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# A study on the socio-economic characteristics of contract farmers associated with Surguja district

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#### **Abstract**

India with over 60% of its living in villages has not found out alternate livelihood for its rural poor, where farmers live in abject poverty due to frequent failure of monsoon, resulting in crop loss and financial loss. During the last 20 years, Poultry Integrators like Poultry have given the Indian Farmers a second life through contract poultry farming. The farmers without any investment and marketing risk of selling the produce – chicken get extra income once in 45 days, throughout the year. With the growth in urban population, strong belief in good and clean food habits, increased income and higher purchasing power, the chicken industry has been growing phenomenally, thereby making the lives of farmers happier and richer. This research studies the satisfaction levels of farmers vis-à-vis services being provided by the Integrator and suggests measures to improve the living conditions of the farmers.

Keywords: Back yard poultry, agriculture and value additions

#### Introduction

#### **Introduction and the problem**

Agriculture is often described as the backbone of the Indian Economy. Its complementarity with other sectors and its ability to trigger growth is due to the following reasons: a) Agriculture contributes a significant share in the generation of the country's National Income, though the share has declined from 55% in the early 1950s to about 25% currently; b) More than half of India's workforce is employed in the agriculture sector; c) The growth of other sectors in the overall economy depends on the performance of agriculture to a great extent. Though tremendous progress has been made in the exploitation of the irrigation potential of the country by means of major, minor, small irrigation works, yet 2/3rds of are under cultivation is un-irrigated and there is thus, heavy dependence on the vagaries of nature, ie., monsoon. Thus, the overall agricultural growth remained stagnant and slow (below 3%) in the country.

Apart from this, agricultural growth has remained confined to a few well – endowed pockets which has created regional disparities. Poverty in rural India is caused by low level of assets holding, coupled with low and uncertain returns. Land and livestock like poultry are considered to be the major assets of rural households for livelihood support in general and small and marginal households in particular. As distribution of land holdings in rural India is highly skewed towards medium and large farmers, rearing of livestock like poultry are considered to be the potential options for the poor households to earn their livelihood on sustainable basis. The Indian Poultry Industry as an alternate livelihood, lesser dependence on monsoon, healthy and continuous working conditions made a big success story. From a backyard venture, it has made a quantum leap to emerge as a dynamic industry. Over the last 3 decades, there have been significant developments in the poultry industry with each decade focusing on different sectors. The 70's saw a spurt in egg production; the 80's an acceleration of broiler production; the nineties advances in poultry integration, automation and feed production. In the current decade broiler industry is poised to exploit value added products and explore global trade.

The traditional poultry farming view of the domestication of the chicken is stated in Encyclopædia Britannica (2007): "Humans first domesticated chickens of Indian origin for the purpose of cockfighting in Asia, Africa, and Europe. Very little formal attention was given to egg or meat production. Modern commercial broilers are specially bred for large scale, efficient meat production and although they are the same species, grow much faster than

Correspondence: Shikha Markam Subject Matter Specialist, IGKV, KVK, Surguja, Chhattisgarh, India egg laying hens or traditional dual purpose breeds. They are noted for having very fast growth rates, a high feed conversion ratio, and low levels of activity. Broilers often reach a slaughter weight of 1.5 kg. to 2.5 kg. (dressed) in only five weeks.

India is currently ranked as the fifth largest poultry producer in the world, behind the United States, Brazil, the European Union (EU), and China in the year 2012. Of late India is the world's fourth largest egg producer and fifth major producer of broilers. India produced 3.16 million tons of broiler meat in 2012, up from 1.8 million tons in 2005, 1.65 million tons in 2004 and 1.6 million tons in 2003. According to US Department of Agriculture estimates, India's poultry meat production grew about 6% annually during the 1980's, accelerated to 11% annually in the 1990s and to nearly 19% during 2007 – 2011.

The rearing of poultry also provides an excellent opportunity for underemployed members of the rural families. Poultry of 1000 birds either Layer or Broilers can support at least 15-20 persons upstream, direct and downstream, beginning from the input end (upstream), to farming (direct) and transport, processing and marketing (downstream). The growth of the poultry sector in India is also marked by an increase in the size of the poultry farm. In earlier years broiler farms had produced on an average a few hundred birds (200-500 chicks) per cycle of 40 days. Today units produce minimum of 5,000 birds units 5000 to 50,000 birds per cycle are common.

