CHAPTER 5

FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 FINDINGS

PROFILE OF INDUSTRY

The farmers in the Western Tamilnadu are still predominantly depending on poultry farming for their livelihood.

- Around 44% of farmers belong to the age group of 40 to 50 years and 95.2% are males. 99.5% of the farmers were married and 69.6% of the farmers have completed their school education. 85.1% of the farmers living in a joint family.

- 52.8% of the farmers are having below 5 acres and 61.7% of farmers having 5 to 10 years of experience in poultry farming. 25.6% of the farmers have undergone training before starting the poultry farm and 74.1% of the farmers are purchasing the journals relating to poultry to update the poultry knowledge.

- All the farms have conventional feeders and drinkers, 65.3% of farms have heaters and 62.1% of farms have fans. 57.3% of the farms have the side curtains and 70.1% of the farms have vaccine injectors. 62.1% of the farms have allotted the feed storage trays and 70.1% of the farms have manure storage shed.
• 99.2% of the farms are in the direction of east - west and 67.2% of farms are 5001 to 10000 square feet. 94.9% of the farmers are using sand and coconut mix as litter in their farm and 45.6% of the farmers are using open well and tube well water for their water requirements. 76% of the farms’ water quality is more than 500 ppm and 66% of the farmers are using incandescent lamp. 66.4% of the farms having the thermometer and 74.4% of the farmers are using wooden brooders in their farms for brooding chicks.

• All the integrators are operating broiler integration in Western Tamilnadu and 93.3% of the integrators are having poultry feed mill and hatchery operations in the region. 70% of the integrators are having breeder operations and 30% of the integrators are doing chick sales in Tamilnadu.

• 20% of the integrators are doing hatching egg sales and 20% of the integrators are doing feed sales. 16.7% of the integrators are doing poultry medicines and 13.3% of the integrators are doing poultry vaccines.

• 10% of the integrators are doing poultry R and D, 10% of the integrators are doing meat processing unit, and 6.7% of the integrators are doing grandparent, pure line, poultry equipment, egg (Layer), egg processing unit and poultry training institute in each portfolio in the Western Tamilnadu.
PROBLEMS FACED BY THE FARMERS IN POULTRY CONTRACT FARMING

- 62% of the farms are affected by metabolic and nutritional diseases and 83% of the farms are affected by infectious diseases. 50% of the farms are affected by parasitic diseases.

- 86% of the farms’ disease attack due to sanitation in the farm and 77% of the farms’ disease attack due to improper vaccination of broiler birds’ and 92% of the farms’ disease attack due to improper medication to the broiler birds.

- 50.9% of the farms do not have biosecurity arrangements, 47.5% of the farms having dead bird disposal pit and 52.8% of the farms have foot cleaning pits. 61% of the farms are not maintaining the vehicle movements register and 80.8% of the farms having other animals / birds (cattles and goats). 72.5% of the farmers are using the litter manure for their own agriculture use and 27.5% of the farmers are directly selling the litter manure to agents available in nearby towns.

- 64.8% of the farms mortality rate is less than 5% and 39.7% of the farms average weight is 2.00 Kg / bird. 56.5% of the farmers are getting an average weight of less than 34 grams of day old chicks from the integrators.

- 65% of the farmers perceived that the causes for mortality of chicks due to genetic causes and 98% of the farmers perceived that due to improper poultry management. 40% of the farmers perceived that the causes for mortality of chicks due to improper nutritional factors and 81% of the farmers perceived that due to disease.
97% of the farmers are following proper brooding practices in the farm and 91% of the farmers are following the space management. 98% of the farmers are following the feed management, all the farmers are following the water management and 91% of the farmers are following the vaccine schedules.

94% of the farmers are maintaining the temperature chart in their farms and 90% of the farmers are providing sanitized water to broiler birds. 34.9% of farmers perceived that the quality of chicks is bad and 33.9% of farmers perceived that the quality of chicks is neutral. The perception of farmers on the quality of medicine is neutral for 68% and 25.3% of farmers perceived that the quality of medicines is good.

