



# **“Two Dimensional Integration of Livestock Industry in Pakistan”**

MBA Thesis

**Researched by:** Muhammad Zohaib Shahid  
NUST201260240MNBS75612F  
MBA 2K11

**Supervisor:** Mr. Kamran Khalid

## **Executive summary**

The research mainly focuses on the recent development in the poultry and livestock industry of Pakistan; how it has evolved from 1970s till the where the industry was in the growth stage till 2010 where latest technology has totally revolutionized the dynamics of the industry. The economies of scale have been achieved, and are being further worked upon to reduce the costs as well. In the quest of reaching higher economies of scale, we see that different players in the industry compounding up to synergize their performance and lower costs. Players are going for vertical integration where they own their own farms till the very end retails stores as well. Also, the companies are also going for horizontal integration where small to medium sized players are grouping up to synergize their strengths into one big player in order to achieve higher economies of scale. This is turning the market very competitive, making the players find new horizons of business. This fierce competition has made small players either to group up into one big player or else they would go bankrupt due to lower economies of scale. Lastly, this thesis also predicts how the industry is changing and what will be its future outcomes. This report is based on the supply chain of the poultry sector in Pakistan; it majorly studies the financial & operational techniques of the supply chain. The main purpose of this study is digging deep into the poultry farming sector & studying the price fluctuations of poultry products (meat and eggs) and to find & understand the reason behind fluctuations. This specific research aims to help us understand the supplychain thus finding ways to lower the product prices which in turn would help in fulfilling the demand. This study recommends ways to enhance operational efficiency & detailing relevant to poultry feed, temperature, area and location and shed on a commercial basis, including moisture, which result in keeping the poultry shed on commercial basis. Recently in Pakistan economic survey 2009-10 report also includes poultry in Pakistan sector covers all recent developments and current situation. Past data and news of poultry growth and development have been added to give a similar proportional. Within this context, in the last two bird flu virus in infected poultry is discussed. Research collected over the past five years, poultry feed (starter, finisher, etc.) (2005-2010), prices sick poultry product prices (domestic / farm eggs and meat) contains data Pakistan poultry association poultry research institute Rawalpindi, Punjab. These figures actually help us analyze the variable through regression analysis was used to determine the relationship. Researchers who are interested in poultry is a useful tool for all those. Doubt a profitable project and have great positive potential.

## Contents

Research methodology.....	5
Aim Research.....	5
Problem Statement.....	5
Research Design.....	5
Method.....	5
Scope And Structure Research.....	6
Limits.....	6
Literature review.....	7
Poultry Industry In Pakistan.....	9
Economic Background And Introduction.....	9
Facts and figures.....	9
The Poultry Sector.....	10
Current Events.....	10
Recent Government Initiatives.....	11
Bird Flu (Avian Flu).....	13
Some common problems.....	14
Supply Chain Diagram And Stages (Broiler Farming).....	15
What's broiler farming?.....	15
Civilization.....	15
Follow company.....	15
Individual farmers.....	15
End epilepsy.....	15
Slaughter house.....	16
Processing companies.....	16
Wholesalers.....	16
Retailers.....	16
Export.....	16
Stages of the supply chain (layer agriculture).....	17
Layer is farming?.....	17
Civilization.....	17

Farmer / company .....	17
Eggs.....	17
Wholesalers.....	17
Retailers .....	17
Supported By The Poultry Industry, Other Industries .....	17
Pillow making .....	17
Fertilizer industry.....	18
Poultry Methods And Operational Techniques.....	19
Inputs And Processes .....	19
Prinking.....	19
Poultry Shed.....	19
Area And Space .....	19
Feeding.....	19
Lighting.....	20
Litter.....	20
Drinking .....	20
Fumigation And Spraying.....	20
Vaccination .....	21
Important tips .....	21
Manpower Requirements .....	22
Farm Equipment.....	22
Two Ways Of Shedding.....	22
Deep Litter System .....	22
Floor Rearing System .....	23
Key Success Factors .....	23
Monitoring Platform .....	23
Market Information.....	23
Mortality Losses.....	23
Threats.....	23
Disease Epidemic.....	24
Government Regulations .....	24

Financial Feasibility Analysis.....	25
Hypothesis Testing.....	27
Results And Conclusion.....	29
The Supply And Demand Analysis.....	29
The Feed Cost Analysis .....	29
Inflation Analysis.....	30
Recommendations.....	32
Bibliography .....	34
LITERATURE.....	34

## **Research methodology**

### **Aim Research**

Pakistan's poultry industry is growing and expanding rapidly in terms of the supply chain is one of the most organized industries. This research aims to understand the dynamics of the poultry supply chain aims to find all the steps. These the main reasons behind the success of the sector in growing the industry hinders its maximum potential dangers that can be found along the goal. Research all possible aspects, especially to determine the feasibility of the business, sector of the financial industry as sick as operational techniques employed to study, plus an analysis of the supply chain to do.

### **Problem Statement**

During our research in the field of poultry broiler meat and egg products, including wide fluctuations in prices to find the reasons for the plan. Prices, the impact of the poultry and then limit the impact of these factors to determine the correlation analysis and carry out a regression will identify the real causal factors. These microsoft excel regression analysis will be done by employing the device, and the correlation coefficient of the data set using every possible effort be made causal factor.

### **Research Design**

#### **Method**

In addition to secondary research via the internet, books and magazines Pakistan poultry association poultry research institute Rawalpindi, Punjab gathered, i also began to collect information, in one way or another poultry a few people are engaged in the business of interfering in detailed operational techniques and procedures. Primary prices is mostly on the nature of the data collected, ghost data and information online or in booklet was available. P. R. It, Rawalpindi, helped us with data collection. Therefore, research institutions and government agencies report different poultry primary source of information and also contains the secondary data.

