



## Indian Journal of Hill Farming

December 2019, Volume 32, Issue 2, Page 265-267

### Nursery Raising of Vanraja Chicks: A Potential Rural Enterprise

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#### ARTICLE INFO

##### Article history:

Received 14 December 2018

Revision Received 29 April 2019

Accepted 23 May 2019

##### Key words:

Backyard Poultry, Nursery raising,  
Rural enterprise

#### ABSTRACT

Backyard poultry is promoted in country by developing region specific varieties suited to backyard rearing and distributing 3-4 week old chicks of such improved varieties after brooding the chicks in government farms. A farmer was encouraged to procure day old Vanraja Chicks and rear them under intensive system for 3-4 weeks and later sell them to backyard poultry farmers. Through nursery raising of Vanraja chicks farmer was able to generate a decent earning for himself and simultaneously increase the availability of chicks for backyard poultry farming. It was concluded that outsourcing of brooding operations could give rise to a new rural enterprise.

#### 1. Introduction

Backyard poultry plays a key role in the home economy and its increased production has the potential to improve food security and assist in poverty alleviation (Hussain *et al.*, 2017). Backyard Poultry promotion programmes nationwide comprise of a two pronged approach. This includes development of region specific varieties of poultry for backyard poultry farming under All India Co-ordinated Research Project on Poultry Breeding. Distribution of improved germplasm of poultry along with package of practices for scientific rearing of chicks in backyard is ensured through ICAR Poultry Seed Project (Singh *et al.*, 2018) and State Poultry Development Programmes. Distribution of day old chicks directly to backyard poultry farmers does not produce good results because of difficulties in brooding of chicks in small numbers besides initial vaccinations cannot be carried out if chicks are spread across the villages. Nursery raising offers an opportunity for effective brooding and carrying

out the initial vaccination of chicks. Therefore chicks are raised in Government farms for 3-4 weeks before distribution among farmers. Government/ University/KVK farms often have limitations of rearing space which limits the number of chick being distributed. Limitations of rearing space warranted exploration of alternatives. Outsourcing of brooding operations/nursery raising was one of the options. This success story reports nursery raising of Vanraja chicks by a farmer to earn his living on one hand and increasing the availability of vaccinated chicks for backyard poultry farming on the other hand. This approach could spare rearing space in Government/ University/KVK farms for poultry improvement and breed conservation programmes.

#### 2. Materials and Methods

A farmer, Imtiyaz Ahmed Rather S/O Abdul Rashid Rather R/O village Chakoora, District Pulwama in Kashmir was guided to procure Vanraja chicks from ICAR-Poultry Seed Project raise them upto four weeks of age and sell them to farmers for backyard rearing. The farmer, in addition to agriculture used to rear 200 broilers per batch and sold marketable broilers to supplement his income.

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However, farmer struggled with broiler farming as small scale of operations coupled with increased input cost, high mortality and in-consistencies in market resulted in meagre profits from the activity. Farmer was guided to procure two batches of 200 Vanraja chicks each from ICAR-Poultry Seed Project @ Rs 20/chick. Brooding of chicks was carried out in deep litter pens following the standard broiler brooding practices. The commercial broiler starter ration was offered ad libitum to chicks during the rearing period and vaccination against Ranikhet and Infectious Bursal Disease was carried out on 5<sup>th</sup> and 14<sup>th</sup> day respectively. At the end of four weeks chicks were sold to farmers for backyard poultry farming @ Rs 80/bird.

### 3. Results and Discussion

During four weeks of brooding period there was a mortality of 3.5% in first batch and 2.5% in second batch. The average feed consumption during the brooding period was 0.6kg/bird. The economics of two batches of chicken is depicted in table-1. The total investment taking into account the cost of day old chicks, cost of feed and other cost like medicine, vaccination, litter materials and heating cost worked out to be Rs 10,560. The fourth week body weight was 534.25±12.76g and 510.73±17.54g in first and second batch respectively. This body weight was better than 4<sup>th</sup> week body weight of Chabro chicks reared under intensive system in agro-climatic conditions of Kashmir (Khan *et al.*, 2014, Irfan *et al.*, 2015). The amount realised after sale of chicks was Rs 15,440 and Rs 15,660 in two batches and the profits per batch was Rs 4880 and Rs 5040 in first and second batch respectively. The earnings per bird in two batches were Rs 24.40 and Rs 25.20. Suhail *et al.* (2015) have reported an earning Rs 14/bird in commercial broiler farming in Kashmir while as the new activity of nursery rearing of Vanraja chicks yielded a profit of more than Rs 20/bird. Besides a crop cycle is of 4 week duration in contrast to 6 weeks in broiler farming thus more crops could be raised in a year thereby further increasing the earnings per year. Nursery raising of Vanraja Chicks could therefore provide a source of livelihood as well as increase the availability of improved germplasm for backyard poultry farming. Sheikh *et al.* 2018 have also suggested various steps to improve the availability of germplasm for boosting backyard poultry. Although rural poultry farming doesn't produce a large income, it does not require any extra skill and assists rural families a lot in taking them out of poverty (Jensen and Dolberg 2003).

However, it is an established fact that backyard poultry farming has shown its positive impact on the economy of rural families, contributing in the development of rural families and over all development of the poultry sector (Mack *et al.*, 2005). The nursery raising as demonstrated in the success story of Imtiyaz Ahmed Rather can be therefore be promoted as a viable rural enterprise.

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**Table 1.** Economics of two batches of Vanraja chicks

<b>Details of Inputs and Earnings</b>	<b>Batch-I</b>	<b>Batch-II</b>
Cost of 200 chicks @ Rs 20/chick	Rs 4000/=	Rs 4000/=
Cost of feed (0.6 Kg per chick) @ Rs 38/Kg for 200 chicks	Rs 4560/=	Rs 4560/=
Cost of medicine, vaccine, litter materials, heating arrangements @ Rs 10/bird	Rs 2000/=	Rs 2000/=
<b>Total input</b>	<b>Rs 10,560</b>	<b>Rs 10,560</b>
Mortality	7 chicks	5 chicks
Chicks available for sale at 4 weeks of age	193	195
Sale rate	Rs 80/chick	Rs 80/chick
<b>Amount realized from sale</b>	<b>Rs 15,440</b>	<b>Rs 15,660</b>
Earnings/Income/profit	Rs 4880	Rs 5040
Earning/bird	Rs 24.40	Rs 25.20