

Study of Socio-Economic Profile of Contract and Non-Contract Broiler Farmers in Maharashtra

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ABSTRACT

The study was carried out in Western districts of Maharashtra viz; Pune, Satara and Ahmed Nagar, where the integrated system of broiler farming is gaining popularity. A total of 15 contract and 15 non-contract broiler farmers were selected from the sample block of the three districts and surveyed through a well structured pre-tested interview schedule. The data collected from the sample respondents were tabulated and analyzed with a view to achieve the objectives of the study. A combination of analytical tools viz; conventional analysis, tabular analysis, multiple linear regression analysis and Garret's ranking technique were used to analyze the data. The results of the study revealed that as per the size of the broiler unit, majority of the contract farmers were small farmers and majority of non-contract broiler farmers were large farmers. Farmers involved in contract and non-contract broiler farming were mostly educated up to middle and secondary level of school education and all of them were males. The average land holding, family size and experience of contract broiler farmers were lower than of non-contract broiler farmers.

Key words: Socio-economic, Contract farming, Poultry Broiler.

INTRODUCTION

The poultry sector in India has undergone a paradigm shift in structure and operation. There has also been a marked increase in size of poultry farms. Today India is the third largest producer of eggs (after China and USA), and fourth largest producer of poultry meat in the world. The major development in Indian poultry production is the spread of integration, especially in broiler production, particularly in southern and western parts.

Tamil Nadu, Andhra Pradesh, Maharashtra and Karnataka are the major broiler producing states. Broiler production which was merely 4 millions in 1971, increased to 1250 millions in 2000 and reported production of 2420 million broilers in the year 2012 (Economic survey of India, 2012-2013). The contract farming system and the vertical integration of broiler enterprises have played a major role in this spectacular growth.

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Broiler industry is well dominated in Southern part of India with nearly 60-70 per cent total output of broiler came from these states. Poultry is one of the important components of animal husbandry, which provides additional means of employment opportunities to a large number of people with new approaches practiced. One of the innovative approaches getting popular now is an institutional arrangement that enables farmers to access markets called as 'Contract Farming'². Integrators expanded rapidly in southern India, particularly in and around Coimbatore area of Tamil Nadu³. Then it spread other parts of country. Keeping the factors in mind, the present study was designed with the objective of analyzing the socio-economic dimensions in contract broiler production, analyzing the profitability in contract broiler farming and in highlighting the constraints involved in broiler production.

MATERIALS AND METHODS

For collection of data, a multi-stage random sampling design (I stage selection of blocks and second stage selection of respondents) was used. From the districts in Western ghat zone of Maharashtra, three blocks were selected through simple random sampling technique. From each of selected block of Pune, Ahmednagar and Satara districts, five contract and five non-contract broiler farmers were selected by simple random sampling. Hence, fifteen contract farmers from Pune, Satara and Ahmednagar districts and fifteen non-contract broiler farms were selected from the same districts. Totally, 15 Contract and 15 non-contract broiler farmers were selected for the study. Collection of data Information related to size of broiler unit, experience in broiler farming, source of inducement for establishing broiler farm, capital investment details, building particulars, labour involved, details of partnership arrangement, source of feed, input contribution, cost of production of broiler, quantity of broiler sold, constraints involved in

production, finance and marketing in contract and non-contract farming were obtained from the non-contract and contract broiler farmers with well designed pre-tested interview schedule. Socio-economic particulars like the respondent's age, gender, occupation, income, education etc. were also collected from the survey. The collected data were tabulated and analyzed statistically.

RESULT AND DISCUSSIONS

Socio-economic profile of contract and non-contract broiler farmers

An analysis of the socio-economic profile of contract and non-contract broiler farmers will give an idea of the category of people involved in broiler farming.

Classification of sample respondents based on broiler farm size

Contract and non-contract broiler farmers were divided into small, medium and large farmers based on the size of their broiler unit. Small farmers are those having the size of broiler unit less than 6000, medium farmers are those having the size of broiler unit 6000 to 12000 and large farmers are those having the broiler unit size above 12000. The details regarding the classification of sample broiler farmers are given in Table 1. It could be noted from the table that out of 15 contract farmers, 53.33 per cent were small farmers, 26.67 per cent were medium farmers and 20.00 per cent were large farmers and out of 15 non-contract farmers small farmers were nil, 13.33 per cent were medium farmers and 86.66 per cent were large farmers. It could be observed that majority of contract farmers were small farmers and majority of non-contract farmers were large farmers. Gabriel and Imelda⁴ examined the role of contract farming in the commercialization of smallholder's agriculture in Uganda and argued that contract farming is crucial in the commercialization of smallholder agriculture and poverty reduction and were properly nurtured for the benefit of small holder farmers in Uganda.