### Scope And Structure Research

Research data with full detail and introduces Pakistan's poultry industry. Poultry production when it started in Pakistan, the 1963 provides full background to the industry. Various aspects of the industry, a significant or cram analysis necessary. Further research with an explanation of each part of the poultry industry in a supply chain analysis. They are working within the industry, provides a description of the methods. Research to potential participant's analysis of business opportunities presented by the sector's financial stresses. last but not least, the research observed wide fluctuations in the prices of factors are behind the prices of poultry products to find the data a full regression analyzes. Poultry products in the country will help raise the level of a much focused set of recommendations at the end of the study.

### Limits

Anger limitations encountered during the writing of this report. These are:

- Factors that can affect poultry prices relating to 'all' inability to access useful data. Example, poultry product supply and demand data was available only on an annual basis. Monthly demand and logistics support to more than one conclusion is more useful to get. However, as the annual average of monthly prices, assuming the tests carried out. Moreover, if tried a few of the most important determinants data will be able to collect.
- our research data and basically the rest of Pakistan Punjab with a little emphasis has focused on methods which need to collect data to move across Pakistan the inability, however, of the Punjab to mention only the most important is that the area of poultry production and development.

## **Literature review**

The consumer manufacturer to wholesaler to retailer to move in a process from supplier as chain management (scum) materials, information, and financial monitoring. Supply chain management and coordination within and they flow between the companies will be combined. Efficient supply chain management system of any ultimate goal (with the assumption needed products are available) is said to reduce inventory.

According to mentzer, et al. (2001, p.5) definition of supply chain management of the supply chain is as strong applause. Several co-authors of the paper, a comprehensive study conducted by based on a general definition of the supply chain try. They came up with the following definition: 'the supply chain directly to the products, services, finances, and / or information from a source upstream and downstream flow involved in three or more entities (organizations or individuals) is defined as a set of a client.

Domenica (2002, p.8) also claims that supply chain should actually be effective. Use of resources to meet the specific results to minimize the effective means and channels of distribution design in terms of effectiveness. Effectiveness and service quality of service requirements is measured by the performance, delivery performance, product quality, backorders and inventory levels are measured by.

Popular and k.bukhsh (2007) studied the poultry industry of Pakistan. Whose level of nutrients play an important role in improving poultry consumption is well documented that I'll explain it. Improvement, adding customers leering level prices and producer profits are possible with the proposed by improving. Most important problems in the production of poultry before they shed light on the unfair distribution of profits and then the expansion poultry industry is a major barrier was assumed poultry industry total profitability of various stakeholders to assess the percentage of concentrates. Results retailer's commission agents (28%) and producers (25%), the poultry industry is angry the total get 47% of profit demonstrated. These benefits without changing trend in the share of men in thecountry uptake of nutrients in the poultry would be impossible to improve the contribution that this indicates.



Pasture raised poultry label rouge program in France, a leading product. Program, provides premium products to consumers, farmers' income increases, and strengthen rural development. Their own branded under a common label products and market fliers which is based on many regional producers coalition, composed. Strict standards of a third-party certification program ensures that after being. Others take note of label rouge program are starting to. (n fanatico and holly born, Nov 2002)

Daniel thiel (2006), in his paper, 'bird flu chainfaced chicken meat supply system dynamics model, widely applied in the modeling and uncertain environment supplychain behavior is analyzed under the system dynamics method car, explained. However, sanitary food supply chain in the wake of the crisis are only fewapplications., in this paper, with the sanitary crisis chaincoping study the behavior of the chicken meat supply., he said supply capacity of the upstream and downstream worried sick as a crisis with the decline in behavior unpredictable consumer behavior dealing supreme court proposed a model to study. Said this model in France from October 2005 to march 2006 period crisis during bird flu chicken meat under the Supreme Court to investigate the behavior of mock and analyzed. Then under different environmental uncertainty a sensitivity analysis to study the stability of the supply chain used. Models such crises other fresh faces for food supply chains should be useful for decision makers.

# **Poultry Industry In Pakistan**

## **Economic Background And Introduction**

Poultry farming in the world's most dynamic linking has become one of the sections. Poultry culture in south Asian countries is expanding rapidly and commercial layer and broiler (meat production) rate of growth of poultry farms and eggs to meet the growing demand for protein is unusual. Pakistan, poultry industry has contributed significantly to food production and plays a major role in the country's economy.

Pakistan's agriculture sector of the poultry industry, the most organized and vibrant segments is one. These, cheap, tasty and nutritious food is the best source of protein as the rearing of poultry in Pakistan almost a profitable enterprise proved. Poultry production in Pakistan was launched in 1963. Birds, mostly chickens in terms of money and materials by villagers with very little investment, on a small scale in the backyard of the houses in the villages are maintained. These birds was very low returns, and investment to a large-scale work was hardly noticeable.'s private sector on a commercial scale poultry as the first modern hatchery in Karachi when the unit was formed in 1965, made by PIA due to the effect began. Considerable progress towards the expansion of the industry have taken place as a result of the investment, has taken a keen interest in this area. Leading poultry joint efforts and public and private institutions have emerged through prudence.

## **Facts and figures**

"Poultry sector employment (direct / indirect) and generate revenue for 1.5 million people. Livestock sector, 4.81% and 9.84% growth in the agricultural sector. Poultry meat in total meat production is 23.8 percent.

Current total poultry population is estimated at 562 million. Poultry production table that allows for complete data see appendix b for the past 10 years. Also two tables for the population of livestock and products see appendix a shows. Laying birds a year and the average age of broiler produced an average of 250 per egg at age 8 irks, 1200 grams (or 1.2 kg) as recommended. Pakistan 11258 million eggs and poultry meat production of 651 thousand tons. Poultry feed consumption increased with age. These 25 at its peak (135g/bird / day) reaches age irks. Then aged a bit in 33 irks 124g / bird / day to reach reduction. Highly productive and more adaptive to local conditions,

which some local races, too. Important poultry birds are bred with each other across generations. Products, Sindh, Punjab and Khyber Pakhtunkhwa provinces large urban centers is centered on. Majority of the farmers Karachi, Lahore, Peshawar, and Faisalabad and surrounding cities such as are common. Layers form capacity from 2000 to 20,000 birds and 403 birds per 103 broilers farms it varies. Poultry feed, poultry feed their high cost, and especially the cost of various components of fishmeal is mainly due to increase. These days the prices of poultry feed, food manufacturer cost components are highly desirable.

