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Economic impact of rearing Rajashri birds for improving the livelihood of farmers

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Abstract

Raising of local poultry breeds in backyard farming is an important source of livelihood for the rural people. "Rajasri" a dual-purpose bird, developed for backyard farming has a great potential due to its versatile capacity to adapt in various climatic conditions. These birds are exclusively raised in the backyards with a capacity of 160-170 eggs/year/bird. Dr. YSRHU-KVK, Nellore-2 (Periyavaram) popularized rearing of dual-purpose Rajasri birds which are highly acclimatized to the jurisdiction of KVK as backyard poultry by providing training on backyard poultry rearing and supplied 5weeks old chicks to farmers for enhancement of their income and livelihood in rural areas. The present study was conducted to know the impact of rearing Rajashri birds which were supplied to farmers during the years 2022-23 and 2023-24. Economic analysis indicated that net returns per bird was 422.85 and 448.18 for the birds supplied during 2022-23 and 2023-24 respectively. The weekly egg production was resulted as 3.79 and 3.85, sale price of eggs was Rs. 5.72 and Rs. 5.94 respectively during 2022-23 and 2023-24. Similarly, sale price of female birds was resulted as Rs. 174.60 and Rs. 182.40 and the average expenditure per bird resulted as Rs. 84.12 and Rs. 83.56 respectively for birds supplied during 2022-23 and 2023-24 respectively.

Keywords: Rajashri birds, livelihood, backyard farming and economic analysis

Introduction

Agriculture farming is not remunerative in the current scenario due to constant droughts, pests and vagaries in marketing. There is a great distress among people in rural areas in recent times. Therefore, supplementing the rural families with subsidiary income by rearing livestock which doesn't require expensive inputs would improve the economic status of distress families. Thus, promoting backyard poultry farming with improved chicken varieties are expected to result in increased income and also providing balanced food to the less privileged rural population. Backyard poultry farming is a potential tool to alleviate rural unemployment besides providing balanced food (egg and chicken meat) by utilizing the natural food base available in rural backyard. "Rajashri" a dual-purpose bird, developed for backyard farming has a great potential due to its versatile capacity to adapt in various climatic conditions. These birds are exclusively raised in the backyards, spread across all categories of households. Dr. YSRHU-KVK, Nellore-2 (Periyavaram) popularized rearing of dual-purpose Rajasri birds which are highly acclimatized to the jurisdiction of KVK as backyard poultry by providing training on backyard poultry rearing and supplied 5weeks old chicks to farmers for enhancement of their income and

livelihood in rural areas. Keeping this in view, the study was conducted with the following objectives to know the impact of rearing these Rajashri birds on livelihood of farmers.

Objectives

1. To identify the economic impact of Rajashri birds
2. To get the feedback for improvement

Methodology

The study was carried out during 2024-25 using Ex-post-facto research design. A sample of 50 beneficiaries were selected for the study to whom Rajashri birds were supplied during 2022-23 and 2023-24. Frequency and percentage were the statistical tools used for the study.

Results

1. Economic Impact of Rajashri Chicks

The average sale price of male birds was Rs. 181.20 and 189.50 for the birds supplied during 2022-23 and 2023-24 respectively. The weekly egg production was resulted as 3.79 and 3.85, sale price of eggs was Rs. 5.72 and Rs. 5.94 respectively during 2022-23 and 2023-24. Similarly, sale price of female birds was resulted as Rs. 174.60 and Rs. 182.40 and the average expenditure per bird resulted as Rs.

84.12 and Rs. 83.56 respectively for birds supplied during 2022-23 and 2023-24 respectively. The net returns per bird was 422.85 and 448.18 for the birds supplied during 2022-23 and 2023-24 respectively.

The average annual consumption of eggs per family increased from 150 eggs/annum to 500 eggs/annum. The number of hens per unit household is the best indicator to measure the impact of poultry development in villages

(Kornel, 2006) ^[3]. Rearing of Rajasri birds reveals a significant increase in egg production with high increase in subsidiary income (Naga Raja Kumari and Subrahmanyeswari, 2014) ^[4]. It was concluded that synthetic cross bred high yielding birds are suitable in backyard system of rearing and profit making (Padhi *et al.*, 2003) ^[5]. Similarly findings were observed by Chatterji *et al.* (2002) ^[2] and Bhattacharya *et al.* (2005) ^[1].

Table 1: Economic Impact of Rajashri Chicks (N=50)

	Total	Sale price of male bird (Average/Kg)	Weekly Egg production (Average)	sale price of Eggs (Average)	Sale of female (Average/Kg)	Expenditure per bird
2022-23	250	Rs. 181.20	3.79	Rs. 5.72	Rs. 174.60	Rs. 84.12
2023-24	250	Rs. 189.50	3.85	Rs. 5.94	Rs. 182.40	Rs. 83.56

Table 2: Income obtained

	2022-23	2023-24
Sale of male birds (Rs.)	18120	18950
Sale of eggs (Rs.)	82432.50	86625.00
Sale of hens (Rs.)	26190.00	27360
Total Income (Rs.)	126742.50	132935
Total Expenditure (Rs.)	21030.00	20890.00
Gross Returns (Rs.)	105712.50	112045.00
Income from each Bird (Rs.)	422.85	448.18

2. Feedback for improvement

Table 3 shows that 64.00 per cent of the respondents expressed that mortality of birds due to disease attack followed by problem of wild cats and dogs (58%), due to cannibalism (48%), problem of labour for maintenance (24%) and high temperatures led to mortality of birds (12%).

Table 3: Constraints faced by the farmers (N=50)

S. No.	Constraints	Frequency	Percentage
1	Disease attack	34	68.00
2	Problem of wild cats and dogs	26	52.00
3	Due to cannibalism	21	42.00
4	Labour problem	8	16.00
5	Mortality due to high temperatures	6	12.00

Conclusion

From the present study, it can be concluded that Rajashri bird performs better in terms of productivity and provides subsidiary income to the family. Taking the constraints into consideration the Government should treat poultry farming par with agriculture and may extend all the benefits to poultry farmers as provided to agriculturists. The backyard chicken and egg produced with low input can be sold at a higher price compared to commercial birds, thus ensuring a wider scope for commercial exploitation.

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