Asokan, et al. (2009) [3], studied the value supply chain in broiler industry and suggested to integrate various activities to create values to both the farmers and integrators. Vertical Integration was a means of coordinating different activities of an industry chain when bilateral trading was not beneficial. However, one activity that was not integrated but carried out through contract arrangement in the broiler industry was growing the chicken. The contract was very explicit with regard to roles and responsibilities of farmers and integrators in the broiler industry. The grower provided the land, erected the shed, invested in equipments, and bore expenses of electricity, water, labour besides repairs and cleaning.

The integrator provided day old chick, feed, vitamins, medicines and vaccines which account for nearly 90% of total cost. As birds reached the maturity, they were lifted by the integrator. The farmer was paid according to the weight of bird, based on Feed Conversion Ratio. As the market risk was transferred to the integrator and almost the entire working capital needs were met by the integrator, the activity was ideal for linking the farmers to the market. However, evidences showed that the benefits from these activities were at best equivalent to the wages of the grower and the family.

While poultry farming does provide alternative livelihood to the small and marginal farmers, they also face various obstacles like lack of institutional credit, shortage of labour force, cost escalation of coal, electricity, high mortality of birds especially in summer, loss owing to bird flu, payment issues with integrators either delayed or FCR related losses. Under this background, the present study has been undertaken in Coimbatore District with the aim of exploring the problems faced by the broiler farms under the given changed condition of contract farming and the satisfaction levels of farmers with the Integrator.

The study would look into the various Socio-Economic Characteristics of broiler farmers in Surguja District. The study covers the broiler production units, which are run on contract basis in Surguja District. The survey has been

conducted for the period 2006 - 2010 and the interview has been conducted between June, 2011 and May, 2012. The Surguja District has been purposively selected as it alone accounts for more than 30% of total broiler production in India. Chhattisgarh also reflects the agricultural oriented rural life where people have started taking broiler production on commercial basis to supplement their income. The study on the problems and satisfaction levels of contract broiler farming will help the contract broiler farmers to understand whether the farmers are motivated to continue their farming and what the lessons for the Integrator from this study. The main objective of the study is to identify the constraints/problems and satisfaction levels in broiler farming and suggest remedial measures

# Methodology

The study was conducted in Surguja District, C.G. Chhattisgarh omprises of 24 districts. However, in it, C.G. has a unique role to play as it is the birth place and protector, promoter and developer of broiler industry, as can be seen by the fact that 30% of Indian Broiler Production is mainly concentrated in C.G. District. Poultry integrators have been expanding most rapidly in central India, particularly in the Surguja district of C.G., reportedly has a large integration, which now accounts for about 75% of production and consumption. Hence the sample contract farmers were selected from Surguja District. We have selected the entire 254 farms of Poultry Farm Limited, operating in Surguja District. We have selected farms, by adopting census sampling technique. The 254 sample contract farms selected for the study was further classified in to small, and large farms based on the number birds reared.

An interview schedule was constructed for the purpose of collecting data. A pilot study was conducted on 62 contract poultry farmers, based on which the interview schedule was restructured to meet the accuracy and reliability of data. Suitable statistical tools have been used to draw inferences using SPSS (21.0 version) for Windows. Limitations of the study: The following are the limitations of the study. i) Most contract poultry farmers who were administered detailed interview schedules were found to be keeping improper records of farm management details. ii) The results and findings are based on the opinion of the respondents of Sarguja District, and it cannot be generalized.

# **Results and Discussion**

#### Age

Age group has been classified into four groups such as those who are 21to30 years, 31 to 40 years and 41 to 50 years and above 50 years. This classification is shown in table 1.

 Table 1: Age classification

Age group	No. of Respondents	%
21 - 30 years	44	17.3
31 - 40 years	105	41.3
41 - 50 years	58	22.8
Above 50 years	47	18.5
Total	254	100

Thus, the majority of the respondents belong to the age group between 31-40 years.

#### **Education-Wise classification of the respondents**

**Table 2:** Education-Wise classification of the respondents

Educational qualification	No. of Respondents	%
SSLC	120	47.2
HSC	65	25.6
Graduate	65	25.6
Post graduate	4	1.6
Total	254	100

The majority, 47.2 Percent of the respondents are educated up to SSLC level. The survey brings out the more or less reality of the Indian villages.

