



## A STUDY ON PROBLEMS FACED BY POULTRY FARM OWNERS WITH SPECIAL REFERENCE TO NAMAKKAL TOWN

**Dr.P.Vikkraman\***

**Mr.S.Gunasekaran\*\***

*\*Associate Professor & AC, Department of MBA, Anna University, Regional Centre, Coimbatore.*

*\*\*Assistant Professor, Department of MBA, King College of Technology, Namakkal.*

### **Introduction**

Over the last Twenty Nine years income from the sale of eggs has accounted for approximately six percent of the total income of Indian farmers. During the same period, production techniques and methods have changed drastically from a situation with a few eggs being produced on virtually every farm in the State to the present situation in which the majority of eggs are produced by large commercial laying operations with more than four lakh birds. This is not to say that small flocks do not exist today, but their importance has become less in terms of total egg production.

The changes in egg production practices have been accompanied by changes in the structure of egg marketing in India. These changes have occurred because of attempts by egg producers to obtain better prices for their product, advancing technology in the handling of eggs, competition from surplus egg areas, and other reasons. There is concern among farmers, poultry specialists, and other people about the future of the Indian egg industry, whose chief competitors are large-scale laying operators in surplus production areas outside India.

The study, on which this project is based, was intended to supply knowledge of the situation of the egg industry in Namakkal, Tamilnadu. Also, information about the egg industry is needed by extension personnel, researchers, the general public and others to appraise current research, guide further research, to decide upon alternative courses of action.

### **Profile of an Egg Producer**

Poultry farming is raising chickens, turkeys, ducks and other fowls for meat or eggs. Poultry farms can be:

1. Breeding farms where they raise poultry for meat,
2. Layer farms where they produce eggs.

The best breeds depend on what you want from them. Good egg layers are Rhode Island Reds (brown eggs) and Leghorns (White eggs). Great meat comes from Arbor Acres, Ross, and Peterson chickens which were named after the breeders who raised them. Some hens are raised for egg production and meatiness. New Hampshires, Plymouth Rocks, and Wyandottes are good ones, for egg and meat as well.

In old times, poultry farming was, the farmer's wife throwing some feed out to the chickens which were wandering loose around the yard. She would find the eggs wherever they might be laid, before they got rotten.

Today, poultry raising is big business. Each step is done by someone who knows what they are doing. Just like the dairy farmer we visited, the breeder wants to get the best chicken he can. 'Best' might mean a meatier chicken, one with less or more fat, or one that lays more eggs or eggs more often. The breeder might hire veterinarians or scientists to help him choose the characteristics he wants in his chickens. Breeders are known for their special varieties of chickens and no one is allowed to copy them.

Food costs are important to poultry farmers. Feed is about 60% of the cost of raising poultry. Fowl are usually fed a combination of maize, soy, rice bran and cereals. Poultry is mostly used for meat and eggs but other products also come from these animals. Duck and goose feathers are used for pillows and insulated clothing. Goose feathers are used to make the "down - filled" jackets. Manure is used as fertilizer. Eggs are used in paint and medical vaccines.

California, Indiana, Iowa, Ohio, and Pennsylvania produce the most eggs in the U.S. Alabama, Arkansas, and Georgia produce the most chickens in the U.S. The highest turkey producers are Minnesota and North Carolina.

It offers four varieties of value added specialty eggs, each fortified with specific vitamins and nutrients to help maintain a balanced diet and healthy lifestyle for people of all age groups and for health conditions.

### **Eggs are made up of five major parts**

#### **The yolk**

The yolk makes up 31% of the total egg weight and consists of water, fat and proteins as well as vitamins and minerals. The yolk is held together inside a fine elastic cover called the vitelline membrane. The colour of the yolk is determined by the



hen's diet. A round white spot called the germinal disc can be seen on the surface of the yolk. In fertile eggs this is where the chick starts to develop. In eggs produced for human consumption that are available in supermarkets, at farmers markets and grocery stores the germinal disc remains a small white spot.

