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Socio-Economic Status of Mumbai Metropolitan farm Women Involved in Poultry Value Chain

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ABSTRACT

A study was conducted on 120 poultry farm women in Mumbai Metropolitan Region (MMR) of Maharashtra to study the socio-economic variables and poultry value chain. From Mumbai Metropolitan Region Thane district was purposively selected as good no. of poultry birds are reared by farm women. Farm women having minimum 2 poultry birds with 1 to 3 years of experience were selected. Data were collected personally with the help of pre-tested structured interview schedule and analyzed with the help of frequency, mean, standard deviation, percentage and Cumulative Square Root Technique (CSRT). Majority (58.33%) of the respondents in the study area belonged to the middle age group whereas 94.16 per cent had agriculture as their primary occupation. All the respondents had poultry farming as their secondary occupation. About 85.84 per cent of the respondents had medium annual income ranging from ₹22001 to ₹68000. Nearly one third (74.17%) of the farm women produced was more than 15 eggs/month and more than half (57.50%) of farm women used 1 to 5 eggs for their personal use. All farm women were directly selling their poultry products to consumer without any intermediate chain or channel.

Keywords: Poultry farming, Farm women, Socio-economic, Poultry value chain, CSRT, Marketing channel.

INTRODUCTION

India has emerged on the world poultry map as the 3rd largest egg (56 billion eggs) and 5th largest poultry meat (2.6 million tonnes) producer. Across the world's varied livestock production systems and regions, women are main actors in poultry, small ruminant and micro livestock production followed by dairying. Mostly rural poultry birds have been maintained in backyard by farm women and their children. Poultry are reared traditionally by women (Vincent et al., 2011).

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Pawara et al.

A lot of times it is observed that women prefer poultry among different livestock mainly due to the reasons that chickens do not require the owner to be a land owner. The rearing of poultry provides an excellent opportunity for gainful employment to idle or unemployed members of rural communities (Gazi et al., 2014). Poultry also plays an important role in contributing to women as livelihood option and food security by enabling direct access to animal source protein, providing income from sale of eggs and poultry birds that can in turn be used to purchase food especially during times of food deficit, contributing to increased aggregate cereal supply as a result of improved productivity from use of manure. It is also a source of cash and can open up access to credit by the sale of birds provides an emergency source of cash for medical treatment or school fees, while eggs provides a regular flow of cash income often used to purchase food and household items. It represents a very familiar skill to most of the poor women and it can help them in moving into a positive spiral of events that may lead them for elevation of their socio economic status.

The poultry value chain can be defined as the full range of activities required to bring a product (e.g. live animals, meat, eggs, fibre, manure) to final consumers passing through the different phases of production, processing and delivery (International Development Research Centre, 2000). It can also be defined as a market-focused collaboration among different stakeholders who produce and market value-added products. Value Chain analysis is essential to understand the production system, marketing channels and their relationships, the participation of different actors, and the critical constraints that limit the growth of poultry production and consequently the competitiveness of smallholder farmers. These farmers currently receive only a small fraction of the ultimate value of their output, even if, in theory, risk and rewards should be shared down the chain source (Rota, 2009). Hence the study was conceptualised keeping in view to analyse the socio economic parameters and activities followed by farm women in poultry value chain.

The present study was undertaken in Thane district of Maharashtra in 2018. Thane district is having 07 blocks, out of which three blocks namely Bhiwandi, Murbad and Shahapur blocks were purposively selected. From each block, four villages were selected randomly and from each village, 10 farm women were selected who had at least two poultry birds with minimum 1-3 years of experience in poultry rearing. Data were collected personally with the help of pre-tested structured interview schedule. Poultry value chain parameters were analysed with the help of semi structured interview schedule wherein various aspects were studied such as income from poultry, mode of marketing channel, average eggs produced, how rates of poultry products were decided and various other aspects. Frequency, mean, standard deviation, percentage and Cumulative square root technique (CSRT) were mainly used for statistical analysis.