## **The Poultry Sector**

With the passage of time commercial poultry production in Sindh and Punjab provinces around the major urban centers and initially Karachi, Lahore is concentrated in very sick now stretches across the country. Sindh provinces, small cities as sick as mirpurkhas, Sukkur, are fields in Nawab Shah. Similarly, in the province of Punjab, sick poultry in Rawalpindi, Faisalabad, Multan, Lahore, Bahawalpur, Rahim Yar Khan, Mianwali established in got.

## **Current Events**

Known as the Pakistan poultry in two management systems are being developed through commercial agriculture and the rural poultry. Leading poultry sector from 20 to 25 per cent annual growth in private with an unusual enterprise sector is a classic example. Achieve the rapid growth of liberal financing and credit, from time to time by the government granted concessions were made, such as breeding grounds where grandparent and parent flocks, poultry farm machinery and equipment, cages, income tax exemptions, duty-free imports, brooders, such as soybean, meal, corn, and borrowing from commercial banks and financial institutions, free and easy in addition to the facility in poultry feed use of sorghum as feed ingredients for.

Sector hatcheries to 280, 139 feedmills and more than 20,000 layer and broiler breeding farms contain. 5 -day-old d. Poultry industry of Pakistan with a value of US \$ 26 Netherlands, Germany and the united states annually 100,000 grandparent (gp) is importing girls small line profile. These 450,000 metric tons of poultry meat production giving rise to 500 million commercial broilers produced 5 million parent flock gist. Thus, the poultry sector the general public to provide animal protein and animal protein in large part iscontributing difficult to meet the difference isstriving., but importantsector heat stress in the form of a great problem. Manually and poor management

practices coupled with the warm and humid air conditions in herds and poultry production an unmanageable mortality depresses their growth and acquisition is uneconomical, poultry meat increases resulting in serious decline. Environment controlled houses wind chill effect negative effects of heat stress and enhancing provide tunnel ventilation which counteracts, can overcome this critical situation. Their homes highly mechanized automatic chain feeding and nipple drinking system equipped with the poultry production is very favorable for the environment.

The data from animal protein foods to reduce the gap between the availability of eggs and poultry meat production in the country has been established to enhance the potential of the thing. Such buff stone, torrent, light sussex, rhodes island red breeds some of the world's major success in pakistan with the desired traits are hatched. Innovative poultry that has a special significance for countries like pakistan. Enhance the nutritional quality of poultry a simple and relatively inexpensive method of increasing the amount being demanded.

### **Recent Government Initiatives**

In 2008-09 and 2009-10, the government has taken some new steps. These wholesome poultry meat supply envisions sustainable development policy that includes poultry, eggs and value local and international markets at competitive prices products. Poultry for the production of sustainable private sector led growth and support to facilitate the goal. Strategies revolve around improving the regulatory framework. Disease control and genetic improvement in rural poultry; environment high-tech poultry production under controlled housing, processing and value addition, to improve bio-security, based on the research and development and education and training needs of farmers. 15-20% of the annual growth of the poultry sector envisaged.

Consumer prices in the country to help reduce moreover, the federal government in 2009, poultry production to reduce input costs, which was aimed at zero duty, i and vaccinations for poultry feed allowed to import maize. Moreover, sales tax exemptions to encourage the creation of value chain of the industry for raw poultry meat was. Price china to facilitate the establishment of industry, government poultry meat processing machinery / equipment, poultry equipment import (incubators, brooders, evaporation cooling pad, cooling systems, for poultry grain storage), allowed at zero percent custom duty. These, poultry meat increase the shelf life of farmers and consumers to limit the exploitation of middlemen and also to some extent will help keep chicken

prices will stabilize. Next, to protect the domestic poultry industry, the 25% customs duty 2009 since the import of poultry and their products have been charged. [6](#)

Bird flu, rs, bird flu control and prevention national program on "an umbrella project to deal with. 1180.148 million (rs) is under implementation in the country. Compensate poultry farmers to trust them, because of the bird flu angry birds are selected to help these farmers had been allocated rs 324 million project to restore the amount of steps. Similar project under disbursed to affected farmers during 2007-08 was had also 20.5 million.

These measures of poultry production in the country will help to enhance durability and value. "

Over several decades, poultry meat and egg production in the overall performance of the livestock sector have shown positive growth and its impact on the national economy of the country is evident, where a stage has been reached. Supply of eggs and poultry production, small-scale production and large cities and surrounding villages, modern commercial methods based on two different methods. Families keep poultry business or extra income for the business is one of the most promising sources.

In addition, it has a number of advantages poultry. It's a source of income and employment, and it serves as a good return, need more protein, food production. Poultry keeping is becoming more and more capital, and it is very profitable. Business income from poultry broiler or layers for 9 ieks emerge in 20 to 22 ieks 8 starts. 10 ieks under a broiler a young male or female animals. It reared for meat marketing are usually fast growing breeds. Broiler feeds and management depends on the age of marketing, which is always a period of 6 to 8 ieks about 4 kg of feed consumed around 2-2.5 kg and broiler iighing 8 ieks matures. Profits when the demand is higher than the rear broilers breeders will be ready for sale during the festival. A layer of adult age usually lays eggs 250 -300.house eggs to hold it provide high quality protein. Eggs and poultry meat than farm fertilizers that provide a lot of value. It has been observed that every year approximately 40 hens or about 1000 kg of fertilizer production in deep shit. Of meat per year, the economic survey (2008-09), according to 4.52 kg / capita during this period was available in pakistan.

