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# The Consumer Preference for Backyard Poultry Birds and Eggs in North Bengaluru, Karnataka

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**ABSTRACT: This research paper delves into the pivotal role of backyard poultry farming in the Indian agricultural sector, particularly in North Bengaluru. It examines the preferences of consumers towards poultry birds and eggs, highlighting that backyard poultry production has surged by 45.79 per cent since the last census, in stark contrast to a mere 4.5 per cent growth in commercial poultry. Currently, backyard poultry contributes to 37.22 per cent of the total poultry population in India, with 317.07 million birds, and an annual production of 103.93 million eggs. The study reveals that about 42 per cent of consumers in North Bengaluru pay an average of ₹400-₹500 per kilogram for backyard poultry meat, with approximately 76.67 per cent of households consuming between 4-7 kilograms per month. The research underscores a growing consumer preference for backyard poultry due to its perceived superior taste, texture, and nutritional value, particularly among males under 30 years of age. The findings also emphasize the economic impact of backyard poultry farming, which not only supports the livelihoods of small and marginal farmers but also significantly contributes to India's GDP. The study concludes that backyard poultry farming, with its potential for organic and sustainable production, is a viable approach to enhancing food security and nutrition in rural India.**

**Keywords**: Backyard poultry, Consumer Preference, Eggs and Birds and commercial poultry.

## INTRODUCTION

Eggs and poultry products are vital components of global nutrition and food security, offering high-quality proteins that are both affordable and versatile. These products are essential in diets worldwide, yet the egg and poultry industry has faced numerous challenges, influenced by changing consumer preferences, societal concerns, and the push for sustainable practices. India's livestock industry, particularly the poultry sector, has grown rapidly, with poultry farming emerging as one of the fastest-growing areas in agriculture, experiencing an annual growth rate of over 8 percent. Over the past four decades, the industry has transformed from small-scale backyard activities into large agribusinesses. Currently, India has approximately 851.81 million chickens, with 317.07 million raised in backyards, contributing to an annual egg production of 103.93 million. Anonymous (2019). In 2018–19, the cattle industry made up 4.19 per cent of the total GVA. In 2017-18 livestock sector contributed 4.11 per cent to GDP and 25.6 per cent to total agriculture GDP (www.vikaspedia.in).

Backyard poultry farming, a traditional rural practice, has seen remarkable growth, with production increasing by 45.79 percent since the last census. Despite this, the availability of eggs per person remains below the Indian Council for Medical Research's recommended levels. Poultry farming has become a significant contributor to India's GDP, and its expansion in urban and peri-urban areas has been instrumental in reducing malnutrition, poverty, and creating employment opportunities in rural regions. Recent shifts in consumer preferences, particularly the growing demand for cage-free eggs, have led to changes in the retail sector. The indigenous chicken was better than broilers in terms of taste and quality of meat, Raha (2000). While consumers generally prefer eggs for their safety, ease of preparation, and affordability, preferences for egg characteristics such as shell color (yolk colour) vary by region Berkhoff *et al.* (2020), Thehigher egg weight, egg volume, and albumen volume were preferred by the consumers. However, yolk volume was significantly higher in Vanaraja and Gramapriya varieties as compared to native chickens. Consumers were fond of eggs for aroma, flavour, quality resulting in overall acceptability of Miri, Mizo-local and Vanaraja that were significantly higher than that of Gramapriya due their nutritional benefits Haunshi *et al*. (2010). In India, backyard poultry farming remains a crucial source of supplemental income and nutrition for the poorest households Alem *et al.* (2014). The price was the most important attribute determining consumer preferences, followed by the hens' feed and their rearing conditions Rondoni *et al.* (2020). It was also found that only some

groups of consumers were willing to pay the premium necessary for alternative methods of production for better quality eggs and meat in the study area Mesías *et al.* (2011).

India's rich tradition of backyard poultry farming has potential for further development, particularly in organic chicken production. Introducing enhanced dual-purpose birds, such as Vanaraja and Gramapriya, could improve productivity in rural areas Pal *et al.* (2020). Free-range poultry, compared to industrial farming, produces eggs and meat with lower cholesterol, providing essential nutrients and helping combat protein deficiency, particularly among vulnerable populations Rawat *et al.* (2015).

## MATERIALS AND METHODS

The present study is confined to consumer preference for backward poultry birds and eggs. The primary data related to backyard poultry consumers were collected from farmers in two taluks of Bengaluru North namely; Doddaballapura and Devanahalli. Purposive sampling method was adopted in selection of 90 consumers. The primary data was collected by using pre-tested structured schedule schedules through personal interview method. Descriptive statistics such as mean and percentages were used for consumer analysis.

