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# Socio Economic Status of Backyard Poultry Farming Farmers in North Region of Lucknow, U

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*Abstract-* Backyard poultry farming is especially popular in rural and resource-poor areas of India, where it provides money, nutritionally rich food sources (meat and eggs), employs women and jobless youth, and bridges the demandsupply gap for poultry eggs and meat. There is little infrastructure required for backyard poultry farming, and it is readily managed by women, elderly family members, and children. Poultry eggs and meat are the greatest and cheapest forms of protein that are readily available to meet the protein needs of rural Indians. This study examined the potential for chicken production in Lucknow, India. The Desi chicken used in the study was one that was present in the flocks of many Lucknow locales. Data were gathered using a standardised questionnaire, formal and informal interviews, and focus group discussions with local livestock keepers.

360 individuals were interviewed, with men making up 21% of the total and women making up the remaining 79%. The entire family was in charge of managing the chickens in 79% of the families; however, in 38% of the homes, only women were involved, and in 9% of the homes, only men were. Since the majority (66.6%) completed primary and secondary education, their literacy level was high.

*Keywords: desi chickens, socioeconomic survey, poultry.*

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360 individuals were interviewed, with men making up 21% of the total and women making up the remaining 79%. The entire family was in charge of managing the chickens in 79% of the families; however, in 38% of the homes, only women were involved, and in 9% of the homes, only men were. Since the majority (66.6%) completed primary and secondary education, their literacy level was high. Families having less than 50 birds in a flock that is (22.2%) of raising birds rear birds for domestic use. A complex system of production was typical, with lodging offered at night to stave off robbers and animals. Backyard poultry farmers confront a number of difficulties, including inadequate housing that exposes the animals to bad weather, predator assaults and stock theft, high chick mortality rates after hatching, parasitic infections and high feed costs for the flock. Therefore, it is advised that institutional support be given in order to maximise the capacity of the farmers at all production stages for sustainable upscaling.

*Keywords: desi chickens, socioeconomic survey, poultry.*

## I. Introduction

Nearly 75% of the country's entire production of meat and eggs comes from the commercial or organized poultry sector, while 25% comes from the unorganized sector. According to the Government of India's 20th Livestock Census statistics, there are 851.81 million fowl worldwide (including 317.07 million backyard chickens), a 45.8% increase over the previous livestock census. India produced approximately 95.2 billion eggs in 2017–18, with a per capita availability (PCA) of 74 per year. One of the livestock industry's fastest-growing subsectors in India is poultry. 3.26 million tonnes of poultry meat are produced annually in India, which accounts for 46% of all meat output.( Mayer and Kitalyi, 1998).

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For rural villages with little resources, backyard poultry can be a reliable source of income. Additionally, it is essential for ensuring India's nutritional security because backyard poultry produces meat and eggs that are a bountiful supply of protein, vitamins, and minerals. When compared to intensive chicken farming, products from rural poultry farming are more expensive. Compared to chickens raised in intensive poultry farming, free-range birds produce meat and eggs with lower cholesterol concentrations and higher biological protein values (Long et. al., 2007; Bray et. al., 201; Davoodi et.al., 2022)

Because rural poultry has traditionally been owned primarily by women, backyard poultry is thought to be a woman's domain. Native poultry is raised by rural women using an extensive system, which provides them with a source of self-employment and income (Justue et. al., 2013; Yadav et. al., 2021)

In Uttar Pradesh, there are 18.66 million poultry birds, of which 7.24 million are farm poultry, according to the 19th livestock census of 2012. In terms of farm poultry, there are 6.6 million broilers. The average number of eggs consumed annually at the national level is 55, compared to 22 for each state. Similar to this, the recommended daily intake of chicken meat is 11 kg, but there are only 2.8 kg of it available nationally and 0.987 kg per person annually in Uttar Pradesh (SDAH, 2013; Maddheshiya et. al., 2022).

In India, indigenous chickens make for 99 percent of the entire chicken population. They are controlled under complex systems. This suggests that almost every family in rural Ethiopia has traditional chickens because they offer protein for the rural people and create family money. Chicken breeding is a viable occupation and an alternative revenue source for rural Ethiopian farmers since the indigenous hens are good scavengers and foragers, well suited to adverse environmental conditions, and require less space (Gueye, 2002) Additionally, the local chicken industry makes a significant contribution to the livelihood of people and food security in low-income households (Jugessur et, al. 2006, Kabir et. al., 2015). Production of livestock in general, and chicken production in particular, is crucial for the socioeconomic development of developing countries. Not just in terms of scale, but also in terms of output and quality, there has been growth. In contrast to more intensive systems in urban settings, large- and small-scale scavenging poultry

production systems have different effects and contributions in rural areas. By generating income and ensuring household food security, backyard poultry in rural areas considerably reduces poverty (Pica-Ciamarra 2010; Kumar 2021). For a variety of reasons, including the provision of animal protein, the generation of additional financial income, and religious or cultural considerations, rural communities keep desi fowl.

