# Scientific Backyard Poultry Production: An **Approach for Livelihood Enhancement of Rural Farmers of Ropar District**

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### **Background**

In India consumer still has a fascination about desi eggs and meat of desi poultry birds but due to multiplicity of factors backyard poultry farming could not be adopted as a commercial enterprise among the farmers. There are some major constraints in adoption of backyard poultry farming such as high mortality rate in young chicks due to a combination of diseases, lesser body weight gain of the bird's only upto 1 to 1.5kg, low egg production, small egg size, low feed conversion ratio, lack of scientific practices, lower adoption scientific technologies predation, malnutrition, climatic exposure and feed price fluctuations etc. Therefore, the poultry rearer are unable to reap maximum benefits from this activity and just satisfied their family needs along with some local sell.



However, the present dimensions of traditional backyard poultry production have changed drastically and crossed the boundaries from the economically weaker sectors to become 'Family Poultry, 'Smallholder poultry,' 'Scavenging poultry,' or "Village poultry". different systems of poultry rearing with various levels of intensification are now adopted not only by poor, marginal but also by richer members of the society with intensification according to their economical status and requirements. In the state of Punjab also, the taste and nutritional quality of desi poultry meat is widely accepted traits among the public, hence their demand has always been there. Egg and poultry meat serves as inexpensive sources of protein, especially across different socio-economic

groups of Punjab. This form of production is characterized by low-cost initial inputs, with birds allowed free movement in scavenge mode for backyard rearing. As the eggs and meat produced from backyard poultry farming nearly organic, fetches high price and are of high demand among the consumers. In this regards, Krishi Vigyan Kendra, Ropar, Punjab identified the technogical gaps by conducting various field testing and demonstrations and finally motivated the farmers to adopt Backyard Poultry Farming (BYPF) as sustainable source of livelihood and nutritional security through various Human Resource Development programmes. Looking into the vast scope of BYP, KVK concentrated on improving the skills and capacity building of these farmers through vocational and skill development trainings on 'Backyard Poultry Rearing'. The beneficiaries were taught thoroughly about general management, brooding management, feeding, disease management, vaccination, hygiene and sanitation, candling and hatching of eggs to ensure higher output from the enterprise. KVK Ropar has initiated to promote semi intensive type of backyard poultry farming with improved desi breeds developed by various research organisation such as CARI Nirbheek, Vanraja, Grampriya, Chabro etc so it serves not only interest of producer and consumer but overall helped in ensuring nutritional and livelihood security for the rural masses. Consequent upon the efforts of KVK and prospective nature of the enterprise some of the trainees have opted for semi intensive kind of backyard poultry farming and their economic benefits have forced them to further expand their enterprises. Being nurtured under the guidance of KVK scientists, initially the following farmers got motivated and started their own ventures. All of these beneficiaries are rearing the birds under intensive system but also feed their birds the domestic wastage, coarsely ground cereal grain mixture, green fodder, moringa along with readymade concentrate mixture. Remarkable is that inspite of meagre inputs (birds/ feed/ vaccines) from KVK, merely technical guidance has motivated them to adopt and practise it.

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Table 1: Adoption by KVK trainees

Name	Village/ block	Major occupation	Flock size	Inputs by KVK No. & TG*	Year/ type of intervention
Gurdit Singh	Rasidpur/ Chamkaur Sahib	Agriculture& Pig farming	150	20 (Kadaknath) &TG	2019/ FLD
Kamaldeep Singh	Khanpur/ Chamkaur Sahib	Agriculture& Pig farming	50	10 (Kadaknath) &TG	2019/FLD
Manoj Kumar	Surtapur/ Ropar	Agriculture& Pig farming	200	TG	2019/ Training
Major	Chauntan/	Agriculture& dairy	50	20 (Chabro)	2020/FLD&

