

# SUSTAINING FARM-BASED LIVELIHOODS BY DEMONSTRATING SUSTAINABLE REGENERATIVE AGRICULTURE PRACTICES

# INTRODUCTION

## ABOUT RBL BANK

RBL Bank is a leading private-sector bank in India, headquartered in Mumbai. Established in 1943, RBL Bank has evolved into one of India's most dynamic and innovative financial institutions, providing a wide range of banking services, including retail, corporate, and treasury banking. RBL Bank is committed to its corporate social responsibility (CSR) initiatives, focusing on making a positive impact in the communities it serves. In line with its mission to foster inclusive growth, RBL Bank actively support projects aimed at education, healthcare, rural development, and financial inclusion.

The bank's CSR efforts focus on empowering underserved communities, with a special emphasis on promoting access to quality education, skill development, and livelihood opportunities.

## ABOUT SRIJAN FOUNDATION

SRIJAN (Self-Reliant Initiatives through Joint Action) is a grassroots development organization empowering rural communities since 1997. Operating in 32 tribal districts across seven states, it has impacted over 2 lakh families in 2,000+ villages. SRIJAN bridges rural communities with government and civil society, promoting modern agriculture, financial linkages, and sustainable livelihoods. Through initiatives like nano-orchards, farmer collectives, and regional forums, it drives self-reliance and lasting change in underprivileged communities.

## BENEFICIARIES AT AGRICULTURE PRODUCTION CENTRE



# RESEARCH METHODOLOGY

RBL Bank assigned SoulAce to conduct a study on the work done by SRIJAN on promoting climate-resilient farming techniques, organic farming, and water efficiency measures.

## OBJECTIVES OF THE STUDY

The primary objectives of the study were to:



To evaluate the immediate impacts of the program implemented and assess the enduring impacts of the program.



To measure the extent to which the program has contributed to the well-being of the community.



To provide insights into the strengths and areas for improvement of the program implementation.

## MIXED METHODOLOGY

The impact assessment study adopted a comprehensive mixed-methods strategy, blending quantitative and qualitative approaches to offer a more intricate understanding of the project's impact. This combination allowed for the acquisition of both numerical data and detailed contextual insights, resulting in a more comprehensive evaluation of the project's outcomes.

On the quantitative side, structured interviews and closed-ended surveys with multiple-choice and Likert-scale questions enabled the collection of data that could be quantified and statistically analyzed for clear, measurable outcomes.

To complement this, qualitative methods such as semi-structured and open-ended interviews, along with Focus Group Discussions (FGDs), were conducted with a diverse group of stakeholders.

These qualitative insights enriched the numerical data by uncovering deeper perspectives on program effectiveness, challenges faced, and areas for improvement. The findings from both methods were cross-validated through triangulation, enhancing the reliability and depth of the overall analysis. The study used a centralized dashboard and in-house app for real-time data monitoring, with descriptive, numerical, and graphical analysis to ensure data integrity and extract key trends.

## UPHOLDING RESEARCH ETHICS

The impact assessment adhered to a robust ethical framework, ensuring participant protection and trust. Informed consent was obtained after explaining the study's purpose, risks, and benefits. Confidentiality and data security were strictly upheld. The principles of non-maleficence, transparency, and fairness guided the process, ensuring integrity and equitable treatment throughout.

## STANDARDISED FRAMEWORK FOR EVALUATION

The study used the OECD-DAC framework to ensure globally aligned, credible, and consistent evaluation of the project's impact.



# EXECUTIVE SUMMARY

## PROJECT BACKGROUND

Tribal communities in Pratapgarh, Udaipur, and Pali face challenges like marginal landholdings, soil erosion, and unsustainable farming. To address this, SRIJAN, with RBL Bank's support, launched a program promoting sustainable agriculture and empowering women farmers through training in organic farming, water management, and crop diversification. Key interventions included compost units, mini sprinklers, nutrition gardens, and nano orchards. Over 3,500 marginal farmers have benefited through improved soil health, crop yields, and incomes, while reduced chemical use and the formation of Women Producer Groups (WPGs) have strengthened community resilience and environmental sustainability.