### **The egg white**

Surrounding the yolk is the egg white, which is called albumen. It is a clear jelly-like substance which makes up 58% of the weight of the egg. There are two layers in the egg white. A thick layer of white immediately surrounds and acts as a cushion for the yolk. In this thick layer of egg white are the chalazae. These are rop – like cords which are attached to each end of the yolk. The chalazae act as anchors to hold the yolk in the centre of the egg.

### **Shell membranes**

The shell membranes enclose the yolk and white of the egg, and prevent bacteria from entering the egg. These membranes are strong and are made partly from keratin (a protein also found in human hair).

### **The air pocket**

As it is forming, the egg stays warm inside the hen. Soon after an egg is laid, it cools and the inner shell membranes pull away from the outer shell membranes at the blunt end of the egg, causing an air cell or pocket to form. As the egg ages, the air cell becomes larger.

### **The shell**

The shell of the egg is rigid but brittle, and protects the contents of the egg. The shell makes up 11% of the weight of the entire egg. About 98% of the shell consists of calcium carbonate. Magnesium and phosphorus make up the other 2%.

### **Poultry Farm for Producing Eggs**

The production of poultry in the US and generally throughout the world is carried out by a highly specialized, efficient poultry industry that has been a leader in trends of scale and industrialization that have taken place in American agriculture over the past half a century. Feed represents about 75 percent of the total cost of egg production and 60 percent of the cost of broiler production. Hatcheries are modern buildings which provide a place for holding of hatching egg prior to setting a room for grading, trying, fumigation, cooling and room for incubation, hatching, sexing and vaccination. Egg markets all over the country are dull with poor demand. There is a fair scope for new entrepreneurs to enter into this field.

### **Kinds Of Eggs**

#### **Children's Special Eggs**

These eggs are enriched with **DHA, Lutien, Vitamin – E and Organic Selenium**. 13.3g of protein helps in growth, carbohydrates and fats give good energy. DHA, Iron and Iodine aid the development of the brain in children and make them intelligent while 210 IU of Vitamin A and Lutien improve their eye sight.

Vitamin E, Selenium and Zinc present in these eggs develop a healthy immune system whereas Vitamin D, Calcium and Phosphorous help to develop healthy bones in children.

#### **Heart's Special Eggs**

Specially formulated to contain Cholesterol.

For healthy heart and for better immunity these types of eggs are enriched with OMEGA-3, Vit-E, ORGANIC SELENIUM & ORGANIC CHROMIUM.

Omega- 3 helps to reduce cholesterol level in the body carbohydrate and fats for good energy vitamin-E, Selenium & Zinc for healthy immune systems and organic Chromium & Biotin help to maintain Blood Glucose level. Iron helps to prevent anemia.

Omega- 3 is provided to reduce the blood cholesterol and recommended by many doctors for maintaining healthy heart and it reduces the risk factor.

#### **Mother's Special Eggs**

Specially formulated to promote physical and mental development of baby and helps to prevent breast cancer. These eggs are enriched with carbohydrate and fats for good energy, biotin helps to maintaining a steady blood sugar level, Vitamin-D, calcium B-2, Vitamin B-6, Vitamin B-12, C-D-P & Folic Acid for the mental & physical development of the baby, Niacin &



Vitamin B1 for better release of energy Vitamin-K helps blood clotting, Vitamin –E, Selenium & Zinc for healthy immune system, DHA for better development of brain, eyes & nerves of the baby, Choline for brain development, in baby and milk production for mothers and also reduce the risk of breast cancer.

### **Growth of Egg Producers In Namakkal Taluk**

India is the fifth largest producer of eggs and ninth largest producer of poultry meat in the world, producing 34 billion eggs and about 600,000 tons of poultry meat in 1999 (Mehta, 2005). Poultry sector in India has been growing at a much faster rate than other sectors of the Indian economy and accounts for 100 billion rupees to the Gross National Product (GNP). Despite such an amazing growth in last two decades, annual per capita consumption of egg and poultry meat in India is disappointingly low with approximately 36 eggs and 0.7 kilograms of poultry meat (Mehta, 2005). These levels are too low as compared to the world average of 147 eggs 10.9 kilograms of poultry meat on a per capita basis (FAOSTAT).

