Factprs Involved in Success of Poultry Business in Selected Areas of Tamilnadu

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Abstract

The poultry industry provides a good employment opportunity for both males and females along with agricultural activities. The poultry industries were involved with live stock, which is monitored around the clock and the poultry entrepreneurs are very much concentrated in utilizing the farm optimally enriching maximum output through selling the eggs and other allied products like feathers, gunny bags and poultry litters etc. The poultry entrepreneurs have gained a good profit and a particular portion of the profit was correctly paid towards income tax. Hence, the Indian economy gain the momentum through poultry industries. But after the introduction of globalization, many foreign countries launched their business in various areas namely production, marketing, transporting, banking, insurance, IT and IT enabled industries. In order to show much glamour for the industries and offices they had consumed heavy electricity power and make their premises fully air-conditioned for round the clock. The state government has not planned well to distribute the electricity power equally for already existing industries, the newly arrived foreign originated industries and service oriented organization. This affected drastically and the frequent power cuts were vested with the shoulders of poultry farms and feed mills and poultry egg packaging industries. Due to this frequent power cut, the agriculturalist in the dry land finds difficult to produce first quality maize, which is the core raw material for poultry feed. Hence, after liberalization many of the small poultry entrepreneurs were found very difficult to produce the quality eggs in their poultry farms and these eggs finds difficult to compete in the global market. Key Words : Poultry, profit, employment, industries, business.

1. INTRODUCTION

Poultry egg and meat are important sources of high quality proteins, minerals and vitamins to balance the human diet. Specially developed breeds of egg type chicken are now available with traits of quick growth and high feed conversion efficiency. Depending on the farm-size, layer (for eggs) farming can be main source of family income or can provide income and gainful employment to farmers throughout the year. Poultry manure has high fertilizer value and can be used for increasing yield of all crops.

2. SCOPE FOR LAYER FARMING AND ITS NATIONAL IMPORTANCE

Poultry industry which provides cheap source of animal protein has taken a quantum leap in the last three decades evolving from a near backyard practice to a venture of industrial promotion. Poultry is one of the fastest growing segments of the

agricultural sector in India today. While the production of agricultural crops has been rising at a rate of 1.5 to 2 percent per annum that of eggs has been rising at a rate of 8 percent per annum. India is on the world map as one of the top five egg producing countries with 55.6 billion eggs produced during 2008 (FAO).

The poultry sector in India has undergone a paradigm shift in structure and operation. This transformation has involved sizable investments in breeding, hatching, rearing and processing. Farmers in India have moved from rearing non-descript birds to rearing hybrids which ensures faster growth, good livability, excellent feed conversion and high profits to the rearers. High quality chicks, equipment, vaccines and medicines are available. Technically and professionally competent guidance is available to the farmers. The management practices have improved and disease and mortality incidences are reduced to a great extent. The industry has grown largely due to the initiative of private enterprise, minimal government intervention, considerable indigenous poultry genetic capabilities and adequate support from the complementary veterinary health, poultry feed, poultry equipment and poultry processing sectors. The industry has created direct and indirect employment for 3 million people.

The following objectives were chosen for the study.

(1)   To study the production and marketing of poultry eggs in the study.

(2)   To ascertain the factors that influenced the successful operation of poultry farms.

(3)   To identify the barriers to the efficient operation and possible opportunities associated with marketing and production of poultry eggs.

An attempt has been made to identify the factors that influenced the poultry entrepreneurs in the poultry business and their level of successful operation of poultry business in the study area. For this purpose, a field survey method was employed to collect the first-hand information from 523 sample respondents. The entrepreneurs have been chosen randomly from the major poultry clusters of Tamilnadu.

2. REVIEW OF LITERATURE

Sinha and Giri (1989) states egg internal quality is measured in several ways including factors like; yolk color, albumen height, yolk height, Hough unit, yolk width and nutritive values. Egg's internal quality could be influenced by factors like; genetic factors, environmental factors (such as temperature, relative humidity and the presence of CO_2), hen age, nutrition status, egg storage condition and storage time. A good quality egg should be free from internal blemishes such as blood spots, pigment spots and meat spots.

