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Socio-economic status of backyard poultry farmers of Bidar District of Karnataka

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Abstract

The present study was conducted to evaluate the socio-economic status of backyard poultry farmers in Bidar district of Karnataka State. A multistage random sampling procedure was used to select the 150 respondents in 30 villages for the study. A structured interview schedule was used to elicit the data from the respondents. The findings of the study revealed that most of the backyard poultry farmers were middle-aged (55.3%), female (86.7%) and illiterate (44.7%), with nuclear family type (76.7%) and pucca house (62.7%). In most cases, agriculture was the primary (46%) and animal husbandry the secondary (84.7%) occupation, with flock size of 40.50 ± 0.863 birds. Marginal farmers were the biggest group (39.5%) with an average of 2.91 ± 0.184 acres of land holding. The backyard poultry farmers had 6.35 ± 0.120 years of rearing experience and medium level of income (60.67%) with 3.49 ± 0.166 hours per day of employment generation. Overall, on a scale of 1-5, farmers got information support from veterinarians/paravets (3.42 ± 0.049), other poultry owners in the village (2.97 ± 0.039) and digital media (2.61 ± 0.074). Women played a major role in all decision making in respect of poultry ownership, selling and consumption of eggs and meat. The study concludes that the backyard poultry production needs extension training to enrich their skill and to improve their standard of living.

Keywords: Backyard poultry, Bidar, Karnataka, Socio-economic status

Introduction

Poultry farming is one of the fastest growing sub-sectors of Indian agriculture today. In view of the growing concern about meeting the per capita requirement of protein for rural citizens of India, poultry meat and eggs have proven to be the best and cheapest solution to address this issue (Rath *et al*, 2015) [17]. The unorganized sector also referred to as backyard poultry, plays a key role in supplementary income generation and family nutrition to the poorest of the poor. Backyard poultry farming plays an important role in the economic development of the country. In recent years, backyard poultry production has been extremely emphasised in sustaining and enhancing rural livelihoods. Backyard poultry enterprise has supported the poor, landless farmers and other members of the backward classes to enhance their livelihoods, increase their assets and climb out of poverty (Islam *et al*, 2021) [8]. According to the 20th Livestock Census, India had a total poultry population of 851.81 million (including backyard poultry population of 317.07 million), which was a 45.80% rise over previous livestock census. The poultry population in Karnataka is 59.5 million and has increased by 25.94% over the previous census. Bidar district has poultry population of about 7,34,095, of which Humnabad taluka contains highest poultry population of 6,04,406 followed by Aurad 53,667, Basavakalyan 18,866, Bidar 28,025 and Bhalki 14,778 (AHVS, 2019). This study was undertaken to examine the various aspects of backyard poultry farming in Bidar district.

Methodology

The present study was carried out during the period 2021-22 using a multi-stage stratified sampling procedure to select the talukas, villages and respondents. Bidar district has a poultry population of about 7,34,095, of which Humnabad taluka contains highest poultry population of 6,04,406 followed by Aurad 53,667, Basavakalyan 18,866, Bidar 28,025 and Bhalki 14,778.

(AHVS, 2019) [3].

In the first stage of selection, Bidar, Aurad and Humnabad talukas were selected for the study based on the larger population of desi poultry birds and consultations with officials of the Animal Husbandry department regarding the availability of the backyard poultry rearing in larger proportion in Bidar district. 150 respondents were selected from 30 villages, with 5 respondents per village and 10 villages per taluka. The data was collected using well-structured and pre-tested interview schedule. Relevant data pertaining to the study was collected and analysed using frequency and percentage analysis.

Results and Discussion

Age: The data related to the social status of the respondents is shown in Table 1. It was found that out of the total respondents 55.3 per cent respondents were middle-aged, 36.7 per cent young and 8.0 per cent old. The average age of backyard poultry farmers in Humnabad, Bidar and Aurad was 46.28 ± 1.305 , 43.88 ± 1.461 , and 45.08 ± 1.365 years, respectively, with an overall of 45.08 ± 0.795 years. These observations were in concurrence with the findings of Ahire (2007) [2] and Razzaq *et al.* (2011) [18].

Gender: The overall number of female respondents was 86.7%, implying that female members of the family were comparatively more engaged in backyard poultry rearing in the study area. Comparable findings were reported by Rai *et al.* (2000) [16], Sharma *et al.* (2002) [23], Okitoi (2007) [14] and Ogunlade *et al.* (2013) [13].

Education level: Analysis of the educational status revealed that most of the respondents were illiterate (44.7%), followed by primary school (19.3%), middle school and high school (13.3% each), and about 9.3% had education above high school. The findings were similar to the findings of Prakash *et al.* (2003) [15] and Mandal *et al.* (2006) [11].

Family type: The predominant family type was found to be nuclear, comprising 76.7% backyard poultry farmers, with the rest coming from joint families. The findings were in accordance with the findings of Saha (2003) [19], Mandal *et al.* (2006) [11] and Borthakur *et al.* (2010) [5].