RESULT AND DISCUSSION SOCIO-PERSONAL PROFILE OF POULTRY FARM WOMEN AGE

It is observed from Table 1, that more than half (58.33%) belonged to medium age group (35 to 50) and 14.17 per cent belonged to old age groups (above 50). These findings are in line with Upadhyay and Desai (2011).

EDUCATION

A meagre sample (1.66%) of the respondents were graduate followed by 5.83 per cent were higher secondary, 6.67 per cent functionally illiterate, 16.67 per cent had middle education, 19.17 per cent had primary education and remaining 28.33 per cent had secondary education. Study revealed that graduated people are not likely to be involved in poultry rearing. The findings of secondary education, higher secondary and graduation are in line with Yadav and Ravena (2017).

FAMILY TYPE

Majority (62.50%) of the respondents had nuclear family whereas 37.50 per cent lived together in joint family. These results are in the line with the findings of Borgohain and Aknand (2011), Devaki et al. (2015) and Balamurugan et al. (2017).

PROFILE OF POULTRY FARM WOMEN

All the farm women were undergoing poultry farming where as 98.33 per cent of the respondents had joint occupation i.e Poultry and Agriculture. (Table 2)

FLOCK SIZE

OCCUPATION

SOCIO-ECONOMIC

More than three fourth (77.50%) of the farm women reared medium flock size ranging from 4 to 29 poultry birds. From these results, it can be concluded that most of the farm women had medium flock size and reared male and female backyard birds with some chicks. In case of

large flock size, majority of the respondents had 20 desi layer chicks of around 4 weeks which they have received from Department of Animal Husbandry, Govt. of Maharashtra under the Swayam scheme. (Table 2)

TOTAL ANNUAL INCOME

Table 2 denotes that the majority (85.84%) of the respondents had medium annual income ranging from ₹22001 to ₹68000

POULTRY FARMING EXPERINCE

The poultry farming experience depicted that 45.84 per cent of the farm women had medium category i.e. 5 to 15 years whereas 15.83 per cent had experience above 5 years.

	Young (<35)	33	27.50		
1.	Medium (35-50)	70	58.33		
	Old (>50)	17	14.17		
	Education				02.47
	Illiterate	26	21.67		
	Functionally literate	08	06.67		
	Primary	23	19.17		
	Middle	20	16.67		
2.	Secondary	34	28.33		
	Higher secondary (up to 12)	07	05.83		
	Graduate and above	02	01.66		
3.	Family type				01.37
	Nuclear	75	62.50		
	Joint	45	37.50		
4.	Family size (members)				05.17
	Small (less than 5)	42	35.00		
	Medium (6 to 13)	76	63.33		
	Large (14 and above)	02	01.67	1	

Ind. J. Pure App. Biosci. (2019) 7(4), 415-421

Table 1: SOCIO-PERSONAL PROFILE OF POULTRY FARM WOMEN

members.

Pawara et al. FAMILY SIZE

From Table 1, it can be depicted that about

63.33 per cent of the respondents belonged to

Age (years)

S. No.

medium size family ranging from 6 to 13

S.D

09.68 39.92

Percentage

Mean

Ind. J. Pure App. Biosci. (2019) 7(4), 415-421

S.No.	Variables	Respondents (N=120)		S.D	Mean
		Frequency	Percentage		
1	Occupation	I	1		
	Poultry	120	100.00		
	Poultry + Agriculture	118	98.33		
	Poultry + Dairy	17	14.17		
	Poultry + Business	02	01.67		
	Poultry + Labour	19	15.83		
	Poultry + Service	08	06.67		
2	Flock size (No's)	I	I	10.51	19.88
	Small (<4)	04	03.33		
	Medium (4 to 29)	93	77.50		
	Large (>29)	23	19.17		
3	Total annual income (₹)			21676.08	48778.33
	Low (<22000)	01	00.83		
	Medium (22001 to 68000)	103	85.84		
	Large (>68001)	16	13.33		
8	Poultry farming experience (years)				
	Low (<5)	37	30.83		
	Medium (5 to 15)	55	45.84		
	High (> 15)	28	23.33		

Table 2: SOCIO-ECONOMIC PROFILE OF POULTRY FARM WOMEN

COMMUNICATION PROFILE OF POULTRY FARM WOMEN MASS MEDIA EXPOSURE

Majority (79.17 %) of the farm women had medium mass media exposure .From the above results it can be concluded that majority of the farm women actively took part in demonstrations which were conducted on poultry farming practices. Also, farm women had good exposure to mass media which help them to keep themselves updated through newspaper or radio.

