CHAPTER VI

FINDINGS, SUGGESTIONS AND CONCLUSION

FINDINGS

1. Out of the 270 poultry farms taken for the study, 170 respondents were in the age group between 35 to 50. Hence, it is concluded that the middle aged group were largely engaged in the poultry farming business.

2. 89.63% of the respondents had been educated up to the Graduation and the higher secondary levels.

3. Out of the seven levels of classification of income, 34.44% of the poultry farmers (158) earn between Rs.1,00,000 to Rs.2,00,000. It is concluded that most of the income was below Rs. 2,00,000 per year.

4. 172 respondents have less than 15 years of experience. 22.22% of the poultry farmers (60) have 15 years of experience. 15.56% of the respondents have 20 years of experience in the field. It is concluded that the majority of the respondents have 15 years of experience.

5. 122 have private companies and 119 are proprietors of the in business. The remaining 29 respondents are in partnership. It is concluded that the majority of the poultry farm business are private companies.
6. 213 farmers 78.89% have their poultry farms near the in residence. Only 1.85% opt for the Government allotted land. The remaining 14.81 select the area where they can easily market the poultry farm products. It is concluded that the majority of the poultry farms are located near the residence of the poultry farmers.

7. 206 poultry farmers live within 3 Kms of their farms. That is 76.30% of the total of 270. 21.48% of the respondents live around 3 to 6 kms of poultry farm. It is concluded that majority of the poultry farmers live within the 3 kms radius of their farms.

8. 52.22% of the respondents have attended training programmes and the remaining 47.78% of the respondents have not. It is concluded that the majority of the respondents (141) have attended training programmes.

9. 47.41% of the poultry farmers (128) attended the programme for more than nine days. 34.04% of the farmers (92) are attending the programme for 3 to 4 days. Only 18.52% of the respondents attended the programme for less than two days. It can be concluded that the majority of the farmers, that is 128 of them had attended training programmes for more than 9 days.
10. 28.52% of the respondents (77) are running traditional poultry farm business, whereas 21.85% of the farmers (59) started their poultry farms by observing their friends or relatives farms. It is concluded that the majority of the poultry farms were started by farmers (110) through their own interest.

11. Majority of the farmers are felt that the availability of trained human resource in the field of poultry farming and in livestock disease prevention and control was poor. 56.67% farmers say that present farms have insufficient trained persons.

12. 41 poultry farmers owned their firm for less than 14 years and 29 poultry farmers owned their present poultry farms for over 15 years. It is concluded that the average number of years that the poultry farmers are running their firms is less than 10 years.

13. The confidence interval for the difference between the mean of Age and mean of Earnings, extends from -44.9565 to -42.6435. Since the interval does not contain the value 0, there is a statistically significant difference between the mean of age and the mean of earnings, of the two samples at the 95.0% confidence level.
14. The result of the T test concludes that the computed P-value is less than 0.05. We can reject the null hypothesis in favour of the alternative by said mean of age is not equal to the mean of earnings.

15. The difference between the mean of earnings and mean of experience, extends from -13.3494 to -12.1099. Since the interval does not contain the value 0, there is a statistically significant difference between the means of the two samples at the 95.0% confidence level.

16. The result of the T test reveals that the computed P-value is less than 0.05. We can reject the null hypothesis in favour of the alternative that is the mean of earnings is not equal to experience.

17. 110 farmers began their poultry farms because of self interest and their relative median is 3.77.

18. At both the levels (earnings & knowledge) the hypothesis was accepted that the two medians are different. (Correct ties: Chi-square 16.61, (df 3) P< .05; Not Correct ties: Chi-square 15.58 (df 3) P< .05.

19. The hypothesis tested by the Mann–Whitney analysis proves that the medians of the two groups are equal. The obtained Mann–Whitney $U$ statistic is 7314.500. It can be concluded that
there is a significant difference between the median of being trained and not having any previous training.

20. 83.70% grow Babcock in their poultry farms, that is 226 out of 270 poultry farms. 8.52% are farming chicks for feed consumption.

21. Out of the 270 poultry farmers 65.93% select a particular breed (178) for the purpose of getting more eggs. It is concluded that the majority of the poultry farms select a breed for the purpose of obtaining more eggs.

