

Study of Socio-Economic Profile of Farmers in Different Systems of Poultry Production in Varanasi

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ABSTRACT

The study was conducted to determine the socio-economic profile of the farmers, profitability and income utilization under various system of poultry production. Five villages were selected purposively having presence of good number of poultry farmers. Data were collected from the 20 respondent with the help of structured interview technique. The study area was dominated by the male farmers belonging to middle age group followed by young. Most of respondents belongs general followed by other backward class and SC category. Education statuses of most of the respondents were high and 10+2. The average sizes of family in both organised system and backyard were 7 and have medium family size. joint type family were mostly present in most of the farms irrespective to the poultry production system, as is the trend in the present rural social dynamics all over the country and majority of respondents were high and 10+2. In both the systems of poultry farming, respondents had animal husbandry (including poultry) and agriculture as the main occupation. Majority of the organised poultry farmers 5 to 10 years' experience in poultry farm while unorganised poultry farmers had more than 10 year experience.

Keywords: Poultry farming, Age, Education, Family occupation

INTRODUCTION

Poultry farming has become a remunerative business and pre-eminence over all other livestock enterprises in the developing countries. It carries a scope for quick and large profit. In recent years, backyard poultry production has been extremely emphasized in sustaining and enhancing rural livelihoods. In this farming, birds are kept in low-input and low - output system and can easily be managed

by women and children of the households. Now-a-days as there is growing concern about meeting of 3 per capita requirement of protein for rural citizens of India, poultry meat and especially eggs have been proved to be the best and cheapest solution to this.

MATERIAL AND METHODS

The study was conducted in Varanasi district of Uttar Pradesh state.

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Following exploratory research design five village near Varanasi was select randomly. A sample of 20 farmers was selected randomly. Then the pre-tested interview schedule was used for collection of data and the data was analyzed by using appropriate statistical methods.

RESULTS AND DISCUSSION

The Table 1 presents the socio-economic profile of the respondents covered under the present study. The respondents were grouped into different categories based on the mean and standard deviation. The data had been presented in tables and interpreted through frequencies, percentages and mean± standard deviation.

Age

Age can be defined as the length of time a person has lived. The study indicates that in organized system of poultry rearing 60 per cent of the respondents were of the middle age group (35-50 years) followed by old age group (more than 50 years) and young age group (less than 35 years) which accounted for 30 per cent and 10 per cent respectively whereas in backyard system 70 per cent were of middle age group followed by young (20%) and old (10%) age. Similar result were also reported by Kanwat et al. (2012) in their study on the

measure of attitude toward adoption of backyard poultry farming in Arunchal Pradesh, where majority were in middle age group. But the findings of Mandal et al. (2003) are in contrary to the result of the present study. They found that majority of poultry owners belonged to the young age group.

Education

Education is the act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment. A glance at the results in Table 1 indicate that in organised sector majority (40%) of the respondents were high and 10+2, graduate and above (30%) followed by middle (20%), functional literate (10%), and illiterate (0%) category. There were no illiterate and primary respondents in organised farming. On the other hand in backyard of poultry farming majority were primary and illiterate each (30%) followed by functional literate (20%), middle and 10+2 each (10%). There were no graduate and above respondent in backyard of poultry system. Similar result were reported by Saha (2003) in study on rural poultry production in North 24 Praganas district of West Bengal, in which majority of the respondents had education above graduation level (59.3%) and only 18.7 per cent were illiterate.