43.2% of farmers perceived that the quality of feed supplied by the integrator is good. 50.9% of farmers perceived that the quality of vaccines supplied by the integrator is neutral.

There is a significant relationship between body weight and the weight of day old chick, quality of chicks, quality of medicines, quality of feed, quality of vaccines, weighing machines used for weighing the output birds, Supply of power, On-time output pickups and bio-security practices.

There is a significant relationship between mortality rate and the weight of day old chick, quality of chicks, quality of medicines, quality of feed, quality of vaccines, weighing machines used for weighing the output birds, average weight of the birds, on time input supplies, supply of power, on-time output pickups and bio-security practices.
• 69.6% of the farmers facing problems in sourcing of working capital and 52.5% of the farmers not availed the loan. 53.3% of the farmers are well aware of the incentive schemes provided by integrators and 77.9% of the farmers do not receive any monitory benefits from the integrators.

• 58.9% farmers’ are spending Rs. 2001 – Rs 3000 per month as electricity expenses to rear broiler birds in the farm and 76.3% farmers’ are spending Rs. 1001 – Rs. 2000 per month as water expenses to rearing broiler birds in the farm. 30% of farmers were spending the cost of disinfecting items at the time of starting a new batch was Rs. 1601-Rs.2000.

• There is a significant relationship between growing charge per kilogram of production and the production cost per kilogram of chicken production, on-time payment of growing charges and source of working capital.

• There is a significant relationship between return on investment in the business and the production cost per kilogram of chicken production, growing charge per kilogram of production, on-time payment of growing charges, total time taken for paying the growing charges to farmers and source of working capital.

• There is a significant relationship between delay in growing charge payments and the growing charge per kilogram of production, on-time payment of growing charges, total time taken for paying the growing charges to farmers and source of working capital.
• 68% of the farmers agreed that the farm level supervisors are coming for extension services on daily basis and 77% of the farmers have adequate knowledge in poultry record keeping. 44% of the farmers expressed that the farm level supervisor having moderate level knowledge in poultry record keeping.

• 97% of the farmers perceived that, integrators’ staff members are manipulating the input quotas and 98% of the farmers perceived that the main cause for manipulation of input quotas by the company staff is penalization of the farmers.

• 90% of the farmers perceived that the cause for manipulation of input quotas by the company staff, because of involvement of high monitory transactions. 69.3% of the farmers are having significant relationship with the visiting staff (Integrator’s staff).

• There is a significant relationship between corruption activities in contract farming and relationship with the visiting staff, manipulation of input quotas by the company staff, trust with the company staff, number of laborers working in the farm, problem in cooperation of labour, problem in getting labour, corruption in output collection by the company staff (weighment supervisor) and knowledge level of supervisor.

• There is a significant relationship between the effectiveness of extension service provided by the company staff and the relationship with the visiting staff, manipulation of input quotas by the company staff, trust with the company staff, number of laborers working in the farm, problem in cooperation of labour, problem in getting labour and corruption in output collection by the weighment supervisor and knowledge level of supervisor.
• 79.5% of the farmers express that the contract company employees’ are communicating all the details about supplies, payments to the farmers on time. All the farms are having farm record card to monitor the daily activity of farm and in that 75% of the farmers are maintaining the records daily.

• There is a significant relationship between the visiting staff are communicating the supplies and payment details on-time and the communication on Poultry development information to farmers, on-time communication for output collection (Birds collection) and knowledge level of supervisor.

• 81.6% of the farmers are the legal contracts with the integrators and 57.3% of the farmers do not explain about the legal contract by the integrators. 47.5% of the farmers are expressed that they do not aware of the specification on the growing charges calculation methods in contract agreement and 50.1% of the farmers stated that they do not aware of the information on the specification about quality standards of farm output in contract agreement.

• 88.2% of the farmers are getting more than 15 and above days to pay the growing charges and 60% of the farmers are given 30 days and more to farmers to prepare for next batch operations in the farms. 60% of the farmers are getting 5 batches in year to rear the broilers in their farms.