Education, age, land, farm experience, and access to finance have all been linked to agricultural productivity and profit in previous studies, hence the current study was carried out to investigate the socio-economic profile of backyard poultry farmers.

## II. Materials and Methods

*Data collection:* The respondents (male and female) were chosen at random depending on a number of factors. Only those respondents who were willing to participate in the study were chosen in order to avoid biased results and to obtain factual insight into the farming practices. The respondents were not pre-informed, and interviews were conducted in the local tongue.

A systematic questionnaire, informal interviews, and group discussions were used to gather the data. The information on typical farming practices, productivity figures for the studied hens, as well as the variables influencing production and contributing to economic welfare, was gleaned from the respondents.

*Site of Study:* The present study was carried out at numerous locations of Lucknow, Uttar Pradesh, India. Chicken growers from a range of chicken farms in various Lucknow neighbourhoods were chosen for the study. Farmers' readiness to take part in the survey and their degree of adoption of best practises for raising poultry.

## III. Result and Discussion

360 individuals were interviewed; 21% of them were men, and 79% of them were women. In 79% of the cases, the entire family was in charge of caring for the hens; however, in 38% of the households, only women were involved, and in 9% of the houses, only men were. It is woman domain as observed in other studies also. (Long et. al., 2007; Bray et. al., 2017; Davoodi et. al., 2022)

It was found that the pooled mean age of the poultry farmers showed that the majority (59.7%) of them were in the (35–50) age , followed by the young (20–34) and old (>50) age groups, which accounted for 24.4% of the young and 15.8% of the old age groups, respectively.

Majority (40.56%) of the poultry farmers were from general category while OBC group, schedule caste and schedule tribe, which together make up 30.6 percent of the 25%, and 9.4%, respectively.

It was discovered that the majority (52.8%) of poultry farmers belonged to the Hindu group, with the Muslim group accounting for 47.2 % of the total. In contrast to Babu (2013), Babu (2013) indicated that both the Hindu and Muslim communities equally participated in the commercial broiler farming.

It was observed that 67.5 percent of poultry farmers were classified as being from a joint family, while 32.5 percent were classified as nuclear families from the respondents.

In Table1, it was showed that majority 60 percent of the poultry farmers were having medium family size ranging from 5 To 10 members followed by the large size family i.e. more than 10 members and small (< 5) family size which were equal 22 percent.

Table 1 revealed that large number of the respondents (66.6%) belonged to primary to intermediate status of family education followed by the category of low (below primary)and high (above imtermediate), which accounts, 24.17 percent and 9.17 percent respectively.

*Table 1:* Socio-economic profile of poultry farmers regarding backyard farming practices

| S. No. | Characteristic | Frequency (N=360) | Percentage |
|---|---|---|---|
| Age (in Years) | | | |
| 1. | Young | 88 | 24.4 |
| 2. | Middle | 215 | 59.7 |
| 3. | Old | 57 | 15.8 |
| Caste | | | |
| 1. | General | 146 | 40.56 |
| 2. | OBC | 110 | 30.6 |
| 3. | SC | 90 | 25 |
| 4. | ST | 34 | 9.4 |
| Religion | | | |
| 1. | Hindu | 170 | 47.2 |
| 2. | Muslim | 190 | 52.8 |
| | | | |

