestation.



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Earlier in 1 acre land area we could produce 60 maund (1 maund = 40 Kg) rice but now we can produce 80 maund by using modern techniques and new varieties. In the traditional method 50-60 maund corns could be produced in 1-acre land and now using modern technique in same land area we can grow 100-120 maund corns.

-Marium Khatun

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CSA CONTRIBUTES TO WOMEN EMPOWERMENT

Empowering women in agriculture can also have a positive impact on climate adaptation. Women are key to building climate resilience in communities. They are usually first responders in community responses to natural disasters. When it comes to building climate resilience in communities, involving women is crucial. By including more women in climate action, we can create a more sustainable and equitable future for all. Evidence suggests that empowering women improves nutrition for mothers, their children, and other household members.

Through receiving training and knowledge on climate-smart agriculture techniques and practices, JANO participants, especially women, are expanding their skills, incomes, and savings. The entire process is enhancing food security, boosting on-farm productivity and women empowerment. The story of many JANO participants serves as an inspiring testament to the transformative role of women in agriculture, demonstrating that with adequate support and resources, they can drive change in the battle against climate change and food insecurity.

CONCLUSION

Improved coordination among the various institutions implementing CSA projects and programs is essential for the development of a coherent, long-term vision for agricultural development in the country. One step towards achieving this goal is information provision and exchange, in a transparent manner, through multi-stakeholder platforms, joint CSA initiatives, and regular knowledge and experience sharing opportunities among diverse actors involved in research, policy, and implementation.

JANO implemented a multi-sectoral initiative to improve food and nutrition security in rural areas of Rangpur and Nilphamari districts in Bangladesh. JANO aimed to help end malnutrition for children under five and address the nutritional needs of pregnant and lactating women and adolescent girls through a multi-sectoral, integrated, collaborative processes with community engagement.

The collaborative efforts were led by the Bangladesh National Nutrition Council at the national level, and the Nutrition Coordination Committees at district and local levels to contribute to the roll-out of Bangladesh's National Plan of Action for Nutrition II. Through impactful interventions at school and community levels and coordination across different tiers of local and national government, JANO ensured that the nutrition needs of women and children have been recognized and addressed.

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