• There is a significant relationship between integrators are not maintaining the contract terms and conditions and explanation about the legal contract by the company, verifying the legal and other requirements before entering into contract, the periodicity
of contract agreement with the company, contract agreement specify the growing charges calculation methods, contract agreement specify the quality standards of farm output, paying any contract hold-ups and gap between batch and the total number of days to pay the growing charges.

- There is a significant relationship between Integrators are not maintaining the contract terms and conditions and the legal contract by the company, verifying the legal and other requirements before entering into contract, the periodicity of contract agreement with the company, contract agreement specify the growing charges calculation methods, contract agreement specify the quality standards of farm output, paying any contract hold-ups and gap between batch and the total number of days to pay the growing charges.

- 69.6% of the farmers facing problems in sourcing of working capital and 95% of the farmers are facing the collateral problems at the time of taking loan.

- 70% of the farmers are facing the documents insufficiency at the time of taking loan and 54% of the farmers are facing the non-availability of surety at the time of taking loan. 92% of the farmers are facing the lack of repayment capability for the loan amount sanctioned.

- 62.7% of the farmers are well aware of the growing charge calculation methods calculated by contracting companies and 63.2% of the farmers are not aware of insurance policies of poultry farming.
• 53.3% of the farmers well aware of the incentive schemes provided by contracting companies and 94.9% of the farmers are not aware of the government schemes related poultry farming.

• There is a significant relationship between return on investment and types of weighing machines used for weighing the birds, number of days to pay the growing charges, number of days between production batches, companies are controlling farmers resources, sharing of production related risks of the company, supply of electricity power is a major constraint, government policies about poultry farming and risk level in the production process.

CHALLENGES AFFECT THE FARMERS

• 65.1% of the farmers do not trust the integrators in the poultry contract farming business and 58.9% of the farmers are doubtful in recommending the present integrator to other farmers. 49.5% of the farmers are doubtful about their expansion plan in poultry farming and 48.3% of the farmers are not interested to go for own poultry farming operation.

• 55.7% of the farmers are doubtful to keep this poultry business to their next generations and 43.2% of the farmers perceived that the overall activity of farmer union is neutral.

• 40% of the farmer perceived that the farmers union is acting as third party at the time of any settlements with the integrator and 53.1% of the farmers are perceived that the farmers union is not demanding more growing charges on behalf of farmers.
• 58.1% of the farmers perceived that the farmers union is not supporting in legal aspects to farmers and 50.9% of the farmers perceived that, the farmers union may doubtful in providing loan facility to farmers.

• 82.1% of the farmers perceived that the farmers union is not finalizing the broiler rate in the market and 76.5% of the farmers perceived that, the farmers union is not setting input standards which are supplied by the integrator.

• 68.3% of the farmers perceived that the farmer union is not setting any output standards to farmers and 65.3% of the farmers perceived that the farmer union is not supporting contract farming business as farmer friendly.

• 50.2% of the farmers said that the reason for contract extinction by the farmer is, due to less growing charge and 44.7% of the farmers said that the reason for contract extinction by the farmer is delayed payments and 26.5% of the farmers said that the reason for contract extinction by the farmer is integrator has closed the operation.

• 86.7% of the farmers perceived that the main reason may be due to poor performance and 60% of the farmers perceived that the reason may be due to theft of Input and output Items. 50% of the farmers perceived that the reason may be due to dispute with the company staff.

• There is a significant relationship between body weight and the trainings before starting the poultry farm, any seminars / workshops / training, bio-security practices in the farm, dead birds disposal pits, foot cleaning pits, supply of power is a major
constraint, water availability, source of water and risk level in the poultry production process.

- There is a significant relationship between mortality rate of chicks and the trainings before starting the poultry farm, any seminars / workshops / training, bio-security practices in the farm, dead birds disposal pits, foot cleaning pits, supply of power is a major constraint, water availability, source of water and risk level in the poultry production process.

ANALYSIS ON THE PERCEPTION OF THE CONTRACT FARMERS TOWARDS POULTRY BUSINESS

- The factors which represent the perception of the farmers on different dimension were found to be significantly different among the number of years in contract farming and growing charges payment days. The respective regression coefficient indicates that the risk score increases on average to those who availed loan rather than those who have not availed loan.