Table 1 Distribution of Sample Broiler Farms

Farm Size (Total capacity)	Contract	Non-contract	Overall
Small (less than 6000)	8 (53.33)	-	8 (26.66)
Medium (6001 to <12000)	4 (26.67)	2 (13.33)	6 (20.00)
Large (12000 and above)	3 (20.00)	13 (86.67)	16 (53.33)
Overall	15 (100.00)	15 (100.00)	30 (100.00)

(Figures in the parentheses indicate percentages of the total)

Educational status of broiler farmers

The educational status of contract and non-contract broiler farmers shows their attitude, knowledge, skill and ability in running the broiler farm by applying the scientific and technological innovations in feeding and disease control. The educational status of

contract and non-contract broiler farmers is given in Table 2. From the table it could be seen that out of 15 contract farmers, majority of them were educated up to middle school (33.33 per cent) and secondary (33.33 per cent) level, followed by college (26.67 per cent) and illiterate (6.67 per cent). Out of 15 non-contract farmers, 26.67 per cent were educated up to middle school level, followed by primary; secondary and college level each of 20 per cent and 13.33 per cent illiterate. The result revealed that majority of the contract and non-contract broiler farmers were educated up to secondary and middle school level.

Table 2: Educational Status of Broiler Farmers

Small	Category	Educational Status				
		I	P	M	S	C
Small	Contract (8)	-	-	3	3	2
	Non-contract (0)	-	-	-	-	-
Medium	Contract (4)	1	-	1	1	1
	Non-contract (2)	-	-	-	2	-
Large	Contract (3)	-	-	1	1	1
	Non-contract (13)	2	3	4	1	3
Overall	Contract (15)	1 (6.67)	-	5 (33.33)	5 (33.33)	4 (26.67)
	Non-contract (15)	2 (13.33)	3 (20.00)	4 (26.67)	3 (20.00)	3 (20.00)

(Figures in the parentheses indicate percentages of the total)

I- intermediate, P- Primary, M- Middle, S- Secondary and C- College

Occupation wise distribution of broiler farmers

The details regarding the occupation wise distribution of broiler farmers are presented in Table 3. It could be observed that among 15 contract farmers 66.67 per cent had agriculture as their primary occupation, 20 per cent had dairy as their primary occupation and 13.33 per cent had poultry rearing as their primary occupation. However 80 per cent of them had poultry rearing as their secondary occupation, rest of them had other business activities as their secondary occupation. Among 15 non-contract farmers, 60 per cent of them had agriculture as their primary occupation, 26.67 had poultry rearing as their primary occupation and 13.33 per cent had dairying as their primary occupation. Whereas 73.33 per cent farmers had poultry rearing as their secondary occupation and rest of them had other business

activities as their secondary occupation. Majority contract and non-contract farmers had agriculture as their primary occupation and poultry rearing as their secondary occupation. It was apparent that the contract and non-contract broiler farmers with agriculture as main occupation and poultry rearing as secondary occupation to overcome seasonal unemployment and ensure stable income.

Socio-economic profile

Socio-economical profile of broiler farmers is given in Table 4. From the table it could be observed that among 15 contract farms surveyed, the average age of farmers was 38.21 years, average land holdings was 8.05 acres, average family size was 6.96, average dependency ratio was 0.90 and average experience was 4.75 years. Whereas in 15 non-contract farms average age of farmers was 42.04 years, average land holdings 12.27 acres, average family size was 5.10, average

dependency ratio was 0.90 and average experience was 6.50 years. The results indicated that broiler farmers under contract farming were significantly younger, have comparatively lower level of land holdings and also significantly lesser experience than the farmers, who were outside such arrangement. Hence younger farmers with lesser experience opted for contract farming. As most of the non-contract farms were larger in size, their land holding was also comparatively higher. Family size of both the groups was comparable, whereas dependency ratio was same in both groups.