Family size: The overall family size was found to be 7.53 ± 0.174 numbers. The findings were in conformity with the findings of Ahire *et al.* (2007) [2] and Singh and Jilani (2005) [24].

Table 1: Socio-economic status of the backyard poultry farmers (%)

Attribute	Humnabad	Bidar	Aurad	Overall
Age group				
Young (less than 30years)	55	42	32	36.7
Middle-aged (31-50 years)	83	52	58	55.3
Old (more than 50 years)	12	6	10	8.0
Age (years)	46.28 ± 1.305	43.88 ± 1.461	45.08 ± 1.365	45.08 ± 0.795
Gender				
Female	82	94	84	86.7
Male	18	6	16	13.3
Caste				
Gen	38	40	52	43.3
SC	18	34	18	23.3
ST	28	20	22	23.3
OBC	16	6	8	10.0
Religion				
Hindu	84	72	80	78.7
Muslim	8	20	10	12.7
Christian	8	8	10	8.7
Education level				
Above high school	2	16	10	9.3
High school	12	10	18	13.3
Middle school	12	20	8	13.3
Primary school	18	20	20	19.3
Illiterate	56	34	44	44.7
Family type				
Nuclear	70	74	86	76.7
Joint	30	26	14	23.3
Family size	7.38 ± 0.334	7.72 ± 0.331	7.50 ± 0.231	7.53 ± 0.174
Type of house				
Katcha	20	26	20	22.0
Pucca	64	60	64	62.7
Mixed	16	14	16	15.3
Land holding category				
Landless labour	18	23	24	21.3
Marginal farmer	46	38	40	39.5
Small farmer	7	11	10	10.0
Medium farmer	29	28	26	23.3
Land holding (acres)	2.60 ± 0.271	3.08 ± 0.322	3.04 ± 0.361	2.91 ± 0.184
Poultry experience (years)	5.94 ± 0.186	6.58 ± 0.196	6.52 ± 0.229	6.35 ± 0.12
Occupation – Main				
Agriculture	44	46	48	46.0

Animal husbandry	4.0	4.0	0	2.70
Daily wages	30	22	26	26.0
Business	10	20	18	16.0
Salaried job	12	08	08	9.30
Occupation – Subsidiary				
Agriculture	04	14	12	10.0
Animal husbandry	84	82	88	84.7
Daily wages	06	02	0	2.70
Business	06	02	0	2.70
Annual income				
Low (< Rs. 50,000)	6.670	46.67	16.67	22.67
Medium (Rs. 50,000 to 1 lakh)	73.33	40.00	60.00	60.67
High (more than Rs. 1,00,000)	20.00	13.33	23.33	16.67

Type of house: 62.7% of the respondents had pucca house, with the rest having katcha housing (22.00%) and mixed type (15.3%). This was in line with the observations made by Singh *et al.* (2017) ^[25] and Nayak *et al.* (2020) ^[12].

Land holding category: Land holding is one of important socio-economic parameter, which has influence on the economic and social status of the farmers. The average land holdings of backyard poultry rearers in Bidar district was 2.91±0.184 acres. The majority of respondents belonged to marginal land holding (39.5%), followed by medium (23.3%), landless (21.3%) and small (10%) categories. The results are comparable with the findings of Saha (2003) ^[19].

Poultry farming experience: All the backyard poultry respondents reported that they rear desi type and coloured birds. Desi birds seem to be the promising native chicken for low input free range system of rearing for meat and egg production in rural areas. The overall mean backyard poultry farming experience in Bidar district was found to be 6.35±0.120 years. The results were in line with the findings of Mandal *et al.* (2006) ^[11], Ahire *et al.* (2007) ^[2] and Gopinath (2013) ^[6].

Occupation: About 46.0% respondents had agriculture as a primary occupation and 84.7% respondents had animal husbandry as a subsidiary occupation. The above findings were in conformity with the findings of Saha (2003) ^[19], Khan (2006) ^[11] and Semmaran (2007) ^[21]; however, reported that majority of the respondents had poultry farming as major occupation.

Annual income: A majority (60.67%) of the respondents had medium income followed by low (22.67%) and high (16.67%) income from all sources including poultry farming. However, the reliability of the data is questionable as most farmers were hesitant to answer questions regarding their financial status.

Flock size: Data in Table 2 revealed that average flock size of Humnabad, Bidar and Aurad blocks was 37.48±1.290, 41.12±1.683 and 42.90±1.406 birds, respectively, with an overall mean of 40.50±0.863 birds. The findings were in accordance with the findings of Nayak *et al.* (2020) ^[12].