22. 43.70% of farmers feel that more time is taken by the supply agency to supply the goods.

23. 25.19% of farmers face problems in rearing and 23.33% face difficulties due to high cost of chicks.

24. 68.89% out of the total of 270 poultry farms are the large system of rearing chicks. 18.52% of poultry farms use the deep higher system of rearing and 34 poultry farms are use both the deep higher system and the large system of rearing.

25. Majority of the poultry farms follow the NECC rate for fixing their egg price. Out of the 270 poultry farms 261 that is 96.67% follow the NECC rate.
26. 122 poultry farmers (45.19%) sell their eggs to the commission agent and 107 poultry farms (39.63%) prefer to sell it to private traders. Majority of the poultry farms prefer to sell eggs through commission agents followed by Private traders.

27. Out of the 270 poultry farms 117 (43.33%) select a particular channel of selling, to avoid risks. 74 expect a huge profit and therefore select a particular channel of selling., 69 select a particular channel of selling for its cheap rate.

28. There is a statistically significant difference between the mean Earnings from one level of Type of breed to another at the 95.0% confidence level. To determine which means are significantly different from which others, select Multiple Range Tests were conducted.

29. The multiple range test result indicated that Babcock and Feed consumption, Babcock and price of chicks, Booramces and feed consumption are the pairs that show statistically significant differences at the 95.0% confidence level.

30. 61.85% of the poultry farmers are express their priority of sale of Eggs and priority of sale of chicks. The cross table shows that 61.84% of poultry farmers are have a priority to sell eggs and chicks to hotels.
31. The independent T test result shows that the P-value is less than 0.05. It rejects the hypothesis that rows and columns are independent at the 95.0% confidence level. Therefore, the observed value of Priority of Sale of Eggs for a particular case is related to its value for priority of Sale of Chicks.

32. The cross table result shows that 33 Poultry farms opted for Babcock and the Reason for selecting their breed equalled Feed Consumption. This represents 12.2222% of the total of the 270 observations.

33. The test of independence shows that the P-value is less than 0.05. We can reject the hypothesis that rows and columns are independent at the 95.0% confidence level. Therefore, the observed value of Type of breed for a particular case is related to its value for Reason for selecting a breed.

34. The cross table result shows that 28 times Earnings equalled 1 and Preference to sell the eggs equalled Commission agent. This represents 10.3704% of the total of the 270 observations.

35. The test of independence shows that the P-value is less than 0.05. We can reject the hypothesis that rows and columns are independent at the 95.0% confidence level. Therefore, the observed value of Earnings for a particular case is related to its value for Preference to sell the eggs.
36. The null hypothesis tested by the Kruskal–Wallis analysis shows that the four methods of selling of eggs adopted by the poultry farmers have the same effect on the earnings obtained, It can be concluded that the four methods are equally effective with regard to the earnings obtained in the poultry farms business.

37. Out of the 270 poultry farmers, 127 felt that they (47.47) are face problems sometimes to get loans, while that 98 felt (36.30) that they always face difficulties. 36 farmers say that they do not face any difficulty in getting a loan. Majority of the respondents are facing problems sometime or the other.

38. Majority of the respondent get loans from Banks. Out of the 270 respondents, 256 get loans from Banks (94.81%). Another interesting fact is that just 3.33% of poultry farmers availed loan from the NBF Company. It is clear from the table that Banks play an important role in providing loan to the poultry farmers.

39. 168 farmers are highly satisfied about the bankers ability to grant loans in on time. While 1.11% are dissatisfied (3) about the bankers services. It is concluded that the majority of the farmers are highly satisfied about the banker's services of granting loans.
40. Among the partnership business 17 respondents felt that capital is a big problem in their business, where as in the private company business, 49 respondents have said that capital is a big problem. The majority of the poultry farmers (82) said that sometimes capital is a big problem in their business.

41. A hypothesis test was run to determine whether or not to reject the idea that the row and column classifications are independent. Since the P-value is less than 0.05, we can reject the hypothesis that rows and columns are independent at the 95.0% confidence level. Therefore, the observed value of Organisation for a particular case is related to its value for Capital.