S.No.	Variable	Variable Category	Organized(n=10)		Backyard(n=10)		Pooled N=20			
			Mean± SD	Frequency Percentage	Mean± SD	Frequency Percentage	Frequency	Percentage		
1	Age	Young (15-35 year)	41.6	1	10	37.9	2	20	3	15
		Middle (35-50 year)	±	6	60	±	7	70	13	65
		Old (>50 year)	8.97	3	30	6.64	1	10	4	20
2	Education	Illiterate		0	0		3	30	3	15
		Functional literate		1	10		2	20	3	15
		Primary		0	0		3	30	3	15
		Middle		2	20		1	10	3	15
		High and 10=2		4	40		1	10	5	25
		Graduate and above		3	30		0	0	3	15
3	Family size	Small (2-4)	4.5	4	40	3.5	0	0	4	20
		Medium (5-8)	±	4	40	±	7	70	11	55
		Large (>8)	0.79	2	20	0.46	3	30	5	25
4	Family type	Joint		6	60		5	50	11	55
		Nuclear		4	40		5	50	9	45
5	Family	a) Poultry		7	70		0	0	7	35
		b) Poultry+ Agri.		3	30		5	50	8	40
		c) Poultry+Agri.+Bussiness		0	0		2	20	2	10
		d) Poultry+Agri.+Service/Labour		0	0		3	30	3	15
6	Experience in poultry rearing	<2 year		1	10		0	0	1	5
		2-5 year	6	3	30	9	0	0	3	15
		5-10 year	±	4	40	±	5	50	9	45
		>10 year	0.95	2	20	0.53	5	50	7	35
7	Gender	Male		8	80		7	70	15	75
		Female		2	20		3	30	5	25
8	Caste	General		6	60		2	20	8	40
		ST		0	0		1	10	1	5
		SC		0	0		4	40	4	20
		OBC		4	40		3	30	7	35

This study reveals that the level of education of the respondents in organized system were more than backyard system. Therefore in backyard system of poultry rearing illiteracy was regarded as major limitation to technology adaptation in livestock including poultry production in the study area. Therefore, in order to popularize the backyard poultry farming there is need for making more efforts to motivate the respondents to adapt the newer technology. The gap in the knowledge has to be bridged through providing education.

Family type and size

Role of the poultry owners in a family largely depend upon the type and size of the family. The size of family generally indicates the number of helping hands. The time available with the member of the household largely depend on the number of member and the type of family. It was evident from the finding (Table 1) that in organized and backyard system 60 per cent and 50 per cent families were joint, whereas 40 and 50 per cent families were nuclear. The size of the family of respondents were belong to medium (40%), followed by large (40%) and small (20%) respectively. While i.e. in backyard system (70%) belonged to the medium size family and 30 percent belong to large family. The medium family size was relevant to the poultry both in organized and backyard poultry rearing system. Similar results were observed by Singh and Jilani (2005) in a study on backyard poultry farming in Garhwal, Himalayas. They observed that majority of family belongs to medium family size. Saha (2003); Mandal et al. (2006) reported the similar result.

Family occupation

The data revealed that majority of the respondents had 'animal husbandry (including poultry) as the main occupation in organised system (70%). In case of backyard poultry system, a good percentage of respondents (50%) had animal husbandry (including poultry), agriculture as their secondary occupation. Only 30 per cent of farmers had animal husbandry (including poultry) + agriculture as their main occupation in case of organised system.

Further study revealed that the animal husbandry was the subsidy occupants of nearly 72 per cent of the respondents whereas 14 per cent were engaged in agriculture as subsidy occupation. These findings are in accordance with the findings of Iqbaluddin (1996); Sharma (2000); Saha (2003) who pointed out that livestock rearing was a multifarious activity particularly in rural area of India as it provided off season work with steady income throughout the year. Backyard poultry farming was found to be subsidy occupation for all the respondents in unorganized system.

Experience in poultry farm

Table 1 reveals the duration of poultry rearing by the respondents. Majority of the organized poultry farmers i.e. 40 per cent have been rearing poultry for 5 to 10 years while 30 per cent had 2-5 year experience and 20 per cent of respondents had more than 10 year experience. On the other hand majority of backyard (50%) poultry farmers had 5 to 10 year and more than 10 year experience respectively. It is evident from the present study that poultry farming under backyard system follows a cyclic trend like the intensive system and semi-intensive in organized system of poultry production, thus the finding of the present study could be suitably explain by the finding of Saha (2003).

Gender

Majority of respondents (80%) in organised system belonged to male and 20 per cent belonged to female. But in case of unorganised form which was mainly backyard poultry farm majority of respondents 70 per cent were female and 30 per cent belonged to female gender. It shows that in commercial activity where ever the technology is involved women take a back seat. These results were also in accordance with the results recorded by Rai et al. (2000) while conducting study on the performance of the backyard poultry, where they found that out of eighty farmers selected from eight villages, sixty seven were women.