| | | | |
|---|---|---|---|
| Family Type | | | |
| 1. | Joint | 117 | 32.5 |
| 2. | Nuclear | 243 | 67.5 |
| Family Size | | | |
| 1. | Small (<5) | 72 | 20 |
| 2. | Medium (5 TO 10) | 216 | 60 |
| 3. | High (>10) | 72 | 20 |
| Family education status | | | |
| 1. | Low (<Primary) | 87 | 24.17 |
| 2. | Medium (Primary to intermediate) | 240 | 66.6 |
| 3. | High (Above intermediate) | 33 | 9.17 |
| Occupation | | | |
| 1. | Poultry | 75 | 20.83 |
| 2. | Poultry +Other | 285 | 79.16 |
| Land holding | | | |
| 1. | Landless | 0 | 0.00 |
| 2. | Marginal | 101 | 28.06 |
| 3. | Small | 110 | 30.56 |
| 4. | Semi medium | 125 | 34.72 |
| 5. | Medium | 24 | 6.67 |
| 6. | Large | 0 | 0.00 |
| Experience | | | |
| 1. | Low (<5) | 110 | 30.56 |
| 2. | Medium (5 TO 10) | 190 | 52.78 |
| 3. | High (>10) | 60 | 15.38 |
| Flock size | | | |
| 1. | Very small <50 | 80 | 22.2 |
| 2. | small (< 50-300) | 80 | 22.2 |
| 3. | Medium (300 to 900) | 175 | 48.6 |
| 4. | Large (>900) | 25 | 6.94 |
| Production cycle per year | | | |
| 1. | Low (<4) | 95 | 26.39 |
| 2. | Medium (4 TO 5) | 178 | 49.44 |
| 3. | High (>5) | 87 | 24.17 |
| Mortality rate | | | |
| 1. | Low (<4%) | 160 | 44.44 |
| 2. | Medium (4 TO 8%) | 140 | 38.89 |
| 3. | High (>8%) | 90 | 25 |
| Training received | | | |
| 1. | Received | 70 | 19.44 |
| 2. | Not received | 290 | 80.56 |

According to Table 1, 20.83 percent of farmers were active in poultry farming, and 79.16 percent were involved in the agricultural, fisheries and other commercial sectors. Backyard farming has frequently been seen as a supplementary occupation that offers additional income-generating activities, creates more employment chances, makes the most use of the resources at hand, and fully utilizes the byproducts of farming activities. The dangers faced by farmers who just grow crops include production loss, marketing issues, a shortage of inputs, etc. However, crop production gives farmers a temporary source of income. The farmer who begins engaging in auxiliary activities like poultry helps them utilise the human resource that is available throughout the year.

Table 1 showed that 34.72 percent of respondents had semi-medium landholdings, 30.56 percent had small landholdings, 28.06 percent of the population was classified as marginal, 6.67 percent as medium, 0.00 percent as landless, and 0.00 percent as having large amount of land.

According to Table 1, the category of farmers with low (less than 5) years and high (above 10) years of experience in poultry farming was represented by 30.76 percent and 17.94 percent, respectively and medium experience by 52.78 percent of the farmers. The results are logically supported by the respondents' skill development in chicken husbandry operations.

According to Table 1, 48.06 percent of poultry farmers produced poultry in the medium category,

followed by 22.2, 22.2 and 6.94 percent of farmers who produced poultry in the very low(<50), low (50-300) and high(>900) categories. Families with less than 50 chicken has kept for their domestic use. Poultry raising has continued to be a mark of honour in the rural community.

The majority of farms (44.44%) had a low level (4%) mortality rate, according to data on chicken farming mortality. While 38.89% of the population experienced medium-level mortality (4–8%) and 25% experienced high-level mortality (>8%), respectively.

The majority of poultry farmers (80.56%) had not recevied any training in poultry farming, whereas the remaining 19.44% of farmers had received training.

*Table 2:* Distribution of poultry farmers according to their mass media exposure.

| Mass media exposure | Frequency | Percentage |
|---|---|---|
| Low | 80 | 20.51 |
| Medium | 200 | 51.28 |
| High | 110 | 28.20 |

Table 2 shows that among the farmers, 51.28 percent had a medium level of exposure to the media, 20.51 percent had a low level of exposure, and 28.20 percent had a high level of exposure. Based on the data analysis, it was discovered that radio, mobile, newspapers, and television were the most significant mass media outlets for keeping poultry producers in the research region informed.

*Table 3:* Distribution of respondents according to housing system of poultry rearing (N=360)

| Variables | Rearing | No. of respondent | Percentage |
|---|---|---|---|
| System of rearing | Backyard/ free range | 360 | 100.00 |
| | Semi intensive | 0 | 0.00 |
| | Intensive | 0 | 0.00 |
| Night shelter | Constructed separate for birds | 335 | 93.06 |
| | Birds share same house with owners | 25 | 6.94 |
| Tyge of houses | Kachha | 270 | 75.0 |
| | Pucca | 20 | 05.56 |
| | Chappar | 70 | 19.44 |

Despite the fact that the majority of poultry owners raised their animals in backyard or freerange settings, they still made the necessary arrangements for the animals' nighttime protection to keep them safe from predators, which is consistent with the findings of Berte (1987), Saha (2003).

Table 3 shows that the majority of poultry owners (93.06%) built separate homes for their flocks, where as just 6.94% of respondents stated that their flocks shared a home with them.

Table 3 makes it clear that the majority of poultry owners (75.0%) kept their animals in kachha houses constructed from materials that were readily available locally, including wood, mud, broken bricks, tiles, and wire mesh, as opposed to the pucca houses that 5.56 percent of respondents kept their animals in.