EXTENSION CONTACT

Majority (63.33%) of the respondents had medium level of extension contact. Majority of the farm women of the study area had extension contact with LSS (livestock supervisor) and Gram sevak as women mostly attended Gram Sabha meeting which were held every month whereas they had least contact with Block Development Officer and scientists. This result is in the line with the findings of Upadhyay (2011).

SOCIAL PARTICIPATION

Results in Table 3 shows that 88.33 per cent of farm women had medium level of social participation. It can be concluded that very low per cent of farm women had low social participation whereas mostly farm women were part of their respective SHG wherein they actively took part in their SHG meetings which were conducted on regularly basis. Also, respondents had occasionally social participation in schools and anganwadis as compared to private organization where they had no social participation.

Ind. J. Pure App. Biosci. (2019) 7(4), 415-421

S.No.	Variables	Responder	S.D	Mean	
		Frequency	Percentage		
1	Mass media expo	Mass media exposure			03.60
	Low (<2)	12	10.00		
	Medium (2 to 6)	95	79.17		
	High (>6)	13	10.83		
2	Extension contact			01.50	04.97
	Low (<4)	20	16.67		
	Medium (4 to 6)	76	63.33		
	High (>6)	24	20.00		
3	Social participation			01.69	04.45
	Low (<2)	02	01.67		
	Medium (2 to 6)	106	88.33		
	High (>6)	12	10.00		

Table 3: COMMUNICATION PROFILE OF POULTRY FARM WOMEN

VALUE CHAIN OF POULTRY FARMING ACTIVITIES AVERAGE ANNUAL INCOME FROM

POULTRY FARMING

Majority i.e. 61.67 per cent of farm women were having medium category of income ranging from ₹1295 to ₹5125. About 15.83 per cent of farm women fall under low range of income i.e. upto ₹1294. Less than three fourth (73.68%) of the farm women were not selling eggs and poultry birds and they were wholly used for their personal use, where in their family members used to consume eggs and meat for own personal needs. It is evident, that farm women earned an average from poultry farming which is not a huge amount neither negligible as it serves as economic support to their families. The farm woman utilizes this money according to their needs and interest. The average rate by which they were selling eggs was ₹5 whereas for poultry bird it was ₹500 per bird. However, this range may vary according to bird's size and according to interest of producer and consumer.

Variable	Respondents (N=120)		S.D	Mean
	Frequency	Percentage		
Average annual income	2351.048	3628.333		
Low (<1294)	19	15.83		
Medium (1295 to 5125)	74	61.67		
High (>5126)	27	22.50		

Table 4: AVERAGE ANNUAL INCOME FROM POULTRY FARMING

AVERAGE EGGS PRODUCED AND CONSUMED PER MONTH

Less tha three fourth (74.17%) of the farm women mentioned that eggs produced in a month were more than 15. Total Production of eggs depends on no. of birds reared. Respondents having range of more than 15 eggs produced per month generally had more **Copyright © July-Aug., 2019; IJPAB** than 2 poultry birds. According to studies, a local or non-descript hen lays 110 to 120 eggs per year. Further, egg production is related to several factors such as feeding, health care and others. Majority (57.50%) of farm women used 1 to 05 eggs for their personal use. These farm women who usually use eggs on monthly basis were those who usually do not used to

Ind. J. Pure App. Biosci. (2019) 7(4), 415-421

Pawara et al.Ind. J. Pure App.sell eggs on large number rather keep them forfamily member as a protein source. Farmwomen mostly used these eggs for theirchildren or infants in family. However, thesefigures may vary according to the egg

production, as sometimes egg production may fall depending on that farm women decides how many eggs were to be sold and how many eggs were to be used for their personal needs.