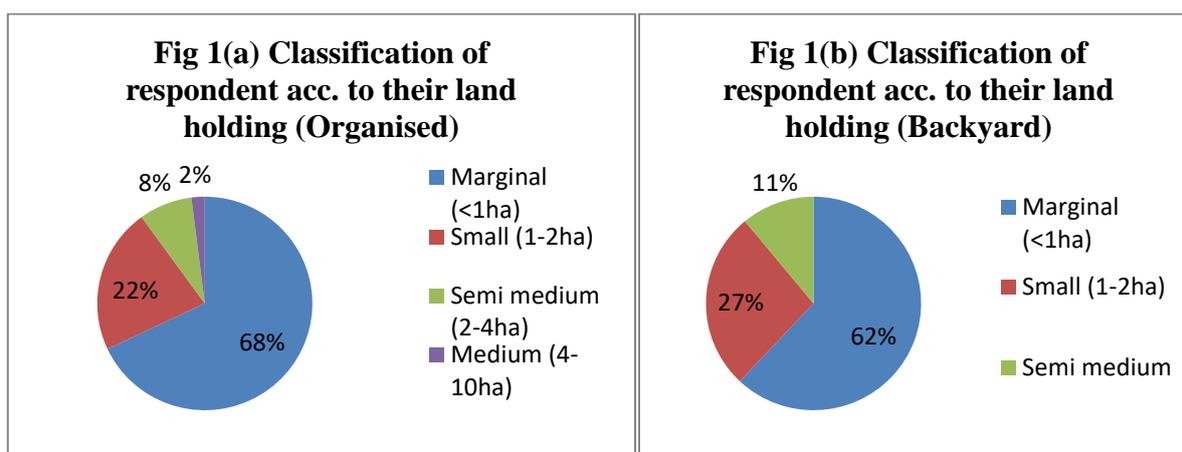
Caste

The study was indicates that maximum respondents in organized system (60%) belong to general category and (40%) belong to other

backward class (OBC). In backyard system (40%) belonged to Schedule Caste (SC) category followed by 30 percent other backward class (OBC) category and 20 percent General category. The similar results findings in the study of Mandal et al. (2003) who found that majority (57.50%) of the respondents in Bareilly district of Uttar Pradesh belong to the general category followed by 21.67 per cent from SC category and 12.50% from ST category.

Land holding

Fig 1 (a) and (b) reveals that in both the systems of poultry rearing majority (organised 68 per cent and backyard 62 per cent) of the respondents fell under marginal land holding category followed by small (organised 22 per cent and backyard 27 per cent). None of the respondent either in organised or backyard system of poultry farming fell under landless as well as large land holding category.



This finding also got support from the study of Chatterje et al. (2004) who concluded that the farmers involved in backyard poultry rearing were generally marginal and small farmers in their study on the evaluation of Nicobari fowl under backyard island milieu. Mandal et al. (2006) reported the similar result.

Flock size

In the study data shown in (table 2) that the majority of respondents (90%) of organized sector were from groups with flock size of >3000 birds, about 10 per cent were in the category of flock size of 2000-3000 and none of the respondent from the group 1st and 2nd. In backyard system of poultry rearing majority of

the respondents (60%) were from group 1st (upto 5 birds), 20% were from the 2nd group, 10% from the 3rd group, and 10% were from the 4th group. In organized system all the respondents kept the broiler birds and respondents of unorganized system of poultry rearing kept coloured non-descript birds. The backyard poultry system was supported by the findings of the Panda and Singh (2000) who conducted a survey on backyard poultry in remote village of Orissa state and found that majority of respondents have 5 to 10 birds. The study of Mandal et al. (2003) found that majority of respondent rear less than 10 birds.