These low levels of per capita consumption of eggs and poultry meat have been mostly attributed to lower purchasing power (Gandhi and Mani, 1995). However, purchasing power of Indians is likely to grow at a much higher rate in the future due to strong economic growth, as a result of continued economic liberalization initiated in early 1990s. Macroeconomic forecasters such as World Bank, and Standard and Poor's DRI are now projecting an average annual growth of 6 to 8 percent in India's real GDP in the next decade. In addition to strong income growth, consumption pattern is also likely to be influenced by population growth, urban- rural population composition and other demographic variables.

Poultry sector plays a pivotal role among the sub-sectors in potentiating the role of animal husbandry in the process of rural economic development of the state. The Indian Poultry Sector with 7.3 percent growth in poultry population has witnessed one of the fastest annual growth of about 6 percent in Eggs and 10 percent in meat production over the last decade amongst all animal based sectors.

The high growth has placed India at 3<sup>rd</sup> position in Egg production and 5<sup>th</sup> in chicken meat production on a global basis. Even with this development, the per capita availability is only 52 eggs and 2.3 kg of poultry meat against the recommended levels of 180 eggs and 11 kg of meat per annum. Tamil Nadu is leading the states in broiler production with a record production of 397 thousand tons in 2009-10. TamilNadu accounts for 17.71 percent of the poultry population of the country. More than 90 percent of poultry or poultry products exported from India originates from TamilNadu.

At present poultry concentration is restricted to certain poultry belts such as Namakkal, Erode and Coimbatore. The poultry keeping has evinced great interest among poultry farmers. There is a good potential for export of egg, egg products and frozen chicken meat from our State to Gulf countries, Russia etc. Further, due to the changes in consumption behavior of the people in the state towards desi chicken and desi eggs, there is great scope for the development of backyard poultry.

Animal husbandry is still mainly in the hands of small and marginal farmers and landless labourer's. Though poultry farming has developed into an industry, eco- friendly backyard poultry rearing is a profitable enterprise in providing regular income to the rural poor and ensuring nutritional security. It still continues to be the livelihood proposition of several poor farmers in the rural areas and contributes 3.5 percent of the total egg production in the state.

### **Product Profile**

A chicken egg is an egg laid by a chicken. In general, eggs are composed of several parts. They have a hard outer shell, which would help protect a growing bird embryo (if the egg is fertilized), and inside the shell is the ovum. The ovum is the reproductive cell of egg produced by female birds that would nurture and sustain an embryo before it was strong enough to break out of the shell and become a full – fledged chicken.

Hens lay both fertilized and unfertilized eggs, and most of the development of the chicken embryo in fertilized eggs occurs outside of the hen's body. Special care of a fertilized chicken egg is required for this to occur.

There are two main components of the ova in chicken eggs. These are the albumen or "white" of the egg and the vital line or egg yellow or yolk. Most people will note some thick milky white membranous structures in the egg too. When not providing nutrition for growing chickens, these eggs are a source of nutrition for people and for animals that may eat eggs.

In fact, of all eggs consumed by people, chicken eggs are most common, and recipes calling for eggs tend to mean eggs from hens, unless they specify otherwise. Though there are specialty markets that sell emu, ostrich, quail and duck eggs, these remain a tiny percentage of most eggs purchased by humans.



While the chicken was once hailed as perhaps a perfect food for humans, there are some concerns about consuming too many eggs. Though a single egg isn't tremendously high in calories, egg yolks do contain high levels of cholesterol. Some people avoid this by simply eating egg whites instead, which are high in protein. Others, however, don't care for the whites eaten alone.

There's also some argument that sources of cholesterol in chicken egg yolks may actually help lower overall bad cholesterol count, though this issue is hotly debated. Most people stick to eating the interior of the egg and either discard or compost egg shells. Actually, eggshells are edible, and some people blend them into shakes. Egg shells may also constitute part of chicken feed since they have nutrient value.