Source of inducement

The details regarding the sources of inducement to establish broiler farms under

contract and non-contract farming are presented in Table 5. It could be evident from the table that the source of inducement to establish broiler farming under contract farming appeared to be mainly through self (20 per cent) and relatives (20 per cent) followed by MAFSU (13.33 per cent), friends (13.33 per cent) and remaining by extension agent, A.H dept., integration organization and others. The inducement of broiler farming under non-contract farming appeared to be mainly through self (20 per cent), MAFSU (20 per cent), friends (20 per cent) and relatives (20 per cent) and remaining by industry people and others. Contract and non-contract broiler farmers appeared to be mostly self-motivated.

Table 3: Occupation-wise Distribution of Broiler Farmers

Farmer category		Primary occupation				Secondary occupation			
		Agri	Dairy	Poultry	Others	Agri	Dairy	Poultry	Others
Small	Contract (8)	6 (66.67)	1 (11.11)	2 (22.22)	-	1(11.11)	1(11.11)	7 (77.77)	-
	Non-contract (0)	-	-	-	-	-	-	-	-
Medium	Contract (4)	2 (66.67)	1 (33.33)	-	-	-	-	3 (100.00)	-
	Non-contract (2)	2 (100)	-	-	-	-	-	2 (100.00)	-
Large	Contract (3)	2 (66.67)	1 (33.33)	-	-	1 (66.67)	-	2 (66.67)	-
	Non-contract (13)	7 (53.84)	2 (15.38)	4 (30.76)	-	4 (30.76)	-	9 (69.23)	-
Overall	Contract (15)	10 (66.67)	3 (20.00)	2 (13.33)	-	2 (13.33)	1 (6.67)	12 (80.00)	-
	Non-contract (15)	09 (60.00)	2 (13.33)	4 (26.67)	-	4 (26.27)	-	11 (73.33)	-

(Figures in the parentheses indicate percentages of the total)

Table 4: Socio-Economic Profile of Broiler Farmers (Mean)

Farmers Category		Age** (Years)	Land Holding ^{NS} (Acres)	Family Size ^{NS} (no.)	Dependency Ratio ^{NS}	Experience** (Years)
Small	Contract (8)	34.88 ^a	11.38	6.63	0.87	4.00 ^a
	Non-contract (0)	-	-	-	-	-
Medium	Contract (4)	43.25 ^{ab}	5.28	7.25	1.08	4.25 ^{ab}
	Non-contract (2)	34.00 ^a	13.50	4.67	1.05	7.00 ^{abc}
Large	Contract (3)	36.50 ^a	7.50	7.00	0.75	6.00 ^{bc}
	Non-contract (13)	50.08 ^b	11.04	5.54	0.76	7.54 ^c
Overall	Contract (15)	38.21	8.05	6.96	0.9	4.75
	Non-contract (15)	42.04	12.27	5.10	0.90	6.50

** Overall means differ significantly ($P \leq 0.01$) between groups

^{NS} Overall means do not differ significantly ($P \geq 0.05$) between groups

Table 5: Source of Inducement for Starting of Broiler Farms

Characters	Non-Contract	Contract
Self	3(20.00)	3 (20.00)
Extension agent	-	1(6.67)
A.H Dept.	-	1(6.67)
Industry people	1(6.67)	1(6.67)
MAFSU	3 (20.00)	2 (13.33)
Friends	3 (20.00)	2 (13.33)
Relatives	3 (20.00)	3 (20.00)
Partnership organization	-	1(6.67)
Others	2 (13.33)	1 (6.67)
Total	15 (100.00)	15 (100.00)

List of identified partners in the study area

The name of the organizations and the number of surveyed farms in partnership with each of the same are enlisted in Table 6. Suguna,

Sakar and Charoen Pokphand poultry appeared to be main players in the prevailing partnership arrangements.

Table 6: List of Identified Partners in the Study Area

Name of the Partner	No. of farms in partnership
Suguna	5
Charoen Pokphand	5
Sakar	5
Total	15

CONCLUSION

From the results of the study the following conclusions are made Majority of contract broiler farmers were small farmers and majority of non-contract broiler farmers were large farmers. Most of the contract and non contract broiler farmers had middle and secondary level of school education and all of the participants in broiler farming are males. The primary occupation of most of the contract and non-contract broiler farmers was agriculture and secondary occupation of most of the contract and all the non-contract broiler farmers was poultry rearing. The average land size, family size and experience of contract broiler farmers were lower than that of non-contract broiler farmers.

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