

**PRODUCTION AND ECONOMICS OF POULTRY FARMING IN INDIA AND ANDHRA  
PRADESH**

**A.Veera Kumari**

Research Scholar, Dept of Economics, Acharya Nagarjuna University

**Prof.M.Koteswara Rao,**

Former Professor, Dept of Economics, Acharya Nagarjuna University

**Abstract**

The poultry farming in India occupies an important position due to its enormous potential to bring about rapid economic growth, particularly benefiting the weaker sections due its low investment requirement and short gestation period.

Poultry is important for increasing productivity in Livestock sector. Poultry sector provides employment to over Six million people in the Country. Poultry sector is dubbed as the one having highest employability per unit of investment among all the livestock sectors. The Indian poultry sector with 7.3% growth in poultry population, has witnessed one of the fastest annual growth of about 6% in eggs, 10% in meat production and 8.35% in broiler production over the last decade amongst all animal based sectors. Despite such progress, the average per capita availability is still merely 73 eggs and 3.4 kg of poultry meat against the recommended levels of 180 eggs and 11kg meat per annum. The organised sector of Indian poultry industry contributes nearly 70% of the total output whereas the rest emanates from the unorganized sector. In spite of a spectacular growth in the poultry sector during the past two decades, a huge gap exists between availability and need of poultry products. Maharashtra was the leading producer of chicken meat (632.32 hundred metric tonnes) in 2020 with a percentage share of (15.57 percent) followed by Haryana (478.63 hundred metric tonnes) with a percentage share of (11.78 percent). West Bengal (475.42 hundred metric tonnes) and Tamil Nadu (467.51 hundred metric tonnes) are in third and fourth position with a percentage share of 11.70 percent and 11.61 percent respectively. total poultry meat consumption in India was (4,107.00 thousand metric tonnes) in the year 2021. When compared with previous years, the total consumption of poultry meat increased every year from 2013 to 2021.

Key Words: Poultry, Meat price, Cost of cultivation, Andhra Pradesh, India

**Introduction**

Poultry is one of the most important and fastest-growing sectors of agriculture sectors today in India. The poultry sector majorly maintains the requirements of protein and nutrition. India today is one of the largest manufacturers of eggs and broiler meat. Poultry sector contributes 1% to National GDP in Livestock 14% GDP. India is now the world's third egg producer in the world (FAO).Poultry meat is the fastest- growing component of global meat demand. India stands the world's second – largest developing country, is experiencing rapid growth in its poultry sector. India has exported 320,240.46 MT of poultry products to the world for the worth of Rs.529.81 Crores / 71.04 USD Millions during the year 2021-22(APEDA). According to world poultry market, India ranks sixth (using FAOSTAT rankings). India ranks third and eighth in production of eggs and meat in the world respectively, said The Economic Survey 2021-22.Egg production in the country has increased from 78.48 billion in 2014-15 to 122.11 billion in 2021-22 taking the per capita availability of eggs to 91 eggs per annum in 2020-21.Meat production in the country has increased from 6.69 million tonnes in 2014-15 to 8.80 million

tonnes in 2020-21.

The poultry farming in India occupies an important position due to its enormous potential to bring about rapid economic growth, particularly benefiting the weaker sections due its low investment requirement and short gestation period.

Poultry is important for increasing productivity in Livestock sector. The growth potential of this sector is bright due to regular flow of income throughout the year in the rural economy of the India. Among the livestock sector Poultry industry contributes about Rs. 125 lakh Cr accounting for about 1 per cent of the national GDP and about 14% of the Livestock GDP. In livestock 65 per cent is contributed by meat products, 22.5 per cent by dairy products and 12.5 per cent by poultry products (FAO Statistical Book, 2021). Poultry sector provides employment to over Six million people in the Country. Poultry sector is dubbed as the one having highest employability per unit of investment among all the livestock sectors. The Indian poultry sector with 7.3% growth in poultry population, has witnessed one of the fastest annual growth of about 6% in eggs, 10% in meat production and 8.35% in broiler production over the last decade amongst all animal based sectors. Despite such progress, the average per capita availability is still merely 73 eggs and 3.4 kg of poultry meat against the recommended levels of 180 eggs and 11kg meat per annum. The organised sector of Indian poultry industry contributes nearly 70% of the total output whereas the rest emanates from the unorganized sector. In spite of a spectacular growth in the poultry sector during the past two decades, a huge gap exists between availability and need of poultry products. Therefore, to meet the domestic need, it is required to increase meat production by six times. Increase in population growth, changing life-style, shifting of food habits, rapid urbanization, increased per capita income, awareness about health care, etc. are contributing towards rising demand of poultry products. Thus, the growth potential of this sector is bright due to regular flow of income throughout the year in the rural economy of India. Diversification of agriculture through allied activities like poultry farming has acquired added significance for solving the agrarian crisis of the state. Adoption of poultry farming, will meet the growing demand of poultry products and nutrition. Indian Poultry Industry is 5,000 years old; recently it began to witness remarkable growth from backyard to poultry industry. Nearly 70 per cent of the total output of poultry industry is contributed by organised sector and remaining 30 per cent by unorganized sector. There are about 1500 hatcheries operating in the country. India's poultry industry represents a major success story. Poultry Industry is providing nutritional security to the poor and also offering employment to millions of people in rural and urban areas. The future for Indian poultry Industry appears to be very favourable. The most conservative estimates predict a two- to three-fold increase in poultry production over the next ten or fifteen years.