42. The cross table shows that the satisfaction of the bank arrangement granting loan to poultry farms, 51.48% are getting loan from bank often, that people got satisfaction over the bankers arrangement granting loan facility.

43. A hypothesis test was run to determine whether or not to reject the idea that the row and column classifications are independent. we can reject the hypothesis that rows and columns are independent at the 95.0% confidence level. Therefore, the observed value of Bank loan facility for a
particular case is related to its value for Frequency of getting a loan.

44. 31 to 40 people are employed in 28 firms, 41 to 50 workers are employed in 40 poultry firms and 51 and above workers are working in 12 poultry firms. It is concluded that 20 poultry firms on an average employ 50 workers in their firm.

45. Out of 270 respondents 166 have face (61.48%) difficulties in procuring labour sometimes. 79 poultry farmers permanently face difficulties in procuring labour. It is concluded that the majority of firms face difficulties in procuring labour sometimes.

46. Out of the 270 poultry farms 135 employ (50%) skilled labour. 85 employ semi-skilled labour. Unskilled labour is engaged by 50 poultry farms. It is clear that the majority employ skilled labour in their firms.

47. Out of the 270 poultry farms, 183 face (67.78%) labour turnover problems sometimes. 58 poultry farms (21.48%) face labour turnover problems permanently. Just 12 poultry farms have no labour turnover problems. It is clear that the majority of the poultry farmers face labour turnover problem sometime.

48. The null hypothesis tested by the Kruskal–Wallis analysis reveals that the three types of labour engaged by the poultry farmers have the same effect on labour problems. The obtained
Kruskal-Wallis statistic is interpreted as a chi-square value and is shown to be significant, \( \chi^2 (df = 2) = 36.713, p < 0.01 \). Thus, it can be concluded that the three types of labourers are not equally effective with regard to the labour problem.

49. Cross tabulation shows the earnings of poultry farms and types of labour engaged in the poultry farms. 18.89% of the earnings are is got on the farms where skilled labour is employed.

50. A hypothesis test was run to determine whether or not to reject the idea that the row and column classifications are independent (earnings and types of labour engaged). Since the P-value is less than 0.05, we can reject the hypothesis that rows and columns are independent at the 95.0% confidence level.

51. The result from the t-test statistic analysis indicates that there is no evidence to conclude that a significant difference between the availability and non-availability of trained people help to prevent diseases in chicks.

52. Labour turnover has prevailed largely at 11.85% in the proprietary business concern. In the private company labour turnover has prevailed at 34.44% among the 270 poultry farms.

53. A hypothesis test was run to determine whether or not to reject the idea that the row and column classifications are independent (nature of the organization vs. labour turnover
problem). Since the P-value is less than 0.05, we can reject the hypothesis that rows and columns are independent. Therefore, the observed value of Labour turnover for a particular case is related to its value for Organisation.

54. 80 poultry farms spend up to Rs. 15 and 76 poultry farms spend Rs. 15 to 18 and the remaining 12 farms spend up to Rs.18 to Rs.20 for medicine. It is clear that 102 poultry farms spend Rs 20 and above per chick for medicine.

55. The cost incurred per chick is above Rs. 3.5 in 112 poultry farms, 89 poultry farms incurred Rs. 1.5 to 2.5, while 44 poultry farms incurred below Rs.1.5 per chick. It is concluded that the majority of the firms incurred above Rs. 3.5 per chick.

56. The R-Squared statistic indicates that the model as fitted explains 19.085% of the variability in Earnings. The adjusted R-squared statistic, which is more suitable for comparing models with different numbers of independent variables, is 18.1724%.

57. In determining whether the model can be simplified, the highest P-value on the independent variables is 0.1879, attributed to Cost of Medicines. Since the P-value is greater or equal to 0.05, that term is not statistically significant at the 95.0% or higher confidence level. Consequently, it should consider removing Cost of Medicines from the model should be considered.
The ANOVA table decomposes the variance of utilisation of solar energy into two components: a between-group component and a within-group component. Since the P-value of the F-test is less than 0.05, there is a statistically significant difference between the mean utilisation of solar energy from one level of Electricity to another at the 95.0% confidence level.

