



Socio-economic Status of Farmers Rearing Peruvudai Chicken in Western Part of Tamil Nadu

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ABSTRACT: A study was carried out in western part of Tamil Nadu to identify the socio-economic status of farmers engaged in Peruvudai chicken production. Respondents were chosen on the basis of stratified random sampling technique. The data were collected from each respondent through a semi-structured interview schedule. The socio-economic status was evaluated by their educational status, age, gender, ownership status, occupation, family size, land holding pattern, years of experience and income.

Keywords: Peruvudai chicken, socio-economic status, western part of Tamil Nadu.

INTRODUCTION

Native chicken breeds are playing a major role in rural economy in most of the developing and underdeveloped countries. The most important positive character of native chicken is their hardiness and ability to tolerate harsh environmental conditions (Dessie *et al.*, 2011). Among the native chicken breeds/ecotypes in India, the “Peruvudai” is very much popular among the farmers in western part of Tamil Nadu and there is a growing interest in rearing of these birds. The Peruvudai chicken is hardy in nature, have the ability to thrive under adverse conditions, known for their meat and egg quality with desirable taste and flavour along with the fighting quality of cocks (Vasanthakumar *et al.*, 2023). As utilisation of native chicken in their current genetic merit and production environment is more profitable, this study was carried out in farmers’ field with an aim to study the socio-economic status of farmers rearing Peruvudai chicken in western part of Tamil Nadu.

MATERIALS AND METHODS

The study was carried out in western part of Tamil Nadu *viz.*, Dharmapuri, Erode, Namakkal, Salem and Tiruppur districts from 163 farmers rearing Peruvudai chicken with a minimum of two years period. The average number of Peruvudai chicken maintained by individual farmer was considered as the flock size. Based on the flock size, the farmers were grouped into small, medium and large farmers. The socio-economic status was studied by personal interview method using a standard pre-tested interview schedule specially designed for the purpose. The information on educational status, age, gender, ownership status, occupation, family size, land holding pattern, years of experience and income were collected to study the socio-economic status of farmers rearing Peruvudai

chicken. The collected data were analysed using Snedecor and Cochran (1989) statistical methods.

RESULTS AND DISCUSSION

Socio-economic status of farmers. Socio-economic status of Peruvudai chicken rearing farmers in western part of Tamil Nadu were evaluated by different criteria *viz.*, educational status, age, gender, ownership status, occupation, family size, land holding pattern, years of experience and income.

(a) Educational status. Most of the Peruvudai chicken farmers in the study area were found to have secondary (VI to XII) level of education (49.08 %), followed by education upto a degree/professionals (37.42 %), primary level (7.98 %) and illiterate (5.52 %). The findings of the current study showed that up to secondary (VI to XII) level of education, the per cent farmers involved in Peruvudai chicken farming was on an increasing trend as recorded by Kawsar *et al.* (2013) who found that the flock size was increased in step with the level of education. The per cent people educated up to a degree/professionals involved in Peruvudai chicken farming was about 37.42 per cent which was less compared to the per cent people who had the education up to XII (49.08 %) and this is in line with the findings of Rahman (2017) who observed that higher educated ones had more opportunities in earning from an occupation other than backyard poultry farming.

(b) Age. Among the surveyed Peruvudai chicken farmers, higher proportion (40.49 %) of farmers belonged to 36-50 years, while 36.20 per cent of farmers were below 35 years and the remaining 23.31 per cent farmers were of above 50 years of age. Majority of large flocks (66.67 %) were managed by young-aged farmers having less than 35 years of age whereas small flocks (41.45 %) were managed by middle-aged farmers (36-50 years). The involvement of

young and medium age group was encouraging one as these group of people were more motivated to take up improved practices readily than the old age group which was similar to the finding of Mandal *et al.* (2006); Deka *et al.* (2013) ; Rahman (2017).

(c) Gender. The analysis of data revealed that gender had a significant ($P < 0.05$) effect on flock size. The result revealed that both men (42.33 %) and women (57.67 %) were involved in Peruvudai chicken farming activities. The involvement of men in Peruvudai chicken farming was highest in large flock sized farms (100 %), whereas the women involvement was higher in small flock sized farms (60.53 %). In traditional backyard system, involvement of women is more than the male counterpart due to its low investment and in many families feeding, watering, shed cleaning and treatment to the birds were done by females which was also supported by Vij *et al.* (2015); Patbandha *et al.* (2016); Mahoro *et al.* (2017); Alemayehu *et al.* (2018). As the flock size increases, the participation of male is more than the female in the present study. Similar findings was also recorded by Adoligbe *et al.* (2020), who found that male farmers had larger flocks than female farmers and gender based division of roles and responsibilities implied that women were often in-charge of the sale of the family enterprise products on the market while men as a household head had the ownership of the enterprise and had full control over production and the resulting profit.