Lack of animal protein in pakistan during 2000-01 to \$ 140 million based on the human population was estimated at 0.93 million tonnes. Average consumption of animal protein, according to the

world health organization's recommended daily requirement than 28g a minor was 17g. The lack of a proper protein sick cost.during recent couple of years with the increase in poultry meat production can be managed, poultry meat and egg production and consumption have increased.

It is a lucrative business that poultry is an ill-known fact, but it includes some risk concerns. Such newcastale disease, marek's disease, infectious bronchitis, gum - borough disease, fowl pox, mycoplasmosis, coccidiosis's, lymphoid andadino hydro pericardium as virus infections are very common in poultry chicken. These diseases quickly poultry birds and bird affectthe tremendous effects on growth.

Poor food they consume, and the disease spread components, the use of meat, too, affects the health of our customers. A solution to this problem proper and regular vaccination of poultry livestock.

Food for millions of people in the industry and is a source of employment, but also, in the form of heat stress, a major obstacle facing the development butis. Atropical country and pakistan during the summer temperatures reached 40c. Even theaverage temperature forthe greater part of the year out by high thermo-neutral zone is ill. His business environment due to severe badly affected for four longmonths. During this period he continuetheir flock feed intake, growth rate, iightgain, with mortality in broilers fcr to deal with poor performance, either completely or close their business have to.

### **Bird Flu (Avian Flu)**

Bird flu usually only affects birds and sometimes a type of influenza virus that affects pigs is due. Sick or have died from bird flu that affects humans by direct contact with infected birds.like had the flu, bird flu different strains (varieties) are many. Only a few such as reduced egg production birds mild symptoms. Other strains are more dangerous for the birds - they spread rapidly produce more severe symptoms, and almost always kill birds.

Recently infected people in asia and the middle east that is the h5n1 strain of bird flu. H5n1 strains that are dangerous for the birds is one. Became infected with the h5n1 strain of bird flu that caught directly from birds. H5n1 can be spread from a person that has not been proven. Experts h5n1 strain of bird flu that can spread quickly in a new form in person (change) mutate are worried that could. This has happened in the last flu outbreak and a pandemic , known as the cause. A pandemic

that causes serious illness in people and spreads rapidly in population, a disease that is a global outbreak.

Spreading and a pandemic vaccine due to a virus infection that can help. Now there is no vaccine for h5n1 flu virus, scientists from asia, europe, africa and the middle east, the outbreak of h5n1 among birds in the past few years working on one over. So far, human cases in several countries in asia and the middle east has been confirmed. Pakistan is also not safe from bird flu and chicken products, meat and eggs from two sharp decline in demand for the previous example is bird flu outbreak. Million birds died of the disease and thousands more were selected to prevent the spread.

### **Some common problems**

Laying hens are routinely, [d-beaked](#) when young to prevent fighting. Beaks are sensitive, the usual practice of trimming them without anesthesia, some animal rights protection is considered inhumane by agencies. D beaked chickens with chicken beaks will be packed very low. This procedure causes life-long chronic pain and discomfort and decreased ability to eat or drink has been argued. Moreover, poor environment and tight spacing methods of poultry husbandry used for other concerns. Different iather birds unconscious before slaughter conditions and to provide excellent system failure during the rough handling and crowded transport ilfare also cited as concerns.

# **Poultry Supply Chain**

## **Supply Chain Diagram And Stages (Broiler Farming)**

### What's broiler farming?

Farms broiler chickens are a number of entrepreneurial companies for the purpose of creating meat. There poultry increased to meet the needs of customers, every major city, numerous independent contract farmers working the fields as sick as , are. Chickens as day-old chicks are sent to the fields. Age consumers world-processing or companies (hotels, etc.) light specifications is determined by, but usually they are scheduled for delivery to the processing plant at the age of 5 to 8 weeks when production is achieved.

### Civilization

In addition to the beginning of the supply chain, grandparent (gp) and parents and day-old chicks imported products that can be detected with a process. In fact that is drawn in a broiler day old chick is a major product of the supply chain. Import grandparents and parents used to lay eggs a day before the girls with the use of hatchery production.

### Follow company

Production of day-old chicks usually a large company that sold them a contract farmer, or a small, rural level girls child that individual farmers. But most of the girls in his own poultry farm is used by the company.

### Individual farmers

Individual farmers to buy the day before the girls and their own small-scale rural development in broilers on the farm. Revenue generated through the sale of broiler farmers is low and that small-scale farming through the door of their home support.

### End epilepsy

Fully developed or implemented either live broiler chicken, ready to sell. Light a direct implementation of broiler chicken is over; however processed broiler chicken price is higher than that of a straight.



### Slaughter house

Slaughter house broilers slaughtered for just assuming the role of the center is an independent unit owned by the company as sick as can be. Broilers purchased by farmers or contractors are brought to the altar. In many cases, such as in pakistan, such as k & n's chicken companies purchase live broilers and slaughter them in their own factory.

### Processing companies

The nominal rate of broiler slaughter wholesale market wholesalers who sell them on or in processed form or complete the slaughter and clean the users in the form of their sales directly to retailers, such k & n's chicken processing companies either sold as is. Processing companies and end customers by further purification of the meat cut into pieces as desired. Processing company by the customer (home or business), depending on the meat is cut and packaged in customized forms.

### Wholesalers

Such as meat wholesalers in the market, either directly to retailers or end users to sell meat in nominal rates. Moreover, hotels, restaurants and other extra meat consumers and minimal bulk discount rates directly from wholesalers to get broiler meat.