Juliet (2004)[2].There are two components of yolk quality; the color of the yolk and the strength of the perivitel line membrane which surrounds the yolk, where yolk color is measured by using Roche color scale

Samli (2005) and Kirunda et al. (2000) reported that the poultry industry identified albumen quality not only to judge the freshness of an egg but also considered it as important for the egg breaking industry because albumen and yolk have different markets. Although various measures of albumen quality have been proposed, the Hough unit is used most commonly today (Silversides, 1994).

Iposu et al. (1994) reported significant negative correlations between egg's Hough unit and egg weight.

Pavlovski et al. (1981) cited in Shawkat (2002) reported that better albumen height and Hough unit was recorded in eggs from free-range birds than in battery cage conditions.

According to the report of Shawkat (2002)[8] both albumen height and Hough units decreased over time. The color of the yolk is determined by the presence or absence of xanthophylls, some of which are precursor of vitamin A. If the fed has plenty of yellow-orange plant pigments, known as xanthophylls, it will be deposited in the yolk. Therefore, yolk color is influenced by nutrition and dark yellow yolks can be produced by feeding laying birds on green forage meal.

Gueye.EF (1998) in most cases of the developed world the diet is altered to produce egg yolks of the correct color for a particular market. In any consumer survey of egg quality yolk color ranks high but preference varies among countries. Some consumers prefer white-colored yolks while others prefer light-colored or darker orange yolks.

4. FACTOR ANALYSIS

All 12 items given in the questionnaire were selected for factor analysis by using principle component extraction with an orthogonal (Varimax) rotation. The number of factors is unconstrained. For the sake of convergent validity, 0.50 was used as a factor loading cut-off point.

The factor matrix is a matrix of loading and correlations between the variable and factors. Pure variables have loading of 0.5 and greater or only one factor. Complex variables may have high loading on more than one factor and they make the interpretation of the output difficulty. The researcher rotated the components seven times to get the significant variables under five factors.

Table 1 shows the reliability statistics and proves the data could support 77.1 percentage reliable to do this analysis. Table 2 indicates that the Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy in the study are 70.0. This is good result, as it exceeds 0.5 Bartlett's Test of Sphericity which is 0.000, meaning that factors that form the variables are adequate.

Table 1 : Realiability Statistics

Cronbach's Alpha	No. of Items
0.7710	12

Table 2 : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.70
Bartlett's Test of Sphericity	Approx. Chi-Square	2844.67
	Df	120
	Sig.	0.000

Table 3 : Total Variance Explained

Component	Initial Eigen values			Extraction Sum./s of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.659	22.156	22.156	2.659	22.156	22.156	2.174	18.113	18.113
2	1.303	10.860	33.016	1.303	10.860	33.016	1.433	11.942	30.055
3	1.273	10.606	43.622	1.273	10.606	43.622	1.299	10.821	40.876
4	1.079	8.992	52.614	1.079	8.992	52.614	1.221	10.174	51.050
5	1.033	8.609	61.223	1.033	8.609	61.223	1.221	10.173	61.223
6	0.905	7.541	68.764						
7	0.802	6.685	75.449						
8	0.773	6.440	81.889						
9	0.624	5.201	87.090						
10	0.574	4.786	91.875						
11	0.531	4.423	96.298						
12	0.444	3.702	100.000						

Extraction Method : Principal Component Analysis.

(a) Total Variance Explained : Table 3 depicts the total variance explained. Total variance is explained with rotation, the Eigen values are different for factor 1,2,3,4 and 5. The Eigen values for factor 1,2,3,4 and 5 are 2.659, 1.303, 1.273, 1.079 and 1.033. Percentage of variance for factors 1,2,3,4 & 5 are 22.156, 10.860, 10.606, 8.992 and 8.609 respectively. It indicates that five factors extract from 12 factors have cumulative percentage up to 61.223% of the total variance.