(d) Ownership status. Majority of the Peruvudai chicken flocks were owned by individuals (99.39 %). A meagre 0.61 per cent (1 out of 163) of Peruvudai chicken flocks was run on partnership which was recorded as one in small sized flock. There was no partnership between the farmers of medium and large flock size and no literature was found in this aspect in native chicken farming.

(e) Occupation. The findings of the study showed that Peruvudai chicken farming was the subsidiary occupation for 93.87 per cent of the farmers and main business for only 6.13 per cent of farmers among the total farms (163) surveyed. The study carried out by Rahman (2017); Kumar *et al.* (2019) revealed that majority of the respondents possessed poultry as the subsidiary occupation, had an excellent source of income during the lean period of agricultural activity, tool for nutritional security, women empowerment, social engagement in their communities, or to access fast cash when unexpected costs appeared.

(f) Family size. The family size of the respondent farmers ranged from 3 to 7 members. The higher proportion of 58.28 per cent of farmers had family size of 4 and above in their family followed by 41.72 per cent of farmers having up to 3 member families. The finding of our study is in line with Rahman (2017), who found that 46.50 per cent respondents had medium family size which was more than that of respondents with small family size.

(g) Land holding pattern. Among the surveyed Peruvudai chicken farmers, higher proportion (40.49 %) belonged to marginal farmers followed by 30.06 per cent medium sized, 26.99 per cent small sized and 2.45 per cent belonged to large sized category. A

large proportion of small flocks (40.79 %) were managed by marginal farmers having the land area up to one hectare. The findings of Vij *et al.* (2006); Rahman (2017) are similar to the findings of current study that the per cent flock owners falling under marginal, small and medium category were more engaged in Peruvudai chicken farming than the large farmers.

(h) Experience. Based on the years of experience in Peruvudai chicken rearing, the farmers were classified into five categories. Highest proportion (37.42 %) of farmers was having 10-15 years of experience followed by 25.15 per cent farmers with less than 10 years of experience, 15.95 per cent farmers with 21-30 years of experience, 14.11 per cent farmers with 16-20 years of experience and 7.36 per cent farmers with more than 30 years of experience in Peruvudai chicken rearing which is correspondence to the findings of Rahman (2017) who reported that majority (91 %) of the respondents were rearing poultry for more than five years.

(i) Income. The main source of income for the Peruvudai chicken farmers was through sale of adult male birds for game and meat purpose, followed by sale of ready-to- lay pullets and eggs. The selling price of cock (8 to 12 months age) was ranged from Rs. 2,000 to 20,000/- based on its physical appearance and gaming / fighting quality characteristics. The males and females sold for meat purpose were costing from Rs. 350 to 600/kg. live weight. Normally the farmers, who were selling the cock for game purpose, were not interested to sell the eggs laid by their hens. In few areas, where birds were reared only for meat purpose, the sale price per egg was around Rs. 10 to 12 /-. Similar observations were also made by Pedersen (2002); Vij *et al.* (2006); Rahman (2017); Haunshi and Rajkumar (2020); Rathod (2020) who recorded high economic return against a low investment in backyard poultry farming.

Summary. Socio-economic status of Peruvudai chicken rearing farmers in western part of Tamil Nadu were evaluated by criteria like educational status, age, gender, ownership status, occupation, family size, land holding pattern, years of experience and income. Most of the Peruvudai chicken farmers in the study area were found to have secondary (VI to XII) level of education (49.08 %), followed by education upto a degree/ professionals (37.42 %). Higher educated ones had more opportunities in earning from an occupation other than backyard poultry farming. Majority of large flocks (66.67 %) were managed by young-aged farmers having less than 35 years of age whereas small flocks (41.45 %) were managed by middle-aged farmers (36-50 years). Gender had a significant ($P < 0.05$) effect on flock size. Both men (42.33 %) and women (57.67 %) were involved in Peruvudai chicken farming activities. The involvement of men in Peruvudai chicken farming was highest in large flock sized farms (100 %), whereas the women involvement was higher in small flock sized farms (60.53 %). Majority of the Peruvudai chicken flocks were owned by individuals (99.39 %). Peruvudai chicken farming was the subsidiary occupation for 93.87 per cent of the farmers, who had an excellent source of income during the lean period of agricultural activity, tool for nutritional security, women

empowerment, social engagement in their communities, or to access fast cash when unexpected costs appeared. The family size of the respondent farmers ranged from 3 to 7 members. The higher proportion of 58.28 per cent of farmers had family size of 4 and above in their family followed by 41.72 per cent of farmers having up to 3 member families. Among the surveyed Peruvudai chicken farmers, higher proportion (40.49 %) belonged to marginal farmers followed by 30.06 per cent medium sized, 26.99 per cent small sized and 2.45 per cent belonged to large sized category. Highest proportion

(37.42 %) of farmers was having 10-15 years of experience followed by 25.15 per cent farmers with less than 10 years of experience. The main source of income for the Peruvudai chicken farmers was through sale of adult male birds for gaming and meat purpose, followed by sale of ready-to- lay pullets and eggs. As the farmers engaged in Peruvudai chicken rearing fetch high economic return against a low investment, this could be considered in policy making decisions for the rural poor as a viable enterprise for their livelihood security.