- The regression has also included company standard on percentage of mortality and number of companies the farmer has associated with so far are significantly increasing on the risk score. Increase in percentage mortality rates will proportionately increase the risk factors score calculated for poultry business. Monthly water expenditure and monthly electricity expenditure increase the risk of poultry business as can be seen from the positive regression coefficients. The regression has also included Company standard on percentage of mortality and number of companies the farmer has associated with so far are significantly increasing on the risk score.
INTEGRATORS’ OPINION TOWARDS POULTRY BUSINESS, CONTRACT FARMERS AND RISK FACTORS ASSOCIATED IN THE BUSINESS

- 83% of the integrators perceived that the causes for mortality of chicks due to disease due to improper poultry management and 47% of them integrators perceived that the causes for mortality of chicks due to genetic causes. 70% of the farmers do not have the biosecurity arrangements at the farm and 83% of the farms are not cleaning the sheds as per SOP before placing the chicks in their farm.

- 97% of the integrators perceived that the cause for low body weight of the broiler chicken is due to feed wastage and 90% of the integrators said as due to diseases and culling. 87% of the integrators perceived that the cause for low body weight of the broiler chicken is due to human factors and 70% of the integrators said that as due to litter quality.

- 67% of the integrators perceived as due to improper farm temperature and 56.7% of the integrators use only electronic weighing scale to weigh the broiler chickens. 83.3% of the integrators mortality rate is less than 5% and 43.3% of the integrators expects minimum 2.00 Kg per bird.

- 26.7% of the integrators achieved 1.7 FCR and 30% of the integrators are supplying an average of 40 grams of day old chicks to farmers. 73.3% of the integrators perceived that they are giving minimum Rs. 3.5 per kilogram of chicken as growing charge to farmers.
• 93.3% of integrators major source of money coming from private capital and 70% of the integrators opted bank loan as their major source of money and 90% of the integrators are following the Broiler Coordination Committee’s rate in the region.

• 73.3% of the integrators perceived that they are not educated the growing charges and its calculation to farmers and 70% of the Integrators are not giving incentive schemes to the farmers.

• 53% of the farmers have possessed moderate level knowledge in poultry record keeping and 63% of the integrators perceived that farm level supervisor have possessed adequate level knowledge in poultry record keeping.

• 97% of the integrators perceived that the cause for manipulation of input quotas by the company staff, because of involvement of high monitory transactions and 65% of the integrators perceived that the cause for manipulation of input quotas by the company staff, because of poor knowledge.

• 76.7% of the integrators are perceived that there is a chance of corruption by the company staff at the time of output collection. 50% of the farm level supervisory staff is highly effective and 50% of the integrators perceived as effective.

• 86.7% of the integrators perceived than the integrators’ staff members understand the growing charge calculation methods. 96.7% of the farm supervisors are visiting the poultry farms on daily basis and they are travelling on an average of 61 – 70 KM per day.
76.7% of the integrators do not have the ERP system to manage the poultry business but all the integrators have farm records to monitor the performance of the birds. 63% of the integrators agreed that their staff members are maintaining the farm records.

5.2 SUGGESTIONS

This section offers a few suggestions for improving the poultry management for getting good performance, which will significantly help the farmers and integrators to improve their profitability and also the points may be considered by the Government for the growth of poultry industry in India as follows,

- Most of the farmers don’t have wall curtains installed in their farms in this region. The farmers may install side wall curtains which will help in reducing exposure to heat and light in the farm and this will further facilitate reduction in mortality and improvement in the body weight. Therefore, a proper wall curtain management has to be followed in the poultry farm.

- A separate place for storage of feed and trays has to be allocated to store the feed bags and this will help in monitoring feed supply and consumption patterns, and an absence of this facility has been observed in the poultry farms in the region.