### PROJECT DETAILS



#### Implementation year

FY 2020 - 2023



#### Assessment year

FY 2024 - 2025



#### Total Beneficiaries

3,500 Marginal farmers



#### Implementing Partner

Self-Reliant Initiatives through Joint Action (SRIJAN)



#### Project locations

Udaipur, Pali and Pratapgarh



#### Sample size

347 Farmers



#### Key Stakeholders

Women from the community, Local Panchayat officials, Community members, Project Staff



#### Alignment with SDGs



The program also aligns with the Government of India programs like:

- National Action Plan on Climate Change (NAPCC)
- National Sustainable Agriculture Mission (NSAM)

### PROJECT ACTIVITIES



Training women farmers in sustainable agriculture practices and technology.



Establishing compost units and providing resources for organic farming.



Conducting demonstrations of Kharif and Rabi crops to improve agricultural skills.



Supporting seed multiplication to enhance local seed supply and self-sufficiency.



Demonstrating the use of mini sprinklers for efficient water management.



Promoting the establishment of nutrition gardens for improved dietary diversity.



Organising exposure visits to other agricultural regions to share knowledge and practices.






## PROJECT OBJECTIVES

Key Objectives	Achievement Status	Remark
To empower women members with improved knowledge, skills, and awareness of agriculture production and technology.	Achieved	The program trained women farmers in sustainable agriculture, including organic farming, mixed cropping, and efficient irrigation. Women Producer Groups (WPGs) enabled resource access, collective marketing, and community leadership.
To improve nutritional intake through diversification in the food basket.	Achieved	Nutrition and kitchen gardens boosted fresh produce consumption, enhancing nutrition and health. Nano orchards further diversified food sources.
To demonstrate technologies and equipment to reduce human drudgery and improve water efficiency.	Achieved	The introduction of sprinkler irrigation systems demonstrably improved water efficiency and reduced water wastage. The provision of modern agricultural equipment (cultivators, seed drills, etc.) also reduced human drudgery.

## BENEFICIARIES AT PRATAPGARH, RAJASTHAN



# Key Findings and Impacts

Component	Indicators	Findings	Impacts
 Demographics	Occupational status	Over half of the respondents (51.6%) relied on both daily wage work and farming as their primary income sources, with the remaining depending solely on farming and animal husbandry.	Small landholdings limit agricultural growth potential.
		52.3% of respondents had 1 to 3 acres of land, followed by 39.2% with less than one acre.	
 Irrigation	Use of drip and sprinkler irrigation	32 units of mini sprinkler systems in Pratappgarh and 32 in Udaipur district have been implemented.	Before the program, 60.2% of respondents relied on rain-fed irrigation, but this decreased to 10.4% after the intervention, reducing dependence on traditional methods.
		The use of sprinkler irrigation increased from 21.6% to 42.4% after the intervention, while the use of drip irrigation as the primary method grew from 6.3% to 22.2%.	
 Training and Knowledge	Compost-making training	90.5% of the respondents were trained in compost making; 99% of the respondents started making compost after training.	In Pali and Udaipur, the use of chemical fertilisers reduced by more than 90% and in Pratappgarh, it has decreased by up to 69%.
	Soil health improvement	76.4% of the respondents reported significant improvement in soil health; 22.5% reported moderate improvement.	Use of bio-fertilisers led to cost savings of approximately ₹1,800 per bigha, i.e. ₹2,880 per acre, reducing dependency on chemical fertilisers.
	Involvement in Krishi Sammelan	97.2% of the respondents reported that they got to know about different government schemes and subsidies in Krishi Sammelan.	84.7% reported having applied for schemes after attending Krishi Sammelan indicates increased awareness and engagement with available agricultural support programs.
 Nutrition	Vegetable consumption	53.0% of the respondents consumed self-grown vegetables daily; 22.5% consumed them weekly.	Improves dietary diversity and nutrition among families, contributing to better health outcomes.
		Entrepreneurship model	
 Nano Orchards	Land use	150 Nano Orchards of Guava have been established in Pratappgarh district, Rajasthan, each covering 0.25 acre of land.	83.2% of respondents reported increased income from selling orchard fruits, while 63.8% noted improved nutrition due to the availability of fresh fruits, enhancing food quality and variety for their families.
		30.8% used 0.5-1 acre for nano orchards.	