(b) Rotated Component Matrix : The rotated component matrix is discussed in the following table. After a factor solution has been obtained, in which all variables have a significant loading on a factor, the researcher attempted to assign some meaning to the pattern of factor loadings. Variables with higher loadings are considered more important and have greater influence on the name or label selected to represent a factor. Researcher examined all the underlined variables for a particular factor and placed greater emphasis on those variables with higher loadings to assign a name or label to a factor that accurately reflected the variables loading on that factor. The names or labels are not derived or assigned by the factor analysis in computer programme; rather, the label is intuitively developed by the analyst based on its appropriateness for representing the underlying dimension of a particular factor. All the factors have given appropriate names on the basis of the variable represented in each case.

Table 4 : Rotated Component Matrix

Factors	Component				
	Var 1	Var 2	Var 3	Var 4	Var 5
Manpower	0.718				
Season	-0.655				
Heavy initial Investment	0.630				
Source of loan facilities	-0.618				
Government support	-0.529				
Industry experience		0.721			
Poultry farming occupied an important place in the Indian economy in terms of revenue generation.		0.612			
Poultry business also helped in developing many ancillary business		0.524			
In the rural sector more percent of the population is directly or indirectly depends on egg poultry farming			0.850		
The demand for processed poultry egg products is increasing fast				0.798	
The marketing of the poultry eggs is largely in the hands of wholesalers					0.813
The fast growing domestic and export markets for poultry eggs need an effective infrastructure					0.610

Extraction Method : Principal Component Analysis

Rotation Method : Varimax with Kaiser Normalization

(a) Rotation converged in 14 iterations

The above table shows the rotated component matrix, in which the extracted factors are assigning a new naming related together. From the above table it is noted that all the loading factors which are having the loading value less than 0.5 are rejected from the analysis.

(a) Factor 1 is the most important factor which explained 18.113% of the variation. The factors as 'Manpower (0.718)' and 'Heavy initial Investment (0.630)' are highly correlated with each other. These statements reflect non product based support for development of poultry industry, hence, the researcher names this segment entrepreneurs as 'Production planning Conscious Entrepreneurs' of poultry entrepreneurs.

(b) The second kind of factors explained 11.942 % of the variances. In this segment, the researchers took the three important variables such as 'Industry experience (0.721)', 'Poultry farming occupied an important place in the Indian economy in terms of revenue generation. (0.612)' and 'Poultry business also helped in developing many ancillary business (0.524)'. These statements are embossed economy and business knowledge for production of poultry eggs and hence the researcher named this segment entrepreneurs as 'Business Development Conscious Entrepreneurs'.

(c) This factor explained 10.821% of the variations. In this segment, the researcher took the important variables such as 'In the rural sector more percent of the population is directly or indirectly depends on egg poultry farming (0.850)' and they could able to do the business administration properly and efficiently. This statement focused upon the efficiency of employees with the poultry business, which leads to increase the production of required eggs in total. Hence, the researcher named this segment entrepreneurs as 'Business Conscious Entrepreneurs'.

(d) The fourth factor explained 10.174% of the variations. The extracted statement is 'The demand for processed poultry egg products is increasing fast (0.798), and the statement indicates that the entrepreneur should uphold their marketing of poultry eggs. Hence, the researcher named this segment as 'Economic Conscious Entrepreneurs'.

(e) The fifth factor explained 10.173% of the variations. In this segment, the researchers took the two important variables such as 'The marketing of the poultry eggs is largely in the hands of wholesalers (0.813)' and 'The fast growing domestic and export markets for poultry eggs need an effective infrastructure (0.610)'. These statements are embossed marketing and export knowledge of poultry eggs and hence the researcher named this segment entrepreneurs as 'Marketing Conscious Entrepreneurs'.

5. CONCLUSION

From the factor analysis, the factors were studied by selecting twelve variables. Out of twelve variables, only five variables showed high level of influence with 61.233 cumulative percentage with 10.173 variance. They are manpower (2.659), season (1.303), heavy initial investment (1.273), source of loan facilities (1.079) and Government support (1.033). These five factors contracted together account for 61.223 percent of the total variance. Hence, it is found that the factor have reduced the number of variables from 12 to 5 underlying factors.

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