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Transforming Livelihood through Integrated Farming System: A Farmer FIRST Programme Success Story from Morena District

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This paper presents the success story of Sh. Ram Shankar Sharma, a farmer from Santa village in Joura block of Morena district, Madhya Pradesh, who significantly improved his livelihood under the Farmer FIRST Programme (FFP). Prior to intervention, his farming system based on pearl millet and wheat was affected by weed infestation, pest attacks, and low productivity, resulting in an annual net income of ₹54,594. Through Integrated Farming System (IFS) interventions introduced under FFP, including improved high-yielding varieties, integrated nutrient and pest management, and diversification with pulses and mustard— remarkable economic gains were achieved. His annual net income increased to ₹1,01,001 along with annual cost savings of ₹33,263, indicating improved profitability, resource-use efficiency, and financial stability. Beyond economic gains, the interventions reduced production risks and strengthened livelihood security. The case demonstrates the effectiveness of IFS adoption under participatory extension approaches like FFP in promoting sustainable agricultural livelihoods.

Keywords: Integrated Farming System, Farmer FIRST Programme, Livelihood security, Case study, Success story.

Introduction

Smallholder farmers in India are often constrained by limited landholdings, low productivity, and high vulnerability to both biotic and abiotic stresses. These challenges undermine their livelihood security and make farming increasingly unsustainable. To address such issues, the Integrated Farming System (IFS) has been promoted as a holistic model that combines crops, livestock, horticulture, fisheries, and other allied enterprises. By diversifying production, enhancing input recycling, and ensuring multiple income streams, IFS improves farm resilience, generates employment, and contributes to food and nutritional security (Kumar & Meena, 2022).

The Farmer FIRST Programme (FFP), launched by the Indian Council of Agricultural Research (ICAR), emphasizes a participatory extension approach that involves farmers directly in technology assessment, refinement, and dissemination. This approach ensures that interventions are farmer-centric, locally relevant, and designed to build resilience against climatic and market uncertainties. Through need-based demonstrations, training programmes, and enterprise diversification, FFP has been instrumental in enhancing farmers' capacity to adopt sustainable practices and achieve better socio-economic outcomes (Singh et al., 2021).
While large-scale studies provide aggregate evidence of the benefits of IFS under FFP, farmer-level success stories provide deeper insights into how interventions are experienced at the household level. Such case studies capture the real-world challenges, adaptive strategies,

and livelihood transformations that often remain hidden in survey data. They also serve as motivational examples for other farmers and as feedback for researchers and policymakers.
This paper presents the case of Sh. Ram Shankar Sharma, a progressive farmer from Santa village in Morena district, whose livelihood improved significantly after adopting IFS-based interventions under the Farmer FIRST Programme. His journey illustrates how integrated enterprises, combined with institutional support, can transform farming into a sustainable and profitable livelihood.

Support under Farmer FIRST Programme

Under the ICAR Farmer FIRST Programme (FFP) being implemented through RVSKVV-ZARS Morena, scientists interacted with him, understood his problems and encouraged him to adopt improved farming practices. He showed a positive attitude and agreed to try new techniques suggested by the team.
He expressed confidence that with proper guidance, farming could again become profitable.

Challenges Faced by the Farmer

Before the interventions under the Farmer FIRST Programme, Sh. Ram Shankar Sharma faced several difficulties in farming. His major challenges included:
Severe weed infestation in fields, which reduced crop growth and yield
Frequent pest and disease attacks, causing production loss and additional cost
Low adoption of improved farming practices and scientific technologies
Low productivity of existing crops such as pearl millet and wheat
Higher cost of cultivation without corresponding improvement in returns
Lack of diversification, which increased farming risk and income uncertainty
Limited livelihood security, making farming economically stressful for the family

Methodology

The study was conducted in Santa village of Joura block, Morena district, Madhya Pradesh. A case study method was adopted to document the livelihood transformation of Sh. Ram Shankar Sharma under the Farmer FIRST Programme. Primary data were collected through personal interviews and farm visits, while secondary data were verified from FFP records at RVSKVV-ZARS Morena. The case documentation focused on his farming system before intervention, interventions introduced, and changes in productivity, income, cost of cultivation, and livelihood outcomes.

Data were collected during 2024-25 through repeated farm visits, personal interviews, and systematic on-field observations to ensure reliable documentation of changes. Secondary information related to input use, costs, productivity, and returns was verified from FFP project records maintained at RVSKVV–ZARS Morena. Economic indicators such as gross income, net income, cost of cultivation, cost savings, and benefit–cost ratio were computed using prevailing market prices. Triangulation of farmer recall, recorded data, and field verification was carried out to enhance reliability. Ethical considerations were followed by obtaining prior consent and ensuring confidentiality of personal information.

Results and Discussion

Before intervention, Sh. Ram Shankar Sharma cultivated pearl millet and wheat; however, productivity was low due to weed infestation, pest incidence, and limited adoption of improved practices, resulting in a net annual income of ₹54,594. With support from the Farmer FIRST Programme, interventions such as improved seed varieties, balanced nutrient management, integrated pest management, and diversification with mustard, arhar, and moong were introduced. These practices led to improved productivity, better input-use efficiency, and enhanced farm profitability. After adoption, his annual net income increased to ₹1,01,001 along with cost savings of ₹33,263, reflecting a substantial improvement in economic stability.

