

# SOCIAL STATUS OF FARMERS AND LABOUR UTILIZATION PATTERN IN INTENSIVE REARING OF NATIVE CHICKEN IN WESTERN TAMIL NADU\*

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## ABSTRACT

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*The study was conducted on intensive rearing of native chicken in three districts of Western Tamil Nadu viz., Erode, Tirupur and Coimbatore. The farms were selected by simple random sampling and data collected through a structured questionnaire. A total of 60 farms, 20 in each district were surveyed for the purpose, out of which 22 were small, 15 medium and 23 large size farms with a capacity of less than 1000, 1001-2000 and above 2000 birds in each, respectively. It was found that the farmers rearing native chicken intensively were predominantly young, had education upto school level, owned their farms individually and started the practice to earn subsidiary income. The small and medium size farms were mostly dependent on family labour, while hired labour was engaged in large farms. Labour efficiency was found to improve with increasing farm size.*

**Key words:** *Native chicken, intensive rearing, social status and labour efficiency.*

## INTRODUCTION

The eggs and meat of indigenous chicken are preferred over that of commercial birds due to their colour, hardiness and characteristic flavor of meat (Vij *et al.*, 2006). The market demand for native chickens is relatively high but the supply is rather limited. It is therefore widely accepted that indigenous chicken raising has a high potential for growth in rural area. There is a growing domestic

market for native chicken in the urban and periurban centers with consumers willing to pay a higher price for native chicken meat. With increasing urbanization, sky-rocketing of land prices everywhere, population explosion and allied factors, number of backyard poultry units has reduced considerably. Few farmers in Tamil Nadu have started rearing indigenous type chicken under intensive system like commercial broilers to produce them in high number and reap the advantage of premium price it attracts

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in the market. The native chicken farming under intensive system is at its developmental stage and documentation of socio-economical, technical and financial aspects will help researches and policy makers for further improvement. Hence, the present study was conducted to document social status of farmers and labour utilization pattern in intensive rearing of native chicken for meat.

### MATERIALS AND METHODS

The study was conducted in Western districts of Tamil Nadu viz., Erode, Tirupur and Coimbatore. A total number of 60 farms, 20 farms in each district were identified for the study. The farms were classified into three groups based on the flock size viz., small upto (1000), medium (1001-2000) and large (above 2000). The data on social status of farmers and labour utilization pattern in intensive rearing of native chicken were collected by personal interview methods using a standard pretested interview schedule specially designed for the purpose. Details regarding the number of family and hired labourers utilized were recorded and the following parameters worked out.

$$\text{Labour efficiency} = \frac{\text{Average number of labourers employed}}{\text{Average number of birds}} \times 1000$$

$$\text{Man - hour per native chicken} = \frac{\text{Labour efficiency} \times \text{Average marketing age in days}}{1000} \times 8$$

Eventhough, the marketing age varied from farm to farm and from batch to batch, in order to have an yardstick for measuring the man-

hour, the marketing age was taken as 92 days, which represented the overall average marketing age in the farms surveyed in the study. The data collected were subjected to standard statistical methods (Snedecor and Cochran 1989).

## RESULTS AND DISCUSSION

### Social status of farmers

Social status of farmers rearing native chicken intensively in western districts of Tamil Nadu is presented in Table. 1

### Educational status

Most of the intensive native chicken farmers were found to have education upto school level (51.67 per cent), followed by higher secondary (21.67 per cent) and graduate (16.66 per cent) levels and 8.33 per cent were diploma holders. Only one farmers out of 60 (1.67 per cent) was found to be uneducated. Education is one of the important factors which accelerates growth and development of any enterprise. Majority of the intensive native chicken farmers in Western district Tamil Nadu have studied upto school level. The above findings are in agreement with the earlier reports of Prabakaran *et al.* (2001) and Kumaresan *et al.*(2008). The present study indicates that majority of the poultry farmers have low level of education and intensive rearing of native chicken is mostly adopted by school dropouts as a source of income. Hence, school dropouts may be motivated to undergo vocational training in poultry so as to make them into a potential entrepreneur.

### Age

Among the sample farmers in the study area most of them were young followed by

middle and old age. A similar trend was noted by Mandal *et al.* (2006). However, Kumaresan *et al.* (2008) observed that old age (>35 years) group was involved in village chicken production in North East Zone, which is not in agreement with the results of this study. The findings also showed that young farmers are attracted towards chicken farming which augurs well for its growth in the state.

### **Gender**

The involvement of men in intensive native chicken farming was high and appeared to be so across all categories of farm size which is similar to the findings of Prabakaran *et al.* (2001). Even though most of the labour intensive activities in the native chicken farming are performed by females, as entrepreneurs, their role in native chicken farming is minimal. Training programmes by the university and other government institutions should concentrate on those female participants to ensure their wider participation and gender equity in native chicken based poultry farming.

### **Occupation**

The findings of the study showed that intensive chicken farming was found to be a subsidiary occupation for 76.67 per cent of farmers and main occupation for 23.33 per cent farmers, the difference being much wider in small farm groups. The findings agreed with the earlier report of Prabakaran *et al.* (2001) but differed from those of Mandal *et al.* (2006). It was apparent that the farmers with agriculture as main occupation turned to native chicken farming to overcome seasonal unemployment and ensure a secondary income as a cushion.