Table 2: Flock details of backyard poultry farmers (%)

Attribute	Humnabad	Bidar	Aurad	Overall
Flock composition				
Chicks	11.68±0.584	15.62±0.901	17.44±0.836	14.91±0.492
Cock	4.40±0.241	3.90±0.188	4.24±0.173	4.18±0.117
Hen	21.40±0.826	21.60±0.945	21.22±1.048	21.41±0.541
Total	37.48±1.290	41.12±1.683	42.90±1.406	40.50±0.863

Employment generation: Data in Table 3 revealed that average employment generation of Humnabad, Bidar and Aurad blocks was 3.24±0.277, 3.72±0.293 and 3.62±0.290 hours per day, respectively, with overall mean of 3.49±0.166 hours per day. These findings were in conformity with the findings of Lasoda *et al.* (1997) ^[10] who concluded that management of backyard poultry was largely the responsibility of women.

Table 3: Employment generation (hrs/day) of backyard poultry farmers

Attribute	Humnabad	Bidar	Aurad	Overall
Women	1.38±0.090	1.28±0.095	1.31±0.093	1.32±0.053
Men	1.26±0.080	1.26±0.080	1.29±0.071	1.27±0.044
Children	0.60±0.107	1.08±0.117	1.02±0.126	0.90±0.069
Total	3.24±0.277	3.72±0.293	3.62±0.290	3.49±0.166

Frequency of utilization of information sources: Data in Table 4 revealed an overall mean on a 5-point scale, from institutional sources (3.42±0.049), non-institutional sources (2.97±0.039) and mass media sources (2.61±0.074). The results were in line with the findings of Saha (2005) ^[20], Ahire (2007) ^[2] and Gunjal (2014) ^[7].

Table 4: Frequency of utilization of information sources by backyard poultry farmers (Scale 1-5)

Attribute	Humnabad	Bidar	Aurad	Overall
Institutional source				
Research station	0.88±0.180	1.56±0.157	1.16±0.126	1.20±0.092
Extension personnel	1.02±0.163	1.06±0.163	1.28±0.185	1.26±0.106
Veterinarians/para-vet	3.28±0.081	3.58±0.086	3.40±0.086	3.42±0.049
Non-institutional source				
Other poultry owners in the village	2.76±0.073	3.1±0.065	3.06±0.053	2.97±0.039
Village key personnel	1.10±0.179	1.1±0.144	1.08±0.140	1.03±0.087
Own family members	2.54±0.104	2.5±0.082	2.56±0.082	2.53±0.052
Mass media				
Radio	0.56±0.128	0.70±0.149	0.16±0.078	0.47±0.072
TV	2.90±0.065	2.08±0.230	2.44±0.238	2.47±0.115
Digital media	2.50±0.087	2.64±0.136	2.70±0.152	2.61±0.074

Institutional support system: Table 5 revealed that Government veterinarian (47.3%), Veterinary University (41.3%) and scientists (11.3%) played a major role in improvement of backyard poultry farming. It was felt that there is also need to support farmers through regular advice from researchers, help from bank officials, marketing agents, feed analysts and private veterinary doctors.

Table 5: Institutional support system for backyard poultry farmers (%)

Attribute	Humnabad	Bidar	Aurad	Overall
Government Veterinarian	42	50	50	47.3
University	48	40	36	41.3
Scientist	10	10	14	11.3

Gender dynamics in decision making: As per data in Table 6, male and female adult members of the family play an equal role in the ownership of poultry farming (34.7% each), followed by ownership by the rest of the family members (30.7%). Women play a key role in decision of selling eggs (50.7%) and birds (63.1%). They also play a major role in the decision of consumption of eggs (85.3%) and birds (73.3%). Similar findings were reported by Abubakar *et al.* (2007) [1] and Okitoi (2007) [14]. Balamurugan *et al.* (2017) [4] reported that both men and women were equally responsible for taking major decisions. Also reported that 81.54% of the decision makers were men.

Table 6: Gender dynamics of backyard poultry farmers (%)

Attribute	Humnabad	Bidar	Aurad	Overall
Poultry ownership				
Women	34	26	44	34.7
Men	28	38	38	34.7
Family	38	36	18	30.7
Decision maker – Selling eggs				
Women	48	48	56	50.7
Men	28	12	16	18.7
Family	24	40	28	30.7
Decision maker – Selling birds				
Women	64	64	60	63.1
Men	10	8.0	8.0	7.30
Family	28	26	34	29.3
Decision maker – Home consumption of eggs				
Women	74	82	80	85.3
Men	5.0	8.0	20	14.3
Children	5.0	10	10	1.30
Family	22	10	10	14.0
Decision maker – Home consumption of chicken				
Women	64	80	76	73.3
Men	8.0	4.0	16	16.3
Family	16	12	2.0	10.0

Conclusion

A proper assessment and evaluation of the socio-economic status of backyard poultry farmers is vital to formulate plans for the development of this important sector which contributes significantly to rural livelihood and nutritional security. As the majority of backyard poultry farmers were found to be middle-aged, illiterate women who rear birds as a subsidiary activity, veterinarians and digital medial can play an important role in making them aware about improved breeds and rearing techniques.

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