- Infectious diseases are common in the region and implementation of bio-security measures may prevent such diseases in the poultry farm. The sanitary level of farms can be improved as per standard operating procedures and farmers
have to follow the medicinal schedules as per prescribed medication chart to control infectious diseases in the farm.

- Cattle and goats are commonly available almost in all farms in the region and these animals may carry diseases to the poultry farms. Hence, farmers may place such animals in a separate area in their agricultural land. Care has to be taken to avoid usage of the last batch poultry litters in their own agricultural land, since this may contain viruses and bacterium that may affect the present broiler chickens’ performance.

- Three-fourth of farms’ water quality is more than 500 ppm and water is a main factor in the poultry farming. Hence, adding recommended level of water sanitizers may support in achieving good body weight. Moreover, incandescent lamps are used for lighting purposes and farmers may use compact fluorescent lamps (CFL) in order to reduce the electricity cost. Farmers may also opt for solar power for their electricity requirements of the farm. Government of Tamilnadu is providing subsidy for purchase and installation of solar equipments.

- At present, it takes more than 15 days for the farmers in realizing the growing charge payments. Digitalization of record keeping, shall give accurate information about the supply, performance and quality of the farm on real time basis. This may help the integrators to supply the inputs and collect the live birds at the required time. This will also help in reducing the processing time for calculation of growing charges and also ensure transparency in supply details.
• Portable Electronic weighing machines may be used to weigh the grown birds at the time of output collection to improve the accuracy in weighing and this will avoid loss due to improper weighing.

• Most of the farms have conventional feeders and hence farmers may opt for Auto feeders in their farms in order to avoid the feed wastage and contamination. Implementation of nipple based watering system in their farms will reduce water wastage and contamination.

• Integrators have to ensure practicing of poultry standards by maintaining the minimum weight of day old chicks as 42 grams for better growth and reduce chicks’ mortality in the first week, since the body weight of chicks depends on quality and weight of the day old chick.

• It is suggested that farmers may opt for own broiler farming operations in the region since the market demand of poultry products is increasing day by day.

• Market rate based growing charges may be paid to farmers and profit sharing by integrators with the farmers may give confidence amongst the farming community for future poultry ventures in the region. The integrators may join together and procure the raw materials for getting maximum price benefits.

• The quality of inputs like feed, chicks and medicines etc, may be certified by a government agency in order to avoid supply of sub-standard quality input to farms as in the case of seed
certification which is presently certified by Tamilnadu Agriculture University in the state.

- Good manufacturing procedures for broiler production may be developed and implemented by the Government to ensure supply of quality poultry products to the end user.

- Legal agreements may be explained in detail to the farmers before they enter into any contract and this will avoid unnecessary distrust among the farmers at a later stage and also improve the confidence level of farmers.

- Integrators may also guide the farmers to get the loans from Government authorized funding sources like banks and other funding institutions, since most of the farmers in the region are facing problems in getting the loans from the funding sources.

- The awareness level of farmers may be increased in terms of Government schemes related to poultry farming and the Integrators can provide such awareness to farmers to reduce the dependence of Integrators in terms of purchasing poultry farm assets for future expansion.

- Integrators may go for poultry based ERP system and this shall ensure the accessibility of information pertaining to farm records to the farmers and this leads to improve the confidence level of farmers about Integrators’ operations since most of the Integrators do not have any ERP system in place.

- The effectiveness of Integrators’ staff may be improved by way of giving properly designed orientation programmes regularly
about poultry farming operations, since half of the farmers perceived that the visiting staff members are ineffective.

- Government institutions and Policy makers may adopt policies supporting the poultry sector by extending concession in electricity, water costs, and tax benefits to this sector including provision for an appropriate status of the industry itself, incentives and support. The status of the poultry sector has been a grey area for bankers and policy makers alike.

- Farmers may be encouraged to form Co-operative institutions and this will support in subsidizing the farm input costs. Moreover, the existence of such co-operative institutions will enable the farmers to bring forward their common issues and look forward for solutions.

- Government institutions and Policy makers may support the farmers in building adequate infrastructure such as meat processing units and cold chain systems which are required to ensure efficient backward and forward linkages.