## RESULTS AND DISCUSSION

The results of the present research with regard to findings are discussed with main focus on some of the causes responsible for important results under the following headings in consonance with the objectives of the study.

- Socio-economic characteristics of backyard poultry consumers
- Consumer preference for backyard poultry birds and eggs.

**Socio-economic characteristics of backyard poultry consumers.** The socio-economic characteristics of sample backyard poultry consumers including gender, age, education level, family type, family composition, household income per month and Monthly expenditure on indigenous chicken in North Bengaluru are presented in Table 1.

**Gender.** The study comprised of 90 consumers along North Bengaluru. It can be observed from Table 1 that majority (63.33%) of poultry consumers were male followed by female (36.67%). It indicates that comparatively men preferred backyard poultry meat and eggs in their diet than women due to the availability, taste and texture and nutritive value.

**Age.** Regarding the age of the backyard poultry consumers, it was found that majority (52.22%) of consumers belonged to the age group of upto 30 years followed by age groups of 30 to 50 years (42.22%) and above 50 years (5.56%). This indicates that the consumers age group upto 30 preferred backyard poultry meat than another group.

**Family type.** The type of the family is an important demographic feature of the household. Majority (75.56%) of the families of consumers were nuclear in nature while the rest (24.44%) had joint families. The phenomenon of nuclear family is the order of the day in the present day of modern world, especially in urban areas catching up in rural areas as endorsed by finding of the present study.

**Household income per month.** Regarding the household income of backyard poultry consumers, it was found that majority (43.33%) of them had their income Rs. 20,000-Rs. 50,000 followed by less than Rs. 20,000 (42.22%).

**Table 1: Socio-economic characteristics of backyard poultry consumers in North Bengaluru (n=90).**

| Sr. No. | Particulars | Number of consumers | Per cent |
|---|---|---|---|
| 1. | **Gender** | | |
| | a. Male | 57 | 63.33 |
| | b. Female | 33 | 36.67 |
| 2. | **Age** | | |
| | a. Upto 30 | 47 | 52.22 |
| | b. 30 to 50 | 38 | 42.22 |
| | c. Above 50 | 5 | 5.56 |
| 3. | **Family type** | | |
| | a. Nuclear family | 68 | 75.56 |
| | b. Joint family | 22 | 24.44 |
| 4. | **Household income** (Rs. per month) | | |
| | a. < 20,000 | 38 | 42.22 |
| | b. 20,000-50,000 | 39 | 43.33 |
| | c. 50,000-1,00,000 | 7 | 7.78 |
| | d. >1,00,000 | 6 | 6.67 |
| 5. | **Expenditure on country chicken in** (Rs. Per month) | | |
| | a. <2,000 | 69 | 76.67 |
| | b. 2,000-3,000 | 13 | 14.44 |
| | c. >3,000 | 8 | 8.89 |
| 6. | **Frequency of meat and egg consumption** | | |
| | a. More than once in a week | 7 | 7.77 |
| | b. Weekly | 11 | 12.22 |
| | c. Fortnightly | 33 | 36.66 |
| | d. More than once per month | 26 | 28.88 |
| | e. Monthly | 13 | 14.44 |

Note: * rounded-off averages

**Expenditure on country chicken in Rs. Per month.** According to the survey, most of the sample consumers were spending less than Rs. 2,000 per month, followed by approximately 15 per cent of consumers who were found to be spending between Rs. 2,000 and 3,000, and just about 9 per cent of consumers who were discovered to be spending less than Rs. 3,000 per month these results showed analogous results with Yiqing (2013).

**Frequency of meat and egg consumption.** The study found that majority (36.66%) of the sample consumers in the study area were found to be consuming backyard poultry meat and eggs fortnightly followed by about 29 per cent of the consumers who consumed more than once in a month similar results were found in Pillo *et al.* (2019).

**Consumer preference for backyard poultry birds and eggs.** It can be observed from Table 2 that 58.84 per cent of the consumers were purchasing backyard poultry in the form of cut parts because of difficulty in slaughtering followed by live birds (27.78%), as some consumers are hygiene conscious and they purchase it for consumption in the near future and the price of the live birds were also relatively lesser compared to the dressed chicken followed by dressed chicken (13.33%) due to lack of skill among consumers and time constraint similar results were found in Castellini *et al.* (2008).

