

Vanaraja Backyard Poultry: Enhancing Livelihood and Nutritional Security of Tribal Farmers in Hazaribagh

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Background Information of the Farmer

Shri Sibü Soren is a small tribal farmer from Bhanderi village of Bishnugarh Block in Hazaribagh district. Agriculture is the primary occupation of his family, supplemented by traditional backyard poultry rearing. However, indigenous poultry birds exhibited poor growth, low egg production, and high mortality, resulting in limited income. To enhance livelihood opportunities and nutritional security among tribal households, ICAR-IARI, Jharkhand selected him under the Tribal Sub Plan (TSP) for the promotion of Vanaraja backyard poultry.



Technology/Process Intervened

Under the Tribal Sub Plan (TSP), Shri Sibü Soren received 50 Vanaraja chicks along with technical guidance on scientific backyard poultry management, including brooding, feeding, housing, vaccination, and disease management. Vanaraja is a dual-purpose poultry variety suitable for low-input rural production systems. It possesses better growth rate, higher egg production, superior disease resistance, and better adaptability than indigenous birds, making it ideal for tribal farming conditions.



Effect of the Technology/Process:

Particulars	Before Intervention	After Intervention	Impact		
Poultry breed	Indigenous (Desi) birds	Vanaraja birds	Improved introduced	dual-purpose	breed
Number of birds	Traditional backyard flock	50 Vanaraja chicks supplied	Scientific established	backyard	poultry
Adult body weight	1.0-1.2 kg	>2.0 kg	Nearly doubled body weight		
Egg production	35-50 eggs/bird/year	80-120 eggs/bird/year	More than two-fold increase		

Mortality	Relatively high	Very low	Better survival due to scientific management
Selling price (Meat)	Rs.180-220/kg	Rs.220-300/kg	Higher market value
Selling price (Eggs)	Rs. 8-12/egg (desi)	Rs.20-30/egg	Better returns from egg sales
Annual income from poultry	Low and irregular	Regular income from meat and eggs	Improved household income
Household nutrition	Occasional egg/meat consumption	Regular availability of eggs and meat	Improved nutritional security

Suitability and Adaptability in the Existing Farming Systems:

Vanaraja birds are well suited to the existing tribal farming system as they thrive under backyard scavenging conditions with minimal external inputs. The birds efficiently utilize locally available feed resources, require simple housing, and integrate easily with crop farming. Their adaptability to local climatic conditions and resistance to common diseases make them an ideal enterprise for small and marginal tribal farmers.

Acceptance of Technology:

The farmer expressed high satisfaction with Vanaraja birds due to their rapid growth, better survival, higher egg production, and superior market price compared to indigenous poultry. The technology has increased confidence in scientific backyard poultry farming. Traditional low-yielding indigenous poultry birds are gradually being replaced by Vanaraja birds owing to their higher productivity, better adaptability, and improved economic returns under backyard farming systems.

Socio-economic Impact

The intervention significantly enhanced household income, nutritional security, and livelihood resilience. Income from poultry reduced dependence on seasonal agricultural earnings, while regular availability of eggs improved family nutrition. The enterprise also created employment opportunities for family members, particularly women, thereby strengthening household economic stability.

Linkage with Technology:

Shri Sibu Soren received technical support, quality Vanaraja chicks, and capacity-building training from ICAR-Indian Agricultural Research Institute, Jharkhand under the Tribal Sub Plan (TSP). Continuous technical guidance from scientists has enabled the farmer to adopt scientific poultry management practices, ensuring sustainable production and improved livelihood outcomes.

Conclusion

The experience of Shri Sibu Soren demonstrates that Vanaraja backyard poultry is a low-investment, high-return enterprise for tribal households. With scientific guidance and quality inputs provided through ICAR-IARI, Jharkhand, backyard poultry has become an effective tool for improving income, nutritional security, and livelihood resilience in tribal areas. The intervention serves as a replicable model for enhancing the socio-economic status of small and marginal farmers across Jharkhand.