- As like the famous Technology Upgradation Fund Scheme for The Textile Industries (TUFS), the central government may extend similar support to poultry industry for their modernisation of meat processing units and other poultry related infrastructure through its Ministry of Food Processing Industries (MOFPI), Government of India.

- Awareness may be provided to all the potential future business investors in this region about the scheme of Cold Chain, Value Addition and Preservation Infrastructure which provides
integrated cold chain and preservation infrastructure facilities without any break from the farm gate to the consumer and this will increase the confidence in realizing the scope in this industry.

- Associations of Indian businesses like CII and FICCI, etc may conduct frequent programmes and conferences at national and international levels to bring all the people related to such business under a single forum and this will facilitate in sharing of information, knowledge, business opportunities and so on.

- Integrators being financially capable, they can initiate insurance policies for the farming community in this industry and this will not only build the trust of the farmers but also help in prevention of loss due to all kinds of damages caused by disease outbreaks and natural calamities.

- The Mahatma Gandhi National Rural Employment Guarantee Act 2005, which is applicable for people working in creating infrastructure for promotion of livestock such as, poultry shelter, goat shelter, piggery shelter, cattle shelter and fodder troughs for cattle may be extended to the farming community including those working physically in broiler rearing and this will help the farmer in earning himself a basic livelihood.

5.3 CONCLUSION

Indian poultry Industry has attained an enormous growth in recent times due to increase in family incomes, more poultry production, falling poultry cost and a modern younger poultry feeding generation. Predominantly in southern and western India, Poultry Integrators’ involvement has been vital
in advanced poultry production and cost reduction. The integrators appear to have achieved this by increased productivity, lessen marketing margins and customer pricing. The speed at which the integrated poultry operations will spread in the East, West, and North India will decide the prospect of poultry industry in India. In the last twenty years, poultry industry has made a remarkable stride specifically in the private sector because of which India is now self sufficient in contemporary poultry equipment, skillfully trained resources, readiness of medications / vaccines and superior quality breeding stocks. The poultry farming had several ups and downs in the last couple of decades as a result of unplanned growth and lack of government regulations. Poultry contract farming can be a profitable business even with irregularities in the industry. The main objective of the study was to find out the problems and challenges of poultry contract farming between farmers and integrators in the western Tamil Nadu that includes Coimbatore, Tirupur and Erode. It provided data on the poultry farmers, poultry Integrators and their performance in poultry farming business which is an effective avenue for farmers to increase the income in rural areas.

In this contract farming model, the major problems are, low feed conversion ratio, theft of input supplies and broiler birds, mismatches in growing charges, quality of input and output, corruption and labour problems, price rise of farm inputs, demand pricings and surplus production problems, diseases to poultry. The major challenges are economic and social challenges. To ensure the health and productivity of poultry products, poultry farmers should continue to employ the best management practices recommended by Integrators. As the result of these factors, many of the present day poultry practices are based on tested scientific facts. From the detailed study made by the researcher with concrete objectives, the study reveals much information regarding the poultry contract farming and its present problems and challenges of poultry contract farming.
This study helps the farmers to understand the problems and challenges of the poultry business and for integrators, the issues and perception of farmers about the poultry business processes and poultry management practices. Integrators have to create a common understanding with farmers for better productivity and transparent profit sharing system to create a win-win situation. Farmers’ and integrators’ investment decisions are vital in the poultry industry. Finally, it is concluded that the researcher has gained more knowledge and experience in the field of research and it will be even helpful for future research activities as there is a possibility for future research in the same field.

5.4 SCOPE FOR FUTURE RESEARCH

The researcher has identified the following research areas related to the present study which can be attempted by the prospective researchers in future.

- This study which was conducted in the western region of Tamilnadu can be extended to the whole of India for better generalization of the findings. But all India studies would involve more time and money which are beyond the means of academic researchers.

- Similar studies such as problems and challenges of poultry contract farming may be extended to other livestock such as cattle, pig, goat and fisheries.

- The present study focuses on problems and challenges of poultry contract farming and this may be extended to non contract poultry farming businesses also.