With reference to the preference for eggs, the study found that around 54 per cent of the consumers preferred to consume both indigenous and layer eggs followed by only layer eggs (27.78%) because the prices of the layer eggs were comparatively lower than indigenous (naati) eggs similar results were found in Mesías *et al. (2011*). Indigenous type of eggs was consumed by 17.78 per cent of the consumers due to lack of availability of indigenous eggs and higher prices.

Similar study on consumer preferences for eggs and meat quality parameters of Aseel and Kadaknath indigenous chicken breeds of India under backyard poultry farming was conducted by Kumar *et al.* (2021). The results revealed that the egg and meat quality parameters were very crucial for the poultry industry as egg and meat configuration affects grading, price, taste, bird weight that were preferred by the consumers in the study area. The study also revealed that consumers are willing to pay premium prices for the better-quality eggs and meat similar results were found in Kumar *et al.,* (2021).

**Table 2: Consumer preference for backyard poultry birds and eggs in North Bengaluru (n=90).**

| Sr. No. | Particulars | Number of consumers | Per cent share |
|---|---|---|---|
| 1. | **Form of chicken** | | |
| | Cut parts | 53 | 58.84 |
| | Dressed | 12 | 13.33 |
| | Live | 25 | 27.78 |
| 2. | **Type of egg consumption** | | |
| | Indigenous (Naati) | 16 | 17.78 |
| | Layer | 25 | 27.78 |
| | Both | 49 | 54.44 |
| 3. | **Average price of backyard poultry chicken** (Rs. /Kg) | | |
| | <400 | 34 | 37.78 |
| | 400-500 | 38 | 42.22 |
| | 500-600 | 15 | 16.67 |
| | >600 | 3 | 3.33 |
| 4. | **Average quantity of backyard poultry chicken meat consumed** (Kgs. / month) | | |
| | 4-7 | 69 | 76.67 |
| | 8-10 | 13 | 14.44 |
| | 11-15 | 5 | 5.55 |
| | >15 | 3 | 3.33 |

The results of the present study showed that, about 42 per cent of the consumers were paying an average price of Rs. 400-500 per kg followed by about 38 per cent of the consumers paying less than Rs. 400 per kg as consumers falling under this category were having nuclear family (Table 1). About 17 per cent of the consumers were paying Rs. 500-600 per kg as the consumers were willing to pay more than Rs. 500 per kg and this category of consumers were found to be large / joint family (Table 1). The willingness to pay in nuclear family was less when compared to the joint family because of their income, habits and higher demand comparable findings emerged from the research Berkhoff *et al.* (2020).

Further, the results revealed that regarding the consumption of average quantity of backyard poultry chicken, about 77 per cent of the consumer fell under the category of consuming 4-7 kgs per month followed by about 15 per cent of the consumers consuming 8-10 kgs per month, it was found that three consumers in the study area were found to be consuming more than 15 kgs per month, it was noticed that the families who were consuming more than 15 kgs per month were comprising of joint family and the research produced analogous finding with Alem *et al.* (2014).

Based on the above results on the consumer preference for backyard poultry birds and eggs, the null hypotheses that "Consumers prefer meat and eggs of backyard poultry produced in rural area" has been accepted.

## CONCLUSIONS

Backyard poultry farming is a vital part of India's agricultural landscape, significantly contributing to

rural livelihoods and food security. This research reveals that backyard poultry production has grown rapidly, surpassing commercial poultry in recent years. The rise in consumer demand for organic, cage-free, and locally produced poultry is driven by increased awareness of animal welfare and the health benefits of free-range poultry, which is lower in cholesterol and richer in essential nutrients. Higher-income families tend to consume more backyard poultry, which is preferred for its taste, texture, and nutritional value. Economically, backyard poultry farming supports small farmers, creates jobs, and boosts GDP. The willingness of consumers to pay premium prices reflects strong market demand. The study also emphasizes the need to preserve native poultry breeds like Vanaraja and Gramapriya, which are well-adapted to low-input systems and valued for their quality, ensuring sustainable growth in this sector.

## FUTURE SCOPE

The future scope of this research on consumer preferences for backyard poultry in North Bengaluru is promising. Further studies could explore the scalability of backyard poultry farming in urban and peri-urban areas, focusing on enhancing organic and sustainable production methods. Research could also investigate the economic impact of expanding backyard poultry operations, particularly in terms of job creation and income generation for marginalized communities. Additionally, there is potential to delve deeper into consumer behavior and willingness to pay for premium, organic poultry products. Future research could also assess the viability of introducing and popularizing more native breeds like Vanaraja and Gramapriya, which are well-suited to local conditions. Finally, studies could examine the long-term health benefits of backyard poultry consumption and its role in addressing nutritional deficiencies in urban populations, thus contributing to food security and public health.

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