151 (55.93%) firms are export eggs. 74 poultry firms (27.41%) export meat and the remaining 45 export (16.67%) food grains. It is clear that the majority of the poultry firms export eggs.

89 firms earn from Rs 1 lakhs to Rs. 1, 50, 000. 49 poultry firms earn about Rs. 2 lakhs. The remaining 39 firms earn from Rs 1,50,000 to Rs 2 lakhs. It is concludes that 34.44% of the poultry firms earn from Rs. 50,000 to Rs. 1 lakhs.

103 poultry firms face the problem of not being able to meet supply / demand on time. 80 firms say, the government rules and regulations regarding export of poultry product is stringent. 59 firms face lack of transport and the remaining 28 firms face the problem of perishable products.

The instructional support and other reasons like technological advancement, long term customers in the export market etc. indicates that almost all the reasons for perspectives of export business has contributed equally. All these reasons are equally acceptable to the poultry farmers.
63. ANOVA constructs various tests and graphs to compare the mean values of Income in Export Business for the 4 different levels of Types of Difficulties. Since the P-value of the F-test is less than 0.05, there is a statistically significant difference between the mean Income in Export Business from one level of Types of Difficulties to another at the 95.0% confidence level.

64. ANOVA constructs various tests and graphs to compare the mean values of Income in Export Business for the 4 different levels of Perspectives in Export. Since the P-value of the F-test is less than 0.05, there is a statistically significant difference between the mean Income in Export Business from one level of Perspectives in Export to another at the 95.0% confidence level.

65. There were 37 times when Income in Export Business equalled 1 and Type of Product Export equalled Egg. This represents 13.7037% of the total of the 270 observations. Since the P-value is less than 0.05, we can reject the hypothesis that rows and columns are independent at the 95.0% confidence level. Therefore, the observed value of Income in Export Business for a particular case is related to its value for Type of Product Export.

66. The obtained Kruskal-Wallis statistic is interpreted as a chi-square value and is shown to be significant, $x^2 (df = 2) = 24.465$, $p < 0.01$. Thus, it can be concluded that the three types
of products exported are not equally proportionate to the income obtained in the export business.

67. Among the prespective variables of growth of the poultry farm industry in a proprietary company, the variable ps2 and ps4 have a strong relationship by 45% (0.45). The variable ps8 and ps9 have a strong relationship of 0.75 (75%).

68. The R-Squared statistic indicates that the model as fitted explains 91.634% of the variability in growth of the Poultry farm industry. The adjusted R-squared statistic, which is more suitable for comparing models with different numbers of independent variables, is 90.9433%.

69. The highest P-value on the independent variables is 0.9039, Since the P-value is greater or equal to 0.05, that term is not statistically significant at the 95.0% or higher confidence level. Consequently, removing Cultural qualities from the model.

70. In the private poultry farms the variable ps2 and ps9 have strong relationship of 0.5177 (51%).

71. The R-Squared statistic indicates that the model as fitted explains 48.8747% of the variability in the growth of the Poultry farm industry. The adjusted R-squared statistic, which is more suitable for comparing models with different numbers of independent variables, is 44.7664%.
72. the highest P-value of the independent variables is 0.4915, depending on Good marketing opportunity. Since the P-value is greater or equal to 0.05, that term is not statistically significant at the 95.0% or higher confidence level. Consequently, removing Good marketing opportunity from the model should be considered.

73. In the partnership business, the variables ps2 and ps4 have a strong relationship of 0.8335 (83%), ps1 and ps3 have a strong relationship of 0.5806 (58%). The perspective variable ps10 and ps7 have strong relationship of 0.7428 (74%).

74. The R-Squared statistic indicates that the model as fitted explains 55.8677% of the variability in the growth of the Poultry farm industry. The adjusted R-squared statistic, which is more suitable for comparing models with different numbers of independent variables, is 34.9629%

75. The highest P-value on the independent variables is 0.6930, depending on the need for new technology and cost. Since the P-value is greater or equal to 0.05, that term is not statistically significant at the 95.0% or higher confidence level. Consequently, removing need new technology and cost from the model should be considered.