A select few respondents were also given the o ption of housing the chicks separately to prevent huddlin g and subsequent death.

The poultry house was 4 feet long, 3.5 feet wide, and 2.5 feet tall on average. Such homes make it simple to regularly remove droppings, lowering the likelihood of contracting illnesses and parasites. According to Katie (1990), adequate housing must not only give an environment that minimises environmental effect while still allowing birds to dine, rest, and lay eggs in comfort and security.

Therefore, building decent housing with readily available, affordable, and durable materials and skills can significantly increase a village's ability to produce chickens (Kusina and Kusina 1999).

*Table 4:* Constrain of backyard Poultry Farming

| | | | | (n=360) |
|---|---|---|---|---|
| Sl. No. | Constrain | Frequecy | Percent | Rank |
| 1 | lack of availability of labour in the peak season | 240 | 66.67 | I |
| 2 | Not getting better price for the product | 230 | 63.39 | II |
| 3 | Pest and Diseases | 220 | 61.11 | III |
| 4 | Lack of medical assistance | 200 | 55.56 | IV |
| 5 | Scarcity of resources | 200 | 55.56 | V |
| 6 | Lack of availability of the feed | 180 | 50.00 | VI |
| 7 | Lack of credit facility | 170 | 47.22 | VII |
| 8 | Problem of selling the product | 160 | 44.44 | VIII |
| 9 | Variation in productivity | 150 | 41.67 | IX |
| 10 | Parasitic infections | 150 | 41.67 | X |
| 11 | Mortality problem | 120 | 33.33 | XI |
| 12 | Lack of skill to practice secondary occupation | 100 | 27.78 | XII |

Table 4 summarises the challenges experienced by backyard poultry breeders in their line of work. Table 3's critical analysis reveals that among the top issues raised by backyard poultry farmers during the peak season were a lack of labour (66.67%), poor pricing for their products (63.39%), the occurrence of pests and diseases (61.11%), a lack of access to healthcare (55.56%), and a scarcity of resources (55.56%).

The majority of farmers have complained that low quality standards without aguaranteed minimum support price in the market, as well as the crucial role middlemen play in the marketing system, prevent them from achieving a better price for their products in local and regional markets.

Farmers have observed that they struggle to obtain all the inputs needed to practise these as secondary occupations because of the difficulty in obtaining fodder throughout the year, the difficulty in obtaining water in the summer, the difficulty in obtaining concentrated feed at a reasonable price, and the labour shortage during the peak season. Additionally, they are receiving outdated information that will not help them solve the pest and disease problem. Similar outcomes were seen in Sadaphal et al., 2001 and Thimmareddy, 2001.

*Table 5:* Suggestions by the farmers Practicing Poultry as a Subsidiary Occupation to overcome their Problems (n=360)

| Sr. No. | Suggestions | Frequey | Percnt | Rank |
|---|---|---|---|---|
| 1 | Availability of Better price for output | 290 | 80.56 | I |
| 2 | Availability of credit facility | 280 | 77.77 | II |
| 3 | Make availability of inputs in peak period | 210 | 58.33 | III |
| 4 | Arranging the training programmes to learn special skills to practice | 200 | 55.56 | IV |
| 5 | Providing Medical facilities on time | 190 | 52.78 | V |
| 6 | Providing irrigation facility | 170 | 47.22 | VI |

A quick review of the data in Table 5 revealed that the backyard poultry farmers' top recommendations were to offer a better price for their produce (80.56%), make loan facilities timely available (77.77%), and make inputs readily available during peak times (58.33%).

These ideas support the formulation of appropriate solutions and corrective actions. If their recommendations are given careful attention, there is a good chance that a supportive environment will be created to encourage farmers to engage in auxiliary activities. The findings concur with those of Shantamani (2007) and Sridhar (2002).

## IV. Conclusion

Backyard Poultry Farming plays a' significant role in rural people's life. Village backyard farming in addition to cash income, have nutritional, cultural and social impact.

It may be inferred from the socioeconomic traits of the rural women maintaining backyard chicken that a socioeconomically underprivileged segment of society kept backyard poultry as a secondary source of income to support their living. Backyard poultry farmers confront a number of difficulties, including inadequate housing that exposes the animals to predator assaults and stock theft, high chick mortality rates after hatching, parasitic infections and high feed costs for the flock, low cost of product. Therefore, extenstion programmes in Backyard poultry farming should commensurate so that the poultry owners become more knowledgeable and skillful about the new technologies as well as the, recommended practices and can maximize the productivity and consequently the income.

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