### Retailers

Such as supermarkets and department stores of retailers such as k & n or customer demand directly or processed meat processing companies as a seller acts as an intermediary, either. In addition to dividends from retailers or wholesalers offered by farmers at prices higher than those that sell meat. Hoiver, the existence of retailers to consumers in terms of convenience and time and effort saving offers. In addition, retailers broiler producers to market their product marketing and distribution of basic tools are employed.

### Export

Many times, good prices broiler meat exports to nearby countries is produced in pakistan. Chicken domestic demand is low, and the over supply of meat when especially during off season, the best option available for export producers.

## **Stages of the supply chain (layer agriculture)**

### Layer is farming?

Period for layer hens laying their eggs or their products, especially eggs for use both directly to consumers and business. Always in demand skills for laying eggs that are picked up and placed a shortened form of epilepsy. Groceries directly to consumers, restaurants and even fast food outlets can join. Their end products that use egg business bakeries, flour manufacturers, producers of biscuits, and processed food manufacturers include.

### Civilization

The eggs and egg-laying hens to produce large quantities of laying process requires.

### Farmer / company

Companies by layers used for laying eggs or eggs in the box and buy directly from farmers that are either owned their own farms.

### Eggs

Eggs, clean tilve (dozen) and usually boxed set of 360 eggs (30 dozen) are packed in boxes containing large.

### Wholesalers

Like broilers, eggs to sell large quantities of eggs in bulk rates through wholesalers or retailers who either are sold.

### Retailers

Dozen or dozen retailers and their profitability is determined by the commission in charge of the eggs sold in packs sell eggs.

## **Supported By The Poultry Industry, Other Industries**

### **Pillow making**

A small-scale village level, small-scale poultry feathers are sold to buyers in making the pillows are traditionally used. The industry is small and very much a growth in the pillow industry can be

taken seriously ill, leading to the development of the poultry industry hoiver, not on a commercial basis.

### **Fertilizer industry**

Rearing of poultry manure or waste material resulting in a very effective fertilizer and agricultural use is a relatively widely used. Catalyzing the cultivation of potatoes helps product development involves the use of the poultry manure fertilizer. With the help of small efforts, taken seriously, so once again, progress in the field of poultry manure as raw material for the production of poultry manure should be used, which can positively impact the fertilizer industry .

# **Poultry Methods And Operational Techniques**

## **Inputs And Processes**

Input the necessary forms for a broiler farm farm equipment (drink, feed trays, brooders, and feeders), fixtures and other consumer electronic products (feed, vaccines and medicines, rice husk or saw dust, water, electricity, etc.) Are included. The following processes and details related to broiler farming, and with minor changes, layer and breeder farming is.

### Prinking

Appropriate considering the temperature needed to keep the rest of the girls. Coal or sawdust iek farm. In first phase of poultry thinking is burned to supply heat, 95 ° f and is very comfortable. Iek the first one, it girls, four to five times daily condition (temperature) is observed essential to. Hover thinking they should huddle and move away, but should not be moving around evenly. As girls grow, the temperature reaches approximately 70 ° f until the sixth iek iek per ° f lower than can be of 5 on.

### Poultry Shed

The proper place for each bird shed with a flock of birds should be big enough to keep. Shade poultry product that helps to maximize the production environment, temperature, security and management should provide.

### Area And Space

Place one foot per bird is an ideal arrangement, but 0.65 feet per bird is enough.

### Feeding

Broilers are usually rations are fed up with the following two types:

Broiler starter: this old broiler birds fed the five ieks.

Broiler finisher: this marketing and continued age until the age of five than ieks is fed broiler.

Three or four times each day to encourage feed intake and feeding starter and finisher diet prevents various components will need wastage. percentage in appendix e. this given at the beginning and the

finisher feed mills, developed can be obtained in the form. Girls a clean, dry and well-ventilated room should be sick. Houses should broiler birds that provide fresh air and ventilation is adequate to take off moisture. The entire building, including litter and all equipment should be fumigated. It is necessary to provide adequate feeder space. Ideally, a pan for 50 types of bird feeders is insufficient.

### Lighting

Most broiler grows growing period during the early thinking and provide 24 hours of light. 1-2 hour period using intermittent lighting window recent research conducted in buildings,, efficiency. initially has shown very good feed for the first fifteen days, light intensity 40-60 per 200 square feet of space watt should be replaced by the start of the third week 15 watt bulb.

### Litter

Litter to prevent direct contact with the floor is spread on the floor. Straw, rice husk and sawdust litter commonly used to make. It should be dry and free of clumps. Caked or moldy materials should be removed and filled with fresh materials. Widely dirt and dust, it also should not be used. Litter for each herd using new disease-free is good for raising broiler.

### Drinking

Drinking enough space should be provided for the birds. Drink should contain, fresh, clean and cool water. It is necessary to provide additional water during summer. A drinker is sufficient for 50 birds.

### Fumigation And Spraying

Clean, and wash with disinfectant solution, and that they are dried carefully broiler house must check all equipment and walls. Visit birds. disinfectant room solution, phenol, potassium permanganate, carbolic acid and can be prepared with formaline washed and sprayed white before it should be. Sodium hydroxide / caustic soda with warm water solution can be used to clean the house.

To sanitize germs and pests broiler house, put it formaline to potassiumpermanganate which is developed by withformaldehyde gas, fumigated is. Gas infiltrates every corner of the room so the room for 30 minutes after thefumigation empty and should be sealed.

### Vaccination

Vaccination of girls can be injected, also found in thewater and it also can be done through eye drops. The average cost per vaccination of birds at most variesbetien. 2-5.

### Important tips

Poultry of all types and rapid changes in temperature as the ill effects of rain, will protect their housing needs. Home to be dry at all times, and being free from drafts should provide good ventilation while. Poultry shed design and structure of local government will have to comply with regulations.

Consideration should be given to the person caring for the hens. Eggs can be collected from outside the shed so that, for example, nest boxes can be arranged. Without going into the shed eggs may be deposited alternatively, three or four compartments with an open-topped nest, just inside the door can be placed.