# Area of Agricultural Land Holding

Table 3: Area of Agricultural Land Holding

Area of Land	No. of Respondents	%
Less than 5 acres	165	65.0
5-10 acres	69	27.2
10-15 acres	8	3.1
15&above	12	4.7
Total	254	100

Hence, the majority 65 percentage of the respondents are holding less than 5 acres of land. This is harsh reality on the village, where farmers are either small or marginal with very little livelihood and thus dependent on additional income from other sources like poultry farming.

# **Method of Brooding**

Table 4: Method of Brooding

Method of Brooding	No. of Respondents	%
Coal	237	93.3
Gas	10	3.9
Electricity	7	2.8
Total	254	100

Therefore, the majority of the respondents are using coal method of brooding in their poultry farm. The coal brooding is the most economical form than gas and electricity. Also, availability of gas and electricity are highly restricted in rural areas.

# Type of Roofing for the Shed

 Table 5: Type of Roofing for the Shed

Type of Roofing	No. of Respondents	%
Thatched	147	57.9
Tiles	75	29.5
Asbestos	32	12.6
Total	254	100

Hence, the higher 57.9 Percent of the respondents are having thatched roofing for their shed. This is basically because this form of roofing is economical and can be removed and refitted again during cleaning operations.

# Number of family members looking after the farm

**Table 6:** Number of family members looking after the farm

No. of family members	No. of Respondents	%
0.00	13	5.1
1.00	43	16.9
2.00	120	47.2
3.00	49	19.3
4.00	26	10.2
5.00	3	1.2
Total	254	100

Therefore, the majority 47.2 Percent of the respondents run their poultry farming with the support of two of their family members. It is normally the husband and wife of family.

### **Findings**

- The research analysis shows that the maximum number of the respondents 41.3% falls under the age limit 31-40 followed by 41-50, above 50 and lastly 21-30 years.
- Majority of the farmers are male in all categories of farms, at 93.3%
- Majority of the farmers studied up to SSLC at 47.2%, followed by Graduates and finally Post Graduates.
- The research analysis shows that majority of the farmers at 65% hold less than 5 acres of land.
- 72.4% of the farmers held more than 15,000 birds at the beginning
- 56.3% of the farmers currently hold more than 15,000 birds
- It was found that majority of the farmers used titled sheds due to economic conditions
- Almost all the respondents are using coal for brooding purpose in all categories of farms. As a percentage, 93.3% of the farmers use coal for brooding purposes.
- Majority of the farmers under small and large farms are using coconut husk as litter material. Predominant percentage of 91.3% of farmers use coconut husk, as it is readily and freely available in their land in Coimbatore District.
- Majority of the respondents, 43.3% under the categories of small, medium and large farms are using the bore well as the source of water for the requirements in the poultry farms.
- The diseases such as *E. coli*, Gout, Chronic Respiratory
  Disease, Toxin and Gout are as diseases listed by small,
  medium and large farmers, but they have all agreed these
  are minor diseases and are not major concern for them,
  excepting in summer.

# Conclusion

Like any other developing country, India is witnessing a growing population, urbanization, income growth, growing middle class, and awareness about health benefits, which are all fuelling demand for food of animal origin. These changes in changes in diet, income growth opportunities, particularly of

rural populace are triggering as to what is termed as "Livestock Revolution", and is demand-driven.

This sector now employs over 3.0 million people. At least 80% of employment in the poultry sector is generated directly by farmers, while 20% is engaged in allied activities like feed production, pharmaceuticals, equipment etc. It is also estimated that for increase in per capita availability of one egg or 50 gms. of poultry meat, additional 20,000-25,000 job opportunities are created. Overall it appears that the poultry sector has tremendous potential for growth and development.

# Recommendations

Based on the study, the following recommendations are made: The major factors affecting the contract farmers, as revealed by the study are "low growing charges", and "high electricity rates". The contract farmers are not satisfied with the current rate growing charges given by the integrators as it is not sufficient to meet the growing expenses of coal, electricity, labour charges. Integrator has to treat the farmers as equals and share poultry knowledge, production and marketing techniques with them to create a win-win situation. This would boost up the morale of farmers and they will remain with the integrator forever as loyal company farmers.

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