



## Study of Adoption Level and Constraints faced by Rural Women in Backyard Poultry Farming

JYOTI KISKU<sup>1\*</sup>, J. ORAON<sup>2</sup>, ALOK KUMAR PANDEY<sup>3</sup>, BHUSHAN KUMAR SINGH<sup>4</sup>, KOMAL CHANDRAKER<sup>5</sup>



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### ABSTRACT

The study was conducted to measure the adoption level and to identify the constraints faced by 120 rural women in backyard poultry farming. The study area was Giridih District of Jharkhand. It was found that the majority of the respondents (i.e., 90.83%) were in low category with respect to their level of adoption of backyard poultry rearing practices followed by medium level which is comprised of only 9.16 per cent. The top three constraints faced by them were lack of vaccination facility, non-availability of improved breed and feed during summer. These constraints were followed by incidence of disease (70%), lack of proper marketing channel (66.67%), lack of information (65%), non-availability of medicine (61.67%) and non-availability of Veterinary Doctor (50.00%). The awareness programmes on various scientific poultry farm management practices will be effective to reduce the prevailing constraints.

### KEYWORD

Adoption, Constraints, Rural women, Backyard poultry farming, IPRP

### INTRODUCTION

Backyard poultry farming is very popular in rural areas as it is age old practice. In rural areas, animal husbandry and Poultry are in general considered as a job for women. In studies it is found that women share major burden of livestock and poultry management.

Now it is very important to know about what is backyard poultry farming and what is the importance of it??? According to Mandal *et al.*, 2006, backyard poultry farming is low input or no input business and is characterised by indigenous night shelter system, scavenging system with little supplementary feeding, natural hatching of chicks, poor productivity of birds, local marketing and no health care practice. There are so many advantages of it, some of them are -

1. It gives employment to the rural small scale and marginal farmers.
2. Provides additional income to the rural household.
3. It aids in enhancing the soil fertility in backyard (15 chickens produce 1 – 1.2 kg of manure per day).
4. Products from rural poultry farming fetches high price compared to those from intensive poultry farming.
5. It provides egg and meat with almost no or very less investment through backyard poultry farming in free range system.
6. It also lessens protein malnutrition in susceptible groups like pregnant women, feeding mothers and children.
7. Birds reared under free range conditions give eggs and meat of low cholesterol concentration compared to those produced under intensive poultry farming.

And in India poultry farming plays an important role in country's economy. So it become very important to assess the adoption level and to figure out the problems faced during the farming.

### MATERIALS AND METHODS

The study was conducted purposively in Giridih district of Jharkhand state since it has maximum rural population i.e., 91.49% (NSS 2006). The district has 13 blocks out of which four blocks were randomly selected. Again from each of the selected blocks, three villages were randomly selected. Ten respondents from each of the villages were purposively selected on the basis of having two years' experience in poultry farming and rearing at least five birds. Hence total no. of the respondents was 120. Adoption is the mental process through which an individual pass from first hearing about an innovation. For assessing the Adoption level rural women were asked some questions regarding breeding, feeding, health care and management practices. All the answers were recorded as whether they adopted, adopted and then discontinued and never adopted. For adoption respondent were given score 2, for adopted and then discontinued 1 and for never adopted 0. The extent of IPRP in the present study was measured with the help of scale developed by Pandey (1989). The scale was slightly modified according to the need of the study.

<sup>1</sup>M.V.Sc., R.V.C., kanke Jharkhand India

<sup>2</sup>Director Extension, Birsa Agricultural University, Kanke, Jharkhand, India.

<sup>3</sup>University Professor Department of Veterinary and Animal Husbandry Extension Education, R.V.C., Kanke, Jharkhand, India.

<sup>4</sup>T.A. Department of Veterinary and Animal Husbandry Extension Education, R.V.C., Kanke, Jharkhand, India.

<sup>5</sup> PhD Scholar, Department of Veterinary and Animal Husbandry Extension Education, R.V.C., Kanke, Jharkhand, India

\*Corresponding Author Email: [jyotikisku2k9@gmail.com](mailto:jyotikisku2k9@gmail.com)

The categorization was made by using the formula Mean  $\pm$  S.D.

Low : up to 5

Medium : Score between 6-10

High : Score 11 and above

Constraints were taken as the causes which prevent backyard poultry respondents (rural women) in the adoption of improve managerial practices of the backyard poultry farming. Open end question was specially used to elicit real

causes of non-adoption of the scientific management practices of the backyard poultry rearing. Statements as told by the backyard poultry owners were recorded. The responses, which were similar, were grouped together and presented in the frequency and percentage.

## RESULT AND DISCUSSION

Adoption level of rural women about backyard poultry rearing practices.