The diversified farming system reduced production risks by generating income from multiple crops instead of relying on limited enterprises. The interventions also strengthened

household food and nutritional security and enhanced livelihood resilience. These findings align with earlier studies confirming that IFS adoption under participatory programmes significantly improves profitability, reduces vulnerability, and strengthens livelihood sustainability.

Table 1. Baseline Production and Income Status of the Farmer (2016–17)

Baseline Period (2016-17)					
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Pearl Millet	1.5	13.50	37,170 /-	22,500 /-
Field Crop 2	Wheat	1.5	25.80	47,175 /-	32,094 /-
Total				**84,345 /-**	**54,594 /-**

Table 2. Production and Income Status of the Farmer After Intervention (2024–25)

After Intervention (2024-25)					
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Pearl Millet + Arhar	1.00 & 0.50	12.40 & 3.75	29,670 & 23,200 /-	19,087+ 16,768 /-
Field Crop 2	Mustard+ Wheat	1.00 & 0.50	9.40 & 10.32	39,760 & 19,395 /-	22,541+ 12,745 /-
Field Crop 3	Moong	1.5	5.70	51,990 /-	29,860 /-
Total				**1,64,015 /-**	**1,01,001 /-**

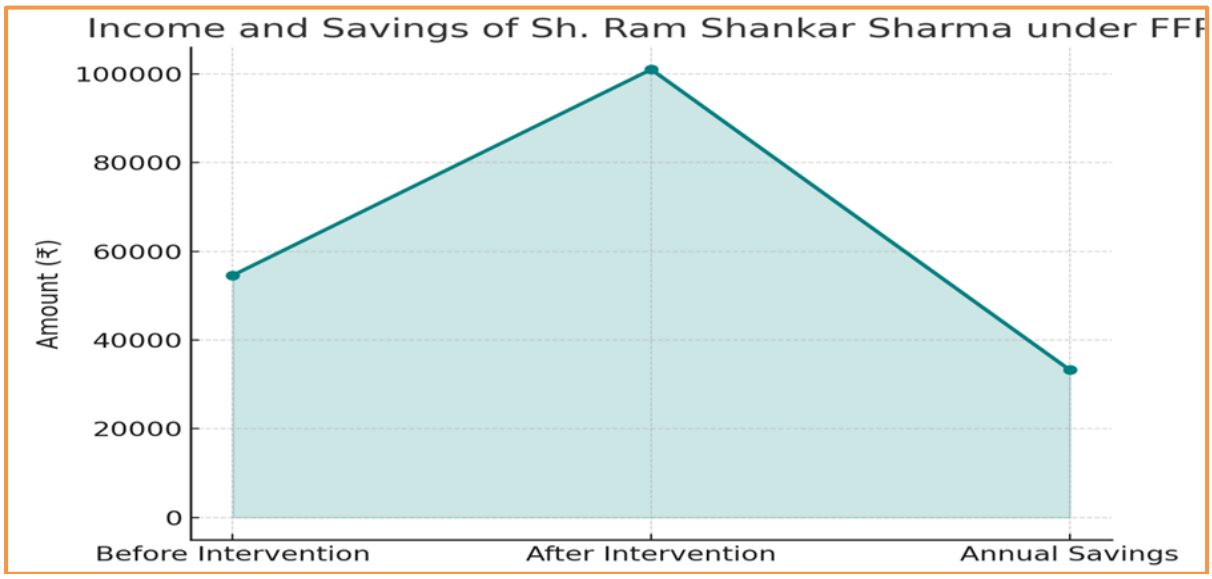
Table 3. Comparative Economic Gains Before and After Intervention

Parameter	Baseline (₹)	After Intervention (₹)	Change (₹)	% Increase
Gross Income	84,345	1,64,015	+79,670	+94.4%
Net Income	54,594	1,01,001	+46,407	+85.0%

The farmer experienced about a 94% increase in gross income and an 85% increase in net income after adopting IFS interventions, indicating improved profitability and livelihood security.

Table 4. Benefit–Cost Ratio Before and After Intervention

Parameter	Baseline	After Intervention
Gross Income (₹)	84,345	1,64,015
Net Income (₹)	54,594	1,01,001
Cost of Cultivation (₹)	29,751	63,014
B:C Ratio	2.83 : 1	2.60 : 1



The results are consistent with studies by Patel et al. (2022) and Billah et al. (2024), which confirmed that IFS adoption under participatory programmes significantly improved farmers' economic and livelihood security. The case highlights the effectiveness of FFP in transforming farming systems at the grassroots level.

Conclusion

The case of Sh. Ram Shankar Sharma clearly demonstrates the positive livelihood impact of Integrated Farming System interventions under the Farmer FIRST Programme. His net annual income increased from ₹54,594 to ₹1,01,001 along with annual cost savings of ₹33,263, indicating improved profitability and financial stability. Diversification reduced production risks, enhanced resilience, and strengthened household livelihood security. The findings highlight the importance of promoting IFS models through participatory extension programmes like FFP for sustainable agricultural development in similar agro-ecological regions.

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