76. The perspective variables of ps3 and ps10 have a strong relationship of 0.5268 (52%).
77. The R-Squared statistics indicate that the model as fitted explains 26.7894% of the variability in the growth of the Poultry farm industry. The adjusted R-squared statistic, which is more suitable for comparing models with different numbers of independent variables, is 24.2551%.

78. The highest P-value on the independent variables is 0.9712, depending on the Trade mark. Since the P-value is greater or equal to 0.05, that term is not statistically significant at the 95.0% or higher confidence level. Consequently, removing Trade mark from the model should be considered.

79. Among the ten barricades variables which affect the growth of the poultry farm industry in a proprietary concern, the variables BS12 and BS16 and BS16 and BS19 have a strong relationship of 0.5580 (55%) and 0.5709 (57%) respectively.

80. R-Squared statistics indicate that the model explains 56.0048% of the variability in general issues that affect growth. The adjusted R-squared statistic, which is more suitable for comparing models with different numbers of independent variables, is 52.3722%.

81. The highest P-value on the independent variables is 0.9608, because of lack of statutory protection. Since the P-value is greater or equal to 0.05, that term is not statistically significant at the 95.0% or higher confidence level. Consequently,
removing lack of statutory protection from the model should be considered.

82. Among the ten barricades variables which affect the growth of the poultry farm industry in a private concern, the variables BS19 and BS15, BS19 and BS16 have a considerable relationship of 0.5814 (58%) and 0.6135 (61%) respectively.

83. The multiple regression analysis result indicates that the R-Squared statistics explains 60.5174% of the variability in general issues that affect growth. The adjusted R-squared statistic, which is more suitable for comparing models with different numbers of independent variables, is 57.3446%.

84. The highest P-value of the independent variables is 0.8651, because of need for more legislation. Since the P-value is greater or equal to 0.05, that term is not statistically significant at the 95.0% or higher confidence level. Consequently, removing the need for legislation from the model should be considered.

85. Among the ten barricades variables which affect the growth of the poultry farm industry in the partnership company, the variables BS13 and BS11, BS15 and BS13, BS15 and BS14, BS16 and BS15, BS18 and BS19 have a strong relationship of 0.6894 (68%), 0.6767(67%), 0.7571 (75%), 0.6985 (69%) and 0.7334 (73%) respectively.
86. The result of multiple regression analysis shows the R-Squared statistic indicates that the model explains 80.541% of the variability in general issues that affect growth. The adjusted R-squared statistic, which is more suitable for comparing models with different numbers of independent variables, is 71.3236%.

87. The highest P-value on the independent variables is 0.9293, depending on the availability of feed. Since the P-value is greater or equal to 0.05, that term is not statistically significant at the 95.0% or higher confidence level. Consequently, removing the availability of feed from the model should be considered.

88. Among the ten barricades variables which affect the growth of the poultry farm industry, the variables namely BS16 and BS19 have a strong relationship of 0.5232 (52%).

89. The R-Squared statistic indicates that the model as fitted explains 49.3374% of the variability in the general issues that affect the growth. The adjusted R-squared statistic, which is more suitable for comparing models with different numbers of independent variables, is 47.5837%.

90. The highest P-value on the independent variables is 0.8470, depending on availability of feed. Since the P-value is greater or equal to 0.05, that term is not statistically significant at the 95.0% or higher confidence level. Consequently, removing availability of feed from the model should be considered.
SUGGESTIONS

After making a study of the 270 Poultry farms the researcher has the following suggestions to make.

Poultry is one of the fastest-growing agricultural sectors. The poultry industry provides meat and egg that is preferred by almost all cultures, is affordable and of good quality poultry remains a relatively cheap source of protein. India is the third largest egg producer in the world (after China and the United States of America), and the nineteenth largest broiler producer. Undoubtedly, this impressive growth is a result of several factors, such as active developmental support from the state and central government, research and development support from research institutes, international collaboration and private sector participation. A majority of the poultry industry is in the organised sector contributing nearly 70% of the total output and the rest 30% in the unorganised sector. The broiler industry is well dominated in southern states in our country with nearly 60-70% total output coming from these states.