### **Ownership status**

In the study area, most of the native chicken reared under intensive system were owned by individual farmers. Only 8.70 per cent of the native chicken farms were maintained under partnership. Similar results were observed by Ramamurthy (1994) in commercial broiler farms. The results of the present study indicated that, similar to broiler farming in its earlier stage of development, native chicken farms are mostly owned by individual farmers due to smaller size and also possibly because contract farming has not been attempted so far.

### **Labour utilization pattern**

The type of labour employed, labour utilization efficiency and manhours per native chicken in different categories of farms surveyed are given in Table.2 The number of labourers employed for every 1000 birds maintained (labour efficiency) in different categories of farms surveyed were  $1.30 \pm 0.09$ ,  $2.40 \pm 0.13$  and  $5.47 \pm 0.60$  in large, medium and small farms respectively and the corresponding values for manhour per native chicken were  $0.97 \pm 0.07$ ,  $1.77 \pm 0.10$  and  $3.92 \pm 0.42$  respectively. From the Table 2 it was observed that the small and medium size farms were mostly dependent on family labour, while hired labour was engaged in large farms. The findings did not agree with those of Ramamurthy (1994) in broiler farms. Labour efficiency was found to improve with increasing farm size which is in agreement with the findings of Prasanna (1991).

### **CONCLUSION**

The farmers venturing into intensive rearing of native chicken were mostly young,

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had education upto school level and resorted to poultry farming for subsidiary income. Small and medium farms were utilizing the family

labour while large farms employed both family and hired labour. There is good scope for development of native chicken farming through capacity building and entrepreneurship training programmes. The labour efficiency was found to be better in large size farms.

**Table 1. Social status of farmers rearing native chicken intensively in Western Tamil Nadu**

S.No	Particulars		Small (n=22)	Medium (n=15)	Large (n=23)	Overall (n=60)	$\chi^2$
1	Education	Illiterate	-	1(6.67)	-	1(1.67)	
		Upto school level	12(54.54)	10(66.67)	9(39.13)	31(51.67)	
		Higher secondary	7(31.82)	2(13.33)	4(17.39)	13(21.67)	
		Diploma	-	1(6.67)	4(17.39)	5(8.33)	
		Graduate	3(13.64)	1(6.66)	6(26.09)	10(16.66)	
		<b>Total</b>	<b>22(100)</b>	<b>15(100)</b>	<b>23(100)</b>	<b>60(100)</b>	
2	Age group	Young (below 35 yrs)	10(45.45)	7(46.67)	12(52.17)	29(48.33)	1.28 NS
		Middle (35-45 yrs)	7(31.82)	4(26.67)	8(34.78)	19(31.67)	
		Old (above 35 yrs)	5(22.73)	4(26.66)	3(13.05)	12(20.00)	
		<b>Total</b>	<b>22(100)</b>	<b>15(100)</b>	<b>23(100)</b>	<b>60(100)</b>	
3	Gender	Male	20(90.91)	15(100)	22(95.65)	57(95.00)	
		Female	2(9.09)	-	1(4.35)	3(5.00)	
		<b>Total</b>	<b>22(100)</b>	<b>15(100)</b>	<b>23(100)</b>	<b>60(100)</b>	
4	Occupation	Main	1(4.55)	5(33.33)	8(34.78)	14(23.33)	6.86 NS
		Subsidiary	21(95.45)	10(66.67)	15(65.22)	46(76.67)	
		<b>Total</b>	<b>22(100)</b>	<b>15(100)</b>	<b>23(100)</b>	<b>60(100)</b>	
5	Ownership status	Individual	22(100)	15(100)	21(91.30)	58(96.67)	
		Partnership	-	-	2(8.70)	2(3.33)	
		<b>Total</b>	<b>22 (100)</b>	<b>15 (100)</b>	<b>23 (100)</b>	<b>60 (100)</b>	

Value in parentheses indicate per cent

NS - Non - significant

\* significant (P<0.05)

**Table 2. Labour utilization pattern in intensive rearing of native chicken**

S.No	Particulars	Small (n=22)	Medium (n=15)	Large (n=23)	Overall (n=60)
I	<b>Type of labour</b>				
1	Family labour	22(100)	14(93.33)	9(39.13)	45(75.0)
2	Hired labour	-	1(6.67)	8(34.78)	9(15.0)
3	Both	-	-	6(26.09)	6(10.0)
	Total	22(100)	15(100)	23(100)	60(100)
II	No. of manhours per day	2.18 ± 0.19	4.57 ± 0.42	5.20 ± 0.29	4.25 ± 0.22
III	Labour utilization efficiency	5.47 ± 0.60	2.40 ± 0.13	1.30 ± 0.09	3.10 ± 0.32
IV	Manhours per native chicken	3.92 ± 0.42	1.77 ± 0.10	0.97 ± 0.07	2.25 ± 0.23

Value in parentheses indicate per cent

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