One thing that may prove confusing for people is the different grades of chicken eggs and their different sizes. Moreover, some eggs are labeled organic and others may be sold as created by free-range chickens. The country in which the eggs are produced usually regulates the definitions of each of these terms and grades.

Typically a chicken egg that is free range and organic will cost the most, but price is usually higher for larger eggs too, and some people purchase fertilized eggs because they're lower in cholesterol or eggs with different colored shells.

### **Eggs in Health**

This study also confirmed that between other protein-containing foods, eggs contain the richest variety and mixture of amino acids that are indispensable for the healthy growth and development of children, adolescents and young adults.

In addition, the high levels of antioxidants in the egg help preventing the age-related macular degeneration which is the leading cause of blindness in developed countries.

One of the key discoveries was that eggs are a very important source of vitamin D, and their consumption can significantly increase your daily intake of this very important vitamin. An egg contains more than 20 percent of the recommended daily intake so if you eat two a day you're half covered.

The low vitamin D levels are linked to many diseases: including osteoporosis, cancer of the heart disease, the sclerosis multiplex, and certain immune system illnesses and even mental disorders.

### **Poultry Hub**

Namakkal, the major poultry producer of southern India, has been witnessing a positive change in the recent years. The district alone accounts for about 75 per cent of the birds produced in the Namakkal zone of the National Egg Coordination Committee. The poultry sector in the zone has grown by 19.53 per cent in the past two years. The total number of birds has gone up from 307.34 lakh in 2005-06 to 367.35 lakh in 2007-08. The zone produces about 3 crore eggs a day, with Namakkal contributing 2.5 crore of the total production. The labour-intensive sector provides direct employment to over one lakh people.

In a country where millions still live in poverty and are severely malnourished, an egg is probably the cheapest source of nutrition available.

Despite the steep hike in egg prices, an egg costs around Rs. 3.20, which is less than what a cup of tea costs, and so it is affordable for even the poorest. But, that luxury could become a thing of the past, warn poultry farmers in Namakkal district, the No. 1 producer of eggs in the country. The farmers here lament that the egg prices determined by the National Egg Coordination Committee (NECC) on a daily basis was not regulated properly after the entry of many middlemen who fix the prices.

Mr.R.Nallathambi, The President of the Tamilnadu Poultry Farmers Association said, "A few years ago, there were over 10,000 poultry farms in Namakkal district alone producing the largest number of eggs that were exported to around 17 countries. Today, the number of poultry farmers has shrunk to just 1,000. The government has been neglecting this business which has a potential turnover of Rs. 30, 000 crore, if Indian eggs could be exported to other countries. He also said "Following the outbreak of bird flu, a large portion of our overseas business has been affected and the government has not taken any efforts to restore confidence among our overseas clients. Although Indian eggs are the cheapest in the international market, it is still not preferred due to lack of promotion by the Central government."



The poultry farmers in Namakkal point out that the egg produced in their district is among the most desirable due to its orange color. "It gets its color due to the corn that we feed our hens. With the soaring prices of soya and corn, the cost of eggs is bound to rise," said Mr.R. Nallathambi, President of the Tamil Nadu Poultry Farmers Association. He pointed out that since a large quantity of soya and corn are exported, farmers have to pay more to procure chickenfeed.

**Objectives of The Study**

**The main objectives of the study are**

- To identify the cost involved in each or separate egg food product.
- To identify the essential problems faced by poultry farm owners.
- To evaluate the effectiveness of present poultry farms and the cost benefit analysis.
- To improve the egg sales promotion and egg food throughout Namakkal and nearby areas.
- To identify the pollution problems faced by the poultry farm owners.

**Scope of the Study**

- To study that covers the egg production and its growth of life.
- Recent trends in their production and its upliftment.
- Changes in the livelihood of the individuals involved in poultry business.
- To determine changes which have taken place in Namakkal egg marketing structure.
- To determine past trends and predict future trends in some selected sectors which are associated with the profitability of the Namakkal egg industries.