Table 1: Social status of farmers rearing Peruvudai chicken in western part of Tamil Nadu.

Sr. No.	Parameters	Number of farmers			Overall	Chi square statistic
		Small (Flock size upto 191)	Medium (Flock size of 192 - 382)	Large (Flock size more than 382)		
Educational status						
1.	Illiterate	9 (5.92)	0	0	9 (5.52)	1.16 ^{NS}
2.	Primary (up to V standard)	13 (8.55)	0	0	13 (7.98)	
3.	Secondary (VI to XII)	76 (50.00)	3 (37.50)	1 (33.33)	80 (49.08)	
4.	College / Professionals	54 (35.53)	5 (62.50)	2 (66.67)	61 (37.42)	
Total		152 (100)	8 (100)	3 (100)	163 (100)	
Age						
1.	Young (Below 35 years)	54 (35.52)	3 (37.50)	2 (66.67)	59 (36.20)	2.20 ^{NS}
2.	Middle (36-50 years)	63 (41.45)	3 (37.50)	0	66 (40.49)	
3.	Old (Above 50 years)	35 (23.03)	2 (25.00)	1 (33.33)	38 (23.31)	
Total		152 (100)	8 (100)	3 (100)	163 (100)	
Gender						
1.	Male	60 (39.47)	6 (75.00)	3 (100.00)	69 (42.33)	8.09*
2.	Female	92 (60.53)	2 (25.00)	0	94 (57.67)	
Total		152 (100)	8 (100)	3 (100)	163 (100)	

Figures in parentheses indicate respective proportions in per cent

NS - Non significant

* - Significant (P < 0.05)

Table 2: Social status of farmers rearing Peruvudai chicken in western part of Tamil Nadu.

Sr. No.	Parameters	Number of farmers			Overall	Chi square statistic
		Small (Flock size upto 191)	Medium (Flock size of 192 - 382)	Large (Flock size more than 382)		
Ownership status						
1.	Individual	151 (99.34)	8 (100.00)	3 (100.00)	162 (99.39)	0.07 ^{NS}
2.	Partnership	1 (0.66)	0	0	1 (0.61)	
Total		152 (100)	8 (100)	3 (100)	163 (100)	
Occupation						
1.	Main	8 (5.26)	1 (12.5)	1 (33.33)	10 (6.13)	4.62 ^{NS}
2.	Subsidiary	144 (94.74)	7 (87.5)	2 (66.67)	153 (93.87)	
Total		152 (100)	8 (100)	3 (100)	163 (100)	
Family size						
1.	Up to 3 members	62 (40.79)	4 (50.00)	2 (66.67)	68 (41.72)	1.05 ^{NS}
2.	4 and above	90 (59.21)	4 (50.00)	1 (33.33)	95 (58.28)	
Total		152 (100)	8 (100)	3 (100)	163 (100)	
Land holding pattern						
1.	Marginal (Up to 1 hectare)	62 (40.79)	3 (37.50)	1 (33.33)	66 (40.49)	0.83 ^{NS}
2.	Small (1 to 2 hectare)	40 (26.32)	3 (37.50)	1 (33.33)	44 (26.99)	
3.	Medium (2 to 10 hectare)	46 (30.26)	2 (25.00)	1 (33.33)	49 (30.06)	
4.	Large (Above 10 hectare)	4 (2.63)	0	0	4 (2.45)	
Total		152 (100)	8 (100)	3 (100)	163 (100)	

Figures in parentheses indicate respective proportions in per cent

NS - Non significant

Table 3: Farmers experience in Peruvudai chicken farming in western part of Tamil Nadu.

Parameters	Number of farmers			Overall	Chi square statistic
	Small (Flock size upto 191)	Medium (Flock size of 192 - 382)	Large (Flock size more than 382)		
Less than 10 years	38 (25.00)	2 (25.00)	1 (33.33)	41 (25.15)	1.69 ^{NS}
10-15 years	57 (37.50)	3 (37.50)	1 (33.33)	61 (37.42)	
16-20 years	22 (14.47)	1 (12.50)	0	23 (14.11)	
21-30 years	24 (15.79)	1 (12.50)	1 (33.33)	26 (15.95)	
More than 30 years	11 (7.24)	1 (12.50)	0	12 (7.36)	
Total	152 (100)	8 (100)	3 (100)	163 (100)	

Figures in parentheses indicate respective proportions in per cent
NS - Non significant

FUTURE SCOPE

Present study on socio-economic status of farmers rearing Peruvudai chicken in western part of Tamil Nadu is the first work to study the status of farmers engaged in Peruvudai chicken farming. As the farmers engaged in Peruvudai chicken rearing fetch high economic return against a low investment, this could be considered in policy making decisions for the rural poor for their livelihood security.

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Conflict of Interest. None.

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