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Singh	Ropar	farming		&TG	Training
Sandeep Singh	Dhamana/ Nurpurbedi	Agriculture	100	TG	2020/ Training
Jujhar Singh	Singhpur/ Nurpur bedi	Agriculture&Commercial poultry farming	300	TG	2020/ Training
Talwinder singh	Phool/nurpur bedi	Agriculture	500	TG	2020 /Training
Som dutt	Morinda/ Morinda	Commercial poultry farming	500	TG	2020/ Training
Harvinder singh	Bara pind/Ropar	Agriculture	100	_	2020/ Training
In progress					
Rajinder singh	Bikkon/ Ropar	Self employed	-	-	2020 /Training
Amarjit singh	Ghanauli/ Ropar	Agriculture	-	-	2020 /Training
Raj kaur	Mansooha/ Ropar	Home maker	_	-	2020 /Training
Barinder Singh	Bara pind/ Ropar	Employee	-	-	2020 /Training

Table 2: Economics of broiler farming for 1000 birds

One time expenses	Expense per unit (Rs)	Total expense
1000 sq ft shed	250/ sq ft	2,50,000
Brooders 2	2500/brooder	5000
Feeder 20	200/per feeder	4000
Drinker 20	200/ drinker	4000
Miscellaneous	5/ bird	5000
	Total	2,79,000
Recurring expenses		
Chicks (1000)	22/chick	22,000
Feed	34/Kg @3kg/bird	1,02,000

Electricity	-	1000
Saw dust	8 qtl (Rs2.5 per Kg )	2000
Sheet for covering		2000
Medicine/ vaccines/misc	Rs 5/bird	5000
	Total	1,34,000

Sale price= Rs 100/Kg live weight - Total - 1.75 Kg -1,75,000/-

**Income=** 1,75,000-1,34,000= 41,000/- (Three months)



# Feedback received by the KVK beneficiaries about BYPF

## High demand

Being the desi birds, the acceptability, demand and consumption of eggs and meat has been in high demand in nearby areas. Even during lockdown period when country was facing the problem of sale of poultry products still the sale of improved desi birds remains unhampered.

ALSO READ: Reviving hope for doomed Poultry Industry during lockdown: Sahbhagita **Group** 

## Low cost of feeding and management

Along with concentrate mixture all the established unit thrive best on kitchen waste, broken grains etc. which lowers down the cost of rearing the birds. Birds are also well managed by all family members including children.

#### Better productivity

The beneficiaries reported an average 800-1000g weight by 60 days Chabro and in Kadaknath breeds by 65 days respectively. Similarly, 5 months old Kadaknath and 5.5 month old Chabro have started their laying cycle compared to the indigenous germplasm. Due to adoption of the improved breed, there is a tremendous change in the life of these farmers has been observed.

## **Higher Disease resistance**

None of the flocks has faced the problem of infectious disease incidence till date which reflects both, the efficacy of vaccination and disease resistance of these birds. Even mortality remain below 2%.

#### Self esteem

With minimal labour and time requirement these farmers are running this enterprise in parallel to their major occupations like pig farming, agriculture etc. this has added to their self esteem especially when they have got marketing channel at their own farm or just nearby market.

### Social and functional linkages

All trainees/beneficiaries of KVK interventions have developed a kind of brotherhood among themselves. Through grouping on social media, they keep on sharing ideas and issues regarding poultry farming and also aid in developing marketing links for each other. Selling of eggs/ birds at their farm has strengthened their social linkages. Association with KVK has further widened their prospects as they participate in various Kisan melas and other programmes organized by the KVK. They have also developed functional linkages with PAU, GADVASU and CPDO.

#### Conclusion

The backyard poultry rearing made a remarkable impact on farmer's livelihoods. The beneficiaries are selling various products like egg, additional males, and spent hens in local market or consumed by their family leads to better nutrition and health. Apart from imparting financial and nutritional enhancement to their livelihood, they have also organized their activities by various groups. Thus, scientific backyard poultry rearing seems to be an enabling factor in empowering and developing entrepreneurial characteristic among rural masses. The results also support the possibilities of establishing this neglected sector as a better alternative for sustainable rural development.