The general observation based on the outcome of this study is that the poultry farm industry is well-structured, and is organized by competitive and educated members. However, there remains a basic lack of trust among the owners of in the poultry farm industry. It is
recommended that business owners will need to adapt their business models to the challenges and changes of the future. One of the important facts is that the ownership of the poultry farms are all Males. Though there are considerable number of women engaging in the poultry farms, none of the firms are registered in the female name of women. It is suggested that the NECC make efforts to bring women entrepreneurs in to the field.

**Capital:**

Significant barriers to entry exist in the poultry farms industry. These barriers include high capital requirements; the high level of capital intensity and the lack of access to credit makes it difficult for smaller, new entrants to establish themselves in the poultry farm industry. Larger firms have the capital outlay and financial as well as intellectual support required to grow into large competitive businesses. In order to expand the poultry farm industry because of huge export opportunity, the industry needs large amount of capital for large or small firms. Lack of funding to procure equipment and other assets is big problems in the poultry farm industry. The NCEP and Banks should made arrangements to provide loans to them in times of need.
Breeding & Price Related issues:

The animal feed industry is exposed to various risks, including input-commodity price volatility, high capital requirements, the inherent business and climatic risks of the different sub sectors, and various other challenges. The greatest strength exhibited was the core culture of the business and the methods that they were perceived to use, which added value to their business and contributed towards their vision and mission. The weakest point for feed manufacturers was the fluctuations in the prices of raw feed ingredients. This affects the earnings of the poultry farm industry. It is suggested that the Government ensure the easy availability of feed ingredients and control the high price velocity.

Manpower:

The Indian poultry industry employs more than 3 million farmers and 15 million agrarian farmers who grow poultry ingredients for feed and contribute. Rs 26,000 crore to the national income. The poultry farm industry engages all types of labour, namely Skilled, Semi-skill and unskilled labourer. The industry needs all types of labour in their firm. Fewer newcomers to the market could result in a shortage of skilled labour available to the industry, lack of trained human resource in the field of poultry farming and disease prevention and control. It is suggested that NECC ensures the availability of trained human resource and create a awareness and spread
information to all the poultry farms in order to prevent diseases. NECC can generate employment by encouraging people to take up egg farming and egg trading.

**Maintains:**

Maintenance is expensive and thus reduces the earnings. The findings clearly indicate that there is no modern and updated maintenance techniques available for storage. It is suggested that cost effective and modern systems should be introduced to the poultry farms. The lack of ability to control an outbreak of disease is also a weakness facing the industry. The outbreak of the H1N1-virus (bird flu), especially, showed how rapidly the disease could spread. Precautionary measures must be taken to prevent such diseases well in advance.

**Export:**

The poultry farming industry generates huge incomes in export. However the lack of a comprehensive marketing strategy and plan affect the export of various products related to poultry farms. It is suggested that Proprietors, Private partnership companies and Commission agent should export their products directly and not through agents.
CONCLUSION

The poultry farming sector of India has been successful over the past few decades as it has been among the most rapidly growing industries. The growth and progress has been due to the investment that has been made by the government and private sector. Poultry is one of the largest and growing sectors. Both small-scale and commercial business entities are involved in breeding (breeders), the rearing of chickens (broiler production), and feed supply. Furthermore, the poultry industry provides meat that is preferred by almost all cultures, is affordable, and of good quality.

Government supports the Poultry Industry as it is one of the industries that is considered to be ‘feeding the nation’. Business in 2020 will not be the same as it is today. Strategic changes need to be made by taking into account the vision of future business models. Opportunities lie in the growth of the economy and increased opportunity of export. The feed manufacturers can work together with broiler growers, to realize a mutual goal of growth and expansion.
Information Technology can be utilized to enhance the front office and back office operations in poultry farms as well as key areas such as processing, marketing and distribution. Technologies such as solar energy will be an opportunity for the poultry farms as they will bring down electricity prices. Conducting market research, identifying potential markets, developing new markets, preparing and submitting position papers to the government on issues affecting the poultry industry must also be undertaken. Finally, prediction of future scenarios, assessment of possible consequences for income and employment, biosecurity and public health, environmental pollution, animal welfare, food supply and demand must also be surveyed and reviewed.