**Research Methodology**

**Meaning of Research**

Research methodology is the way of systematically solving the research problem. It may be understood as a science of studying how research is done scientifically and systematically.

**Research Design**

A research design is an arrangement of conditions for collection and analysis of data in a manner that aims to combine with relevance to the research purpose with economy in procedure.

**Population:**It is the aggregate of all units possessing certain specific characters from which the sample will be drawn.It can be finite or infinite. In finite universe the number of item is certain but in case of an infinite universe the number of item is infinite.

**Sampling Method:**Here the researcher used the simple random sampling method.

**Sampling Size:** part of the population selected for the study is called sample. Here the researcher took 100 as a sample size.

**Data Collection:**Data is collected from the egg producer of Poultry farm. The researcher had prepared a well-structured questionnaire to study the customer satisfaction.

**Primary Data:** The primary data is collected directly from the egg producers i.e. data collected with the help of a questionnaire.

**Secondary Data:**The secondary data means already available data. Here, the data were collected from company records, websites, annual reports, Journals etc...The researcher collected information through primary data and as well as secondary data.

**Methods of Data Collection**

**Sampling Technique:**The researcher used the simple random sampling method.

**Statistical Tools:**The data is collected from the customers during survey and analyzed using various tools.

- Simple percentage method
- Correlation

**Simple Percentage Method**

Percentage refers to a special kind of ratio making comparison between two or more data to describe relationship between the data. Percentage can also be used to compare the relative terms, the distribution of two or more series of data.

$$\text{Simple percentage} = \frac{\text{No. of respondents}}{\text{Total No. of respondents}} \times 100$$



### **Limitation of the Study**

- The time available for the study was very much limited.
- For the time being, it is restricted to 100 respondents.
- Few statistical tools were used for analysis.
- There were chances of biased answers from the respondents.

### **Summary of Findings, Suggestions and Conclusion Findings**

- 78% of the respondents are engaged as Sole proprietors.
- 12% of the respondents are in partnership of 3 to 5 members.
- 91% of the respondents are facing pollution problems by poultry farms.
- 74% of the respondents are facing water shortage during summer.
- 68% of respondents are not happy with govt schemes to encourage entrepreneurs.
- 90% of the respondents have borrowed funds from various sources.
- 85% of the respondents have borrowed from banks.
- 34% of the respondents have an area of poultry farm in 10000 – 20000 sqft
- 62% of the respondents are having minimum 25,000 chicks
- 78% of the respondents are having minimum 10 years of experience in this field.
- 40% of the respondents' mode of savings is land
- 21% of the respondents are spending bank savings for growth of children.
- 10% of the respondents are spending their profit to buy a flat.
- 12% of the respondents are dealing in exports and imports.
- 34% of the respondents prefer maximum production in summer season.
- 82% of the respondents do chicks maintenance for successful business.
- 80% of the respondents are improving quality of the egg product.
- 64% of the respondents come to know the price of eggs through NECC.
- 92% of the respondents are purchasing chicks on yearly basis.
- 63% of the respondents feel safe in their job.
- 70% of the respondents said demand and supply of eggs determine the price.
- 72% of the respondents are satisfied with this business.

### **Suggestions**

- Advertising must be increased in newspapers, magazines, radios and television. Info regarding poultry farms, egg products shall be taken to the people through programmes.
- Offers and special bonus Schemes may be introduced for Poultry farms.
- Health and hygiene through egg products shall be propagated.
- Seasonal woes such as water crisis during summer shall be addressed.
- Entrepreneurship shall be promoted through financial assistance from banks and other lending institutions.

### **Conclusion**

It is clear from the above study that the problems faced by poultry farmers are many due to climatic conditions, availability of funds, land costs and lack of other promotional activities. The Govt., must intervene and take corrective measures to address the problems. Also, exports of eggs and other poultry products must be taken up on a priority basis not only to safeguard the poultry industry but also for the earnings of foreign exchange as it could tilt the scales of our trade deficit. Also, consumption of egg products shall be increased through sustained campaign. These measures, if taken earnestly will turn around the industry and the livelihood of the people as well.