Table 2: Classification of the respondents according to their flock size

S.No.		Organised Broiler farm				Backyard poultry farm			
		Up to 1000	1000-2000	2000-3000	>3000	5 co/h/chi	5-10 co/h/chi	10-15 co/h/chi	>15 co/h/chi
1	Actual no. of birds	0	0	1(10)	9(90)	6(60)	2(20)	1(10)	1(10)
		Desi/indigenous		cross strain		Desi/indigenous		Cross strain	
		0		10		9(90)		1(10)	
2	Guinea fowl	0		0		0.7(70)		0	
3	Duck	0		0		3(30)		0	

Gross annual income from poultry

The study revealed (Table 3) that Most of the respondent of the poultry growers having income in between Rs. 42000 to 62000. A negligible of 10% of the respondent doing poultry farming having annual income more

than Rs. 62000. It is also interesting to mention here that 10% the respondent doing poultry farming with annual income <12000, this indicates that poultry farming is not restricted with annual income of the farmers.

Table 3: Classification of the respondent according to their income (organised)

Income group	Income per annum	Frequency	Percentage
Very low	<12000	1	10
Low	12000-42000	3	30
Medium	42000-62000	5	50
High	>62000	1	10

Material possession (n=20) both organised and backyard

The finding (shown in table 4) that all the respondent (both system) were having Television followed by motorcycle. They were also using regularly. This clearly that indicates that the people are watching T.V. for enriching their knowledge with day to day development in poultry farming. As high as 95% respondent was having motorcycle, which they use

regularly for arrangement of inputs and contacting businessmen and market for disposal for harvested of poultry at reasonable price. It is there for concluded that scientific poultry farming regulates regular use of mass media particularly T.V. for informing themselves with up-to-date knowledge and good mobility for arrangement of different input as well as disposal poultry.

Table 4: Classification of respondent according to their material possession

S.No.	Materials	Possession		Uses	
		Frequency	%	Frequency	%
1.	TV	20	100	20	100
2.	Radio	2	10	1	5
3.	Motorcycle	19	95	18	90
4.	Tractor	4	20	3	15
5.	Power tiller	3	15	2	10
6.	Iron plough	6	30	1	5

CONCLUSION

The study will provides and insight of poultry production practices in organized and backyard farms of Varanasi district of U.P. state. The study will also aid in effective promotion of poultry production and will help to generate information about the practices related to poultry production followed under different systems. The study will provide means of enhancing food, nutritional and economic security coupled with gender empowerment. The emergence of entrepreneurs in a society depends upon closely interlinked social, religious, cultural, psychological and economic factors.

Understanding the role of these factors is essential for creating an environment which can facilitate the development of entrepreneurial behaviour. Considering the importance of poultry farming in Varanasi district and the need of development of entrepreneurship in this sector.

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REFERENCES

- Kanwat, M., Meena, M. S., Kumar, P. S., Choudhary, V. K., & Bhagawati, R. (2012). Measurement of attitude towards the adoption of back yard poultry farming in Arunachal Pradesh. *Journal of Agricultural Science*, 4, 131-136.
- Mandal, M. K., & Gautam, (2003). Status of backyard poultry farming in R.S. Pura Tehsil of Jammu district. *Journal of Interacademica*; 7(4), 491-493.
- Mandal, M. K., Nita, Khandekar, Mahaptra, A. S., Tanmay, Samajdar & Das, A. K. (2004). Involvement of tribal women in backyard poultry farming. *Indian Journal of Animal Health*; 43(2), 177-179.
- Panda, B. (1986). Broiler production and its future development in India. National symposium on hygienic meat production and technology progress and problems of today india, 3-5th June 1986; 14-18.
- Rai, R. B., Balakrishnan, P., & Ummer, K. P. (2000). Performance of backyard poultry in Bay island. *Indian veterinary journal*. 77(8), 709-710.
- Saha, D. (2003). Status of rural poultry production in North 24 Paraganas district of West Bengal. M.V.Sc. Thesis, Division of Extension Education, IVRI, Izatnagar.
- Sharma, S., Iqbal, A., Azmi, S., & Shah, H. A. (2013). Study of poultry coccidiosis in organized and backyard farms of Jammu region. *Vet World* 6(8), 467-469.
- Singh, C. V., Singh, K. S., & Rajora, V. S. (2002). Sustainable backyard poultry production in India, *Indian farming*, 52(1), 4-5.
- Thakre, H. S., & Sarkar, J. D. (2004). Constraints in adoption of poultry production technology for poultry farming in Raipur. *Journal of Soil and Crops*; 14(2), 358-361.