**Table -** Distribution of respondents based on adoption of backyard poultry farming practices:

Sl. No.	Adoption level of practices	Adopted	Adopted but discontinued	Non-adopted
<b>BREEDING</b>				
1	Adoption of improved variety	2(1.67)	4(3.33)	114(95.00)
2	Maintenance of Female and male ratio 10:1	05(4.16)	00(00)	115(95.84)
3	Culling of non-brooding hens	01(0.83)	00(00)	119(98.17)
4	Flock size should be >20	30(25.00)	23(19.16)	67(55.84)
<b>FEEDING</b>				
5	Provision of supplementary feeding	06(5.00)	06(5.00)	108(90.00)
6	Provision of conc.feeding upto 6 weeks	02(1.67)	03(2.50)	115(95.83)
<b>MANAGEMENT</b>				
7	Cleanliness of house	67(55.84)	00(00)	53(44.16)
8	Provision of night shelter	120(100.00)	00(00)	00(00)
9	Cleaning of utensils	58(48.34)	00(00)	62(51.66)
10	Provision of laying nest	120(100.00)	00(00)	00(00)
11	Selling of male birds after 16 wks/4 months	36(30.00)	00(00)	85(70.00)
<b>DISEASE CONTROL</b>				
12	Vaccination	00(00)	02(1.67)	118(98.33)
13	Deworming (Every 2 months)	00(00)	02(1.67)	118(98.33)
14	Isolation of sick birds from the flock	00(00)	01(0.83)	119(98.17)
15	Treatment by Veterinary Doctors	05(4.16)	00(00)	115(95.84)

# Figures in parenthesis indicates percentage

### Adoption of breeding practices by backyard poultry owners:

Very few (1.67%) of the respondents adopted improved variety named kadaknath whereas a few (3.33%) of the respondents reared the improved breed but discontinued. Majority (95%) respondents never adopted the improved breed of backyard poultry. This might be due to lack of knowledge about improved breeds of poultry.

Among the respondents only 4.16 per cent maintained the recommended female and male ratio (10:1) and rest 95.84 per cent not adopted. Culling of non-brooding hen was not practiced among the rural women. 25 percent of respondents had adopted flock size more than 20, 19.16 percent had adopted but not maintained the practice, rest 55.84 percent respondent had small flock size.

### Adoption of feeding practices by rural women involved in backyard poultry farming.

Among respondents 5 per cent of respondents had provided supplement feed such as rice and maize. Another 5 per cent respondents had adopted it but later on discontinued. Rest 90

per cent had never adopted it. Concentrate feeding upto 6 weeks was also not common but very few (1.67%) of them adopted it, 2.5 per cent adopted but later on discontinued the practice. The findings are supported by [Saha \(2003\)](#) and [Mandal et al. \(2006\)](#)

### Adoption of management practices by rural women involved in backyard poultry farming.

It is evident from the data that cent percent respondents provided night shelter and laying nest to their birds. The laying nest was generally broken matka, bamboo basket and rack in the wall with dry bedding material (rice straw, bhusa, ash) in shallow and kept in the corner of house.

55.84 per cent respondents cleaned the house and 48.34 per cent cleaned the utensils regularly and rest 51.66 per cent did not follow the recommended practice.

Majority of the respondents (70%) did not sell their birds after 16 weeks. They consume it at home, only 30.00 per cent of them sell their birds at village market to middleman and at their doorstep. The findings are lined with the findings by

**Distribution of respondents according to adoption level**

(N=120)

Sl. No.	Adoption level	Frequency	Percentage
1	LOW (upto 5)	109	90.83
2	MEDIUM (6-10)	11	09.16
3	HIGH (11 and above)	00	00.00

Kumtakar (1999b), Qazi (2002), Saha (2003) and Mandal *et al.*, (2006).

**Adoption of health care practices by rural women involved in backyard poultry farming.**

The health care practices in the rural area is very poor, majority of the respondents do not follow vaccination, deworming and isolation of sick birds from the flock. Only 4.16 per cent respondents treated their birds by Veterinarian.

**Constraints in adoption of backyard poultry rearing practices.**

Table shows constraints faced by the respondents.

Sl. No	Constraints	Frequency	Percentage (%)
1	Lack of vaccination facility (C1)	120	100.00
2	Non-availability of improved breed(C2)	120	100.00
3	Non availability of feed during summer (C3)	120	100.00
4	Incidence of disease (C4)	84	70.00
5	Lack of proper marketing channel (C5)	80	66.67
6	Lack of information (C6)	78	65.00
7	Non-availability of medicine (C7)	74	61.67
8	Non-availability of Veterinary Doctor (C8)	60	50.00

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It was due to lack of veterinary services and lack of extension work. The findings are similar with Kumtakar (1999a), Saha (2003) Kannadhasan and Sudeep Kumar (2005).

A quick glance to above table revealed that majority of the respondents (90.83%) were in low category with respect to their level of adoption of backyard poultry rearing practices, followed by medium level of adoption category which was comprised of only 9.16 per cent. It might be due to illiteracy, and low level of information source utilisation.

The above table shows that lack of vaccination facility, non-availability of improved breed and non-availability of feed during summer were important top three constraints. This might be due to lack of vaccination camps in the village, poor effort by the NGOs working in the area and lack of knowledge about vaccination. Non-availability of improved breed might be declining their profit and income on a regular basis. These constraints were followed by incidence of disease (70%), lack of proper marketing channel (66.67%), lack of information (65%), non-availability of medicine (61.67%) and non-availability of Veterinary Doctor (50.00%). This finding are lined with Mandal *et al.*, (2006).

**CONCLUSION**

The findings of the study highlights that Backyard poultry farming is very common in rural area but the adoption of improved backyard poultry farming are very poor, therefore there is need to provide the facilities and educate the farmers/respondents on improved backyard poultry rearing practices so that their income can be enhanced. Major constraints of backyard poultry farmers need to be addressed.

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