Variables	Respondents (N=120)			
	Frequency	Percentage		
Average eggs produced per month				
Low (1 to 10)	14	11.67		
Medium (11 to 15)	13	10.83		
High (16 and above)	89	74.17		
No eggs produced	04	03.33		
Average eggs consumed per month				
1 to 05	47	39.17		
06 to 10	69	57.50		
No eggs	04	03.33		

Table 5: AVERAGE EGGS PRODUCED AND CONSUMED PER MONTH

RATE OF EGGS

Majority (71.00%) of the farm women reported that they used to sale eggs according to the rate given by the consumer. Mostly, rates in the rural villages were pre decided and according to that producer used to sale and consumers used to buy. The egg rate was $\xi5/egg$.

MARKETING CHANNELS

All the farm women were directly selling their poultry products to consumer without any intermediate chain or channel. They used to sale poultry products within their locality i.e. neighbourhood and friends. No dealers or wholesaler were involved in the chain. The poultry products include eggs and live birds. Therefore, the marketing channel followed by farm women in the study area is as under:

PRODUCER ----> CONSUMER

CONCLUSION

The potential of poultry sector in enhancing rural incomes is well-recognized. All the farm women of study area were having poultry farming as their secondary occupation. Scientific trainings concerning all aspects of poultry value chain should be provided to farm women. The farm women of the study area were handling poultry activities right from conception to production alone. Therefore, efficient marketing network particularly for small and medium poultry farm women should be developed. Further, there should be mechanism for quality assurance of poultry **Copyright © July-Aug., 2019; IJPAB** products along the value-chain with passable facilities such as refrigerated transport, cold storage facilities etc.

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Pawara et al.

- **REFERENCES** Balamurugan, P., Senthilkumar, A., & Murugesan, S. (2017). An analysis on socio–economic profile of backyard poultry farmers in Theni district of Tamil Nadu. *International Journal of Science*, *Environment and Technology*. 6(6), 3513-3519.
- Borgohain, A. & Akand, A. H. (2011). Time Utilization Pattern of Tribal Women in Animal Husbandry. *Indian Research Journal of Extension Education 11*(1), 50-56.
- Devaki, K., Senthilkumar, K., & Subramanian, R. (2015). Socio-economic profile of livestock farm women of Thiruvallur district, Tamil Nadu. International Journal of Science, Environment and Technology, 4(5), 1322-1329.
- Garba, J., Yari, A. Y., Haruna, M., & Ibrahim,
 S. (2013). Traditional poultry production: The role of women in Kaura-Namoda local government area,
 Zamfara State, Nigeria. African Journal of Agricultural Research, 8(26), 3415-3421.
- Gazi, A., Goswami, A., Mazumder, D., & Pal, B. (2014). Backyard Poultry Farming

System: Women & Its Role. International Journal of Development Research 4(5), 1122-1124.

- International Development Research Centre, (2000). A Handbook for Value Chain Research. Ottawa.
- Rota, A. (2009). International Fund for Agricultural Development Livestock Thematic Papers, Value chains, linking producers to the markets.
- Upadhyay, S. & Desai, C. P. (2011). Participation of Farm Women in Animal Husbandry in Anand District of Gujarat. Journal of Community Mobilization and Sustainable Development, 6(2), 117–121.
- Vincent, N., Langat, B. K., Rop, W., & Kipsat, M. J. (2011). Gender aspect in adoption of commercial poultry production among peri-urban farmers in Kericho Municipality, Kenya. J. of Dev. and Agric. Econ. 3, 286-301.
- Yadav, K. & Revanna, M. L. (2017). A Study on Socio-Economic Status of the Farm Women of Tumakuru District of Karnataka State, India. *Int. J. Pure App. Biosci.* 5(4), 309–314.