Iek filling feeders and feeding once a permit should be easy enough to contain food. Leak proof and easy to clean drinking should be. Regular cleaning and disinfection of disease organisms such particles, lice, fleas and ticks as external parasites, well have reservations against the construction of the shed itself, should be easy to clean. Ideally, the cool shade position east or south wall of nest boxes, should be sited with north face. The wood and metal sheds, timber and fibro sheeting, or as the metal can be made from a variety of materials. Appendix f shows the layout of a small poultry shed shows the diagrams.

Hens are unable to find enough shade during the summer, on a very hot day hessian pen with wire mesh may be necessary to cover the front. Under a good investment to prevent heat from radiating and stressed birds, line the underside of the roof insulation is used. On very hot days (35 ° c higher) in a garden sprinkler on the roof of the shed can be used. Rats and mice around poultry sheds can thrive, so caution should be discouraged from . Ideally, the floor should be concrete walls and

doors should be free from large cracks and holes. Where the wooden frame is used, loir parts should be covered with sheet iron. Drain outlets should be sheathed in iron or concrete. [8](#)

## **Manpower Requirements**

Semi-skilled workers in the form of feeding, vaccination and care needs to cleaning operations. One person can easily handle 3,000 birds. A two people will 7,500 bird broiler farm operations services sought to be achieved.

## **Farm Equipment**

The birds drinking and handling a variety of farm equipment, is required for feeding. Which will require agricultural equipment list is as under:

Brooder

Drum heaters

Small drinking

Large drinking

Small feeder

Large feeder

Transfer box

## **Two Ways Of Shedding**

### Deep Litter System

If properly managed poultry deep litter system provides perfect conditions for. Straw, wood shavings, peanut or rice hulls 100-150 mm cover layer is placed on the floor of the shed. Scratching the content of the birds and their droppings to break down in a compost-like material as the cause of when necessary by adding more fresh content to keep litter to a depth of 150 mm.

Dirt should remain dry at all times, and it becomes caked dirt or will be removed. At the end of the old dirt should be cleaned every year - this is an excellent garden fertilizer.

### Floor Rearing System

A poultry raised floor system, walls and floors structure having a structure consisting of a resident. Poultry house floor flooring systems such as sawdust and wood chips, dirt, eliminates the need to use. It betien broods a lot of fertilizer, resulting in drier and more concentrated form. Therefore no charges have dirt floors and very low moisture content in chicken excrement. Moisture is a key ingredient in the production of ammonia gas, and moist, nitrogen-rich ammonia production are important in poultry house litter that is ideal for growing bacteria. Producers can reduce moisture, bacterial growth, resulting in very low ammonia production is reduced. Reduced ammonia odor emissions from conventional poultry houses always solves the problem. This time, the acidic product which acts as an inhibitor litter, litter ph loir betien apply to the production cycle.

### **Key Success Factors**

#### Monitoring Platform

Broilerfarm proper technical supervision of an enterprise is the key to success. Farm workers should be vigilant supervisor birds.the farm feeding and drinking habits should be aware of the birds remain healthy and disease-free, should ensure the timely feeding andvaccination.

#### Market Information

Business thecity supply and demand of chicken should be aware of the sick. The sick birds to negotiate the selling price of a business that helps. Theprice chicken meat over a year fluctuates. Generally, farm gate sellingprice varies from rs. 36 to rs 42 per kg.

#### Mortality Losses

Farm deaths only if the hygienic conditions can be controlled. Timely vaccination and medicines mortality by 5% below will lossesshould.

### **Threats**

Poultry industry by entrepreneur anindividual some inherent problems which can not be controlled, that is. Since some of the risks faced by the industry are: -



### Disease Epidemic

Diseases like newcastle are extremely dangerous. They can eliminate the bird population, so that the birds by regular vaccines and medicines, to protect against diseases such needs.

### Government Regulations

When the wedding meal ban, industry losses at the start of this law suffered heavy. Chicken consumption by 40% has reduced wedding meal ban.

## **Financial Feasibility Analysis**

Appendix g an investment 5000 3000 broilers and layers are designed to raise revenue and costs that arise when comparing the two tables shows. That comes out in dividends is calculated. First, it is necessary to establish a poultry farm that is invested. The recurring costs, depreciation and other costs have been calculated. Next, i also sell products that is obtained by calculating the return and refund of the difference between profit and costs betien. This is a one-off investment and returns slowly to cover the fixed cost is assumed. Therefore, a payment period is also calculated. 3000 and 5000 broilers and layers, respectively, after taking account of a small-scale poultry business is a profitable venture, and even if the amount is raised, increasing the chances of profit accordingly to focus on is for. Other expenses and miscellaneous expenses of the office of pakistan poultry association, rawalpindi has been taken.

### 3000 broilers on floor husbandry systems increase 6.1 feasibility analysis report

Starting with capital expenditure, the building cost a total of rs. 825,000 including flow and store room. Equipment costs a total of rs. For example, electricity and 863,300 poultry brooders, chick guard, small feeder, small drink, round feeders and automatic drinkers in the process must include all the different equipment. Rs.459, 152. Next, resalable the empty feed bag sick as a result of the sale of broiler meat obtained as the total return for all recurring costs and expenses, including depreciation amount. Log in to rate may, 2010 are as. The total profit is rs. 68,298 broilers fully ready to export poultry to the activity which took 2 months to get.

### Deep litter system under the 5000 commercial layers expand 6.2 feasibility analysis report

Farming is different from commercial layer and broiler farming inevitably requires greater investment and expenditure; hoiver, the product through the egg gets maximum return. It also fully hen meat is sold for consumption, after which each layer to obtain eggs from chickens 52 ieks (1year her) takes. As shown in appendix g. Investment shed, an office, a store room and consists of a labor room. Total building cost equal to 2,600,000. The only equipment required in broiler farming equipment but more quantities.hence total cost of rs. 60,500. The total investment amounts to rs. 2,660,500. Next, recurring, depreciation and laying ieks' costs (52 ieks) is equal to rs.eggs. Also, empty feed bags are sold at the rate of rs may, 2010 the average rate at which sales

are rs.60/dozen 7, 461, 200. Has returned. 10/bag. Use a good fertilizer, which is sold as poultry manure. Therefore, the total profit earned is rs. 666,800 poultry as defined in the table after a year of activities is achieved.

## **Hypothesis Testing**

"poultry demand and supply fluctuations and fluctuations in the prices of poultry products, one of the most important reasons."

Broiler meat and eggs as well as the wide fluctuations in the prices of poultry products has led to a couple of factors that may be. Prices on a daily basis and sometimes fluctuate very often.

Generally, an increase in per capita income and urban population growth in the late poultry meat due to rising costs which are the root causes of high demand for chicken. moreover, the price of meat than chicken loir consumer preferences and demand the maximum is encouraged.

Common sense suggests, an item's price is affected by supply and demand trends, and therefore, as a first step, the poultry wide fluctuations in rates are the result of the demand supply gap or investigation is logical. To analyze the data, for the past ten years has been supply and demand data and a relationship exists or not and how to get the chicken over the same period the average annual prices , is compared with. Regression analysis graphs and poultry prices, supply, demand and the overall difference (reduction) has been established by comparing with.

Poultry prices fluctuate more widely to investigate the reasons behind, the most important thing which includes poultry feed prices than inputs. Feed prices doubled over the last 4-5 years, and consequently the prices of input products and its effect on prices explained by the fact that, especially meat. this rate of poultry. Therefore, these two are related with each other that seems logical. Thus, the regression and poultry prices and feed prices over the last 5 years, compared with the supply of poultry.

Inputs such as feed for chicken, poultry research institute, punjab, the total cost of poultry production accounts for 45 to 50 percent. Input costs have increased in the past in this way, with the appearance of a mass of meat and poultry prices eggs. poultry syndication importance attributed to the overall increase in the price of chicken products because of from. At present, poultry feed mixture by home sick as is produced by commercial feed mills. Pakistan's major cities are located in different parts of several feed mills. Various components required for making poultry feed, broken or coarse grains (wheat, rice, maize, millet, sorghum barley, dried seafood, dried animal

blood, broken lentils and various vitamins) are. Its quality and price value of poultry products from poultry feed and poultry farm eggs and broilers important factor in determining the profitability of the. Feed prices have been increasing steadily. Of cereal grains and other feed equipment cost structure to current global changes, the poultry industry more than 60% of the total cost of production has gone because of the high cost of feed is disabled .

Inflation in pakistan has increased over the last ten years and the prices of poultry products and feed not only in the country but the overall effect is a result of inflation is logical to believe again. Therefore, the overall prices further in the poultry sector, which resulted in higher costs are rising and to investigate, i also feed and poultry prices compared with the rate of inflation.

With all the comparisons and regression analysis, i somewhat wide fluctuations in the prices of poultry products able to explain the reasons behind the anger.

## **Results And Conclusion**

Financial feasibility analysis results hidden in the poultry business to portray high profit potential  
Hypothesis testing results

### **The Supply And Demand Analysis**

For both meat and egg supply and demand data, price, was collected from Punjab. Supply and demand data over the past ten years, the demand and supply of these products suggests that there is an increasing. Especially in the case of meat demand and supply gap is increasing betten hoiver. This is due to the increase in prices of poultry products. A regression analysis and graphical depiction of the shortage and prices for meat and egg shortages and price was -0.53, -0.074 that are related by the slope coefficient shows. Slopes are negative suggests that the lack of data taken as a negative is the lack of, higher prices, more and more. Hoiver, the slope coefficients prices depend on supply and demand, which means that not enough is not enough that is noticeable. The most important thing of supply and demand determine the price of poultry products was proposed where our hypothesis runs against. Next, the fall in the prices of poultry and related betten correlation analysis to find out. Results very good temper. -0.76, which is even higher price for meat, there came out of the egg and egg prices, links, -0.83 will come out. Therefore, fluctuations in the prices further to find out other determinants of feed prices and inflation in the country to carry out needs analysis.

### **The Feed Cost Analysis**

Prices of poultry feed and an insight into the overall trend is positive that the two shows. And poultry feed prices during the past five years has increased many folds in meat and egg prices, with prices of feed (poultry products is an important factor) than the obvious two are positively correlated. Slope coefficient when the meat and feed prices, is 0.086. Egg prices, feed prices are correlated with the slope coefficient is 0.046. These comparisons suggest that there are two dependent variables betten. hoiver, supply and demand, compared to earlier analyzes, prices of feed in poultry products. the correlation analysis yielded an effect on prices that can be observed in the secondary. Eggs that prices and was 0.81, while for feed prices and feed prices, meat prices betten

correlation was 0.86. During the past ten years, the inflation rate prevailing in pakistan in the light of our hypothesis and investigate the problem.

### **Inflation Analysis**

Inflation is on the rise in pakistan. Since 2005, inflation rose to 7.9% in 2007 and 2009, respectively, and 20.3% from the 2000-05, the inflation rate was stable at approximately betien 2-5%. I also feed and greatest prices during 2009 has seen a similar trend in the prices of poultry. Feed prices were double the 2006 price. Inflation in the country with the prices of poultry feed and betien carry out a comparison, i get a very positive correlation. Slope coefficients are as follows:

Feed prices affect inflation = 49.75

= 3.56 meat prices influence inflation

= 1.40 egg prices affect inflation

The result is a relationship poultry feed prices and overall prices of goods in general are dependent on prices is clear. Petrol / diesel prices, electricity bills, feed for poultry and many other products such as high input costs of inputs increased by increasing feed prices and thus reduce the farmer, affect the price of poultry producers' input-output capability. Even the spread of diseases and culling of birds affect supply. Therefore, the inflation rate and feed betien birds.the correlation analysis conducted during rearing to recover the high costs charged higher prices of poultry products, meat and egg prices, respectively, 0.84, 0.87 and 0.76 angry.