Component	Indicators	Findings	Impacts
Agricultural Practices	Cultivation in both the Rabi and Kharif seasons	70% of respondents grew only Kharif crops before the intervention, while 23.6% cultivated only Rabi crops.	Before the intervention, only 6.3% of respondents cultivated both Rabi and Kharif crops. This increased to 95% after the intervention, resulting in improved productivity through year-round cultivation.
	Crop yields	80.3% of respondents reported improved crop yield.	Post-program, significant yield increases were observed: wheat yield rose from 1.04 to 4.63 quintals, maize from 1.92 to 4.49 quintals, millets from 1.50 to 3.83 quintals, rice from 1.67 to 4.00 quintals, and toor from 1.30 to 3.33 quintals. These improvements enhance food security and income stability for the farmers.
Income Levels	Monthly income distribution	The percentage of respondents earning Rs. 15,001-20,000 increased from 2.6% before the program to 21.9% after, while 57.3% now earn between Rs. 5,001-10,000, up from 23.1% before the program.	On average, 80% of respondents saw their household incomes rise by ₹5,000 or more, reflecting a notable improvement in economic stability and livelihoods.
			The living conditions and income of people have increased by 60%, as noted by respondents.

## BRAHMASTRA PREPARATION



## OECD FRAMEWORK



### RELEVANCE

The program addressed key challenges faced by smallholder farmers in tribal Rajasthan, promoting sustainable agriculture, efficient water management, and women's empowerment. It provided critical support to communities with low productivity and limited resources, enhancing income generation and food security for marginalized families.



### COHERENCE

The program showed strong alignment with the following Sustainable Development Goals (SDGs):



The program advanced NAPCC goals by enhancing climate resilience through water conservation, soil health, and organic farming. It also supported NSAM objectives by promoting organic practices, crop diversification, and bio-fertilizer use to reduce environmental impact.



### EFFECTIVENESS

The program doubled sprinkler use to 42.4%, promoted composting, and cut chemical fertilizer reliance. Two-thirds of farmers accessed modern equipment, reducing costs, while over half grew vegetables for food security. The Krishi Sammelan raised farmer participation to 92.2%, enhancing knowledge exchange. Productivity, yields, and incomes rose as input costs fell.



### EFFICIENCY

The program's phased approach overcame community hesitations through demonstrations and training. By engaging SHGs and WPGs, it reduced costs and enhanced ownership. Sustainable practices like bio-fertilizers and drip irrigation minimized chemical use, conserved water, and improved productivity.



### IMPACT

The program enhanced agriculture, soil health, and nutrition through efficient irrigation and bio-fertilizer training. It reduced rainfed dependency, cut labor costs with modern equipment, and improved yields in wheat, maize, and millet. Nutrition Gardens provided fresh produce, boosting incomes and community well-being.



### SUSTAINABILITY

The program ensures sustainability through community participation, capacity building, and women producer groups. Aligned with local governance and cost-effective resources, it promotes long-term ownership, economic benefits, and scalability with minimal external support.



Relevance



Coherence



Effectiveness



Efficiency



Impact



Sustainability

# Summary

## SUSTAINING FARM BASED LIVELIHOODS PROJECT

### KEY OUTPUT



**4,130**

marginal women farmers were organised through 189 women producer groups (WPGs) in 83 villages.



**42.4%**

of water conservation efforts boosted sprinkler use, and 22.2% increased drip irrigation from an initial 6.3%.



**80.3%**

reported better yields, due to provision of modern agricultural equipments and better farming practices.



**30.0%**

of beneficiaries now earn ₹15,001-20,000 up from 2.6%, and 57.3% earn ₹5,001-10,000, up from 23.1%, indicating a significant rise in incomes.

### KEY IMPACT



The intervention drove a major shift to sustainable, efficient water management.



Increased farmers awareness led to improved soil health, reduced costs



Enhanced market access, improved access to government schemes, and strengthened rural entrepreneurship through training in advanced farming techniques.



Higher income led to enhanced stability and better family nutrition from improved fresh produce.

# CONCLUSION

The intervention by SRIJAN, supported by RBL bank, has made substantial progress in empowering women farmers in the tribal-dominated districts of Pratapgarh, Udaipur and Pali, Rajasthan. By enhancing their knowledge, skills, and awareness of agricultural production and technology, the program has not only improved food security but also diversified the nutritional intake of these communities. Through targeted outreach, the program has directly impacted over 3,500 women farmers and indirectly benefited more than 10,000 individuals, fostering a sense of collective ownership and responsibility within the community. The focus on reducing human drudgery through the demonstration of efficient water use technologies has further empowered women, allowing them to actively participate in income-generating activities. Increased agricultural yield and income have also been significant outcomes of the program.