**Objective:**

The main objective of the paper is to analyse the trends in production of broiler meat (Chicken) and consumption levels in India. And to analyze the investment, cost and profit of the poultry farmers in the study area and to identify the problems faced by the poultry farmers.

**Methodology**

The present study based on primary data and secondary data collected from 100 poultry farmers in Guntur district of Andhra Pradesh by adopting purposive sampling method. A well-structured questionnaire was prepared and was pre-tested. After incorporating the necessary changes in the pre-tested questionnaire, it was administered and required information about the framing was collected from the respondents during December- January 2022. Besides averages and percentages were used.

**Production of Poultry Meat**

India is the third-largest producer of broiler meat in the world. India's per capita consumption of chicken meat is estimated at around 3.1 kg per year, which is low when compared to the world average

of around 17 kg per year. The details of the production of poultry meat are given in Table 1. It could be observed from Table 1 that Maharashtra was the leading producer of chicken meat (632.32 hundred metric tonnes) in 2020 with a percentage share of (15.57 percent) followed by Haryana (478.63 hundred metric tonnes) with a percentage share of (11.78 percent). West Bengal (475.42 hundred metric tonnes) and Tamil Nadu (467.51 hundred metric tonnes) are in third and fourth position with a percentage share of 11.70 percent and 11.61 percent respectively.

**Table-1 Production and Consumption of Poultry Meat**

<b>State</b>	<b>Production (Quantity in 100 MT)</b>	<b>Share (%)</b>
Maharashtra	632.32	15.57
Haryana	478.63	11.78
West Bengal	475.42	11.7
Tamil Nadu	467.51	11.61
Andhra Pradesh	443.35	10.92
Uttar Pradesh	359.44	8.85
Telangana	336.33	8.28
Kerala	178.03	4.38
Karnataka	139.18	3.43
Punjab	125.03	3.08

Source: Food and Agricultural Organization, Statistics-March 2021

**Consumption of Poultry Meat in India from 2013 to 2021**

It could be inferred from Table 2 that the total poultry meat consumption in India was (4,107.00 thousand metric tonnes) in the year 2021. When compared with previous years, the total consumption of poultry meat increased every year from 2013 to 2021.

**Table-2 Consumption of Poultry Meat in India from 2013 to 2021**

<b>Year</b>	<b>Consumption (Quantity in 1,000 MT)</b>
2013	2,872.85

2014	3,064.96
2015	3,283.70
2016	3,428.04
2017	3,540.60
2018	3,700.30
2019	3,737.30
2020	3,955.70
2021	4,107.00

Source: Food and Agricultural Organization, Statistics-March 2021

***COST & PROFIT ASSESSMENT OF POULTRY FARMING***

Cost of cultivation of poultry farmers per annum is presented in the table-3. The cost of broiler farming including variable cost and fixed cost. The fixed cost variable wise shows that it is accounting for 11.09 percent (Rs.1,47,380) on small farms followed by Rs12,04,706 on medium farms and its accounting for 30.90 percent of the total cost and Rs. 16,76,074/- on large farms, its accounting for 30.36 percent. The fixed cost of broiler farms is observed that there is direct relationship between farm size and fixed cost. In the fixed cost, building/shed and store room is high it is around 6.1% of the cost on small farms, 24.96 percent of cost for medium and 24.79 percent on large farms respectively. The amount spent on electricity, motor pump is Rs. 15,687 and Rs. 4,725/- on small farms Rs. 25,255/- and Rs. 7,666/- on medium farms and Rs. 22,500/- and Rs. 12,350/- on large farms. And the expenditure on feeder water, brooder and fogger is found to high in medium and large broiler farms.

The variable cost of broiler farming is clearly shows that, the major cost of broiler farming is chick and feed cost. The cost of feed