Because of supply and demand affect the price of poultry, but subsequent analysis of our data as well as results prove, the major feed input prices, which affect the economy overall depending on the prices.

(finally) contract kashmir only one method has been used for all cases of supply and demand analysis shows regression results.

Therefore, our hypothesis is correct to some extent but not completely, affect the prices of demand and supply forces alone can not be assumed. The pakistan market, download can not that be said.

Speak of daily fluctuations in the value hoiver,, he's a good extent by the forces of supply and demand seem to emerge. Among the other factors of supply and demand, feed prices and inflation rate fluctuations that may cause too, but it is a long-term impact and the daily swings in the prices of poultry can not cause . Moreover, such a monopoly poir and supply and demand are invisible but still plays a role in the price increases every month to keep the poultry retailers and wholesalers, the higher pricing system the use of such factors may be.

Pakistan's poultry industry is growing and expanding rapidly in terms of the supply chain is one of the most organized industries. In pakistan, a major poultry livestock sub-sector has developed over the past forty years has been observed. This extension make a real difference to animal protein continues to fill and a fully balanced nutritious diet by providing them with ilfare and prosperity of the people should be encouraged to promote.



## **Recommendations**

Improved poultry in Pakistan following the approach must be adopted. To increase poultry production practices following is considered necessary. Productivity significantly boost the flow as the commercial poultry sector should be continued.

Dual-source so that the total demand can be catered for rural poultry sector should be increased. Appropriate awareness raising methods and precautions with few birds or even small-scale poultry sheds in open plan homes of people who must be taught.

Private sector, rural development, improving food availability for birds that can be engaged in the production of poultry farms should be encouraged.

Coarse grain production for major crops like those based on target should be increased under programmes just. Furthermore, the price support must be granted.

Poultry against infectious diseases and expanding health services, improving vaccination against the current 25% of rural poultry production farms must be at least 60 percent. In addition, the local diseases reference laboratories should be established to serve the same purpose.

Marketing as a sick private sector to improve poultry disease diagnostic laboratories and vaccine production should be encouraged to set up units.

Small poultry units of various sizes on the surface of village poultry production in rural areas should be set to increase.

Poultry processing plants and cold stores to provide ready market for broilers mass must be created. Access to further increase the processing plants and therefore more business opportunities in the poultry supply chain will help in widening the network.

Poultry marketing centers at various locations in all major cities and towns should be built. Price support participants will be given in this regard.

Egg production costs and demand situation must be determined and hence the rate of sales prospects as eggs must be declared a quarterly basis.

Government poultry prices and quality in order to maintain stability so that steps can be taken day-old chicks and poultry feed on a check must be regularly maintained.

Without a doubt, the past 40 years, the poultry producing animal protein foods shorten the gap in demand and availability betien played a commendable role. However, within a short period of time to reduce the gap, both in the public and private sectors, small and large-scale poultry, meat and meat is necessary to introduce. Thus, quails, ducks, pheasant, partridges and pigeons than other popular bird husbandry.

## **Bibliography**

- Bird Flu (Avian Flu), Teen's Health, [http://kidshealth.org/teen/infections/colds\\_and\\_flu/bird\\_flu.html#](http://kidshealth.org/teen/infections/colds_and_flu/bird_flu.html#)
- Dr. S. M. Alam & M.A. Khan (August 2000), 'Poultry farming in Pakistan has developed as an important sub-sector of livestock', Nuclear Institute of Agriculture, Tando Jam, Pakistan <http://www.pakistaneconomist.com/issue2000/issue32/i&e3.htm>
- Dr. Mustafa Kamal (2008-09), 'Poultry Production Statistics', Pakistan Poultry Association, Rawalpindi
- Pakistan Economic Survey 2009-10, Agriculture, p.30 [http://www.finance.gov.pk/survey/chapter\\_10/02\\_Agriculture.pdf](http://www.finance.gov.pk/survey/chapter_10/02_Agriculture.pdf)
- SMEDA (2008), Environmental controlled Poultry Farm, Pre Feasibility Study, p.4
- The poultry site (19 May 2009), <http://www.thepoultrysite.com/poultrynews/17771/govt-moves-to-boost-pakistans-poultry-industry>
- Victorian Department of Agriculture(Nov 2007), 'Housing a small flock of laying hens', p.1, [http://www.dpi.nsw.gov.au/data/assets/pdf\\_file/0003/195402/small-scale-poultry-housing-layers.pdf](http://www.dpi.nsw.gov.au/data/assets/pdf_file/0003/195402/small-scale-poultry-housing-layers.pdf)

## **LITERATURE**

- Anne Fanatico & Holly Born (2002), 'Label Rouge: Pasture-based Poultry Production in France', ATTRA, [www.attra.ncat.org](http://www.attra.ncat.org)
- Daniel Thiel (2006), 'A System Dynamics Model of the Chicken Meat Supply Chain faced with Bird Flu', University of Nantes and E.N.I.T.I.A.A., Nantes, France
- Eva Klemencic (2001), 'Supply Chain', Management of the Supply Chain, p.7
- Maqbool & K. Bukhsh (2007), 'ISSUES AND ECONOMICS OF POULTRY PRODUCTION: A CASE STUDY OF FAISALABAD, PAKISTAN', University of Agriculture, Faisalabad, Pakistan
- Search Manufacturing ERP (Oct 2009), 'Supply Chain Management', [http://searchmanufacturingerp.techtarget.com/sDefinition/0,,sid193\\_gci214546,00.html](http://searchmanufacturingerp.techtarget.com/sDefinition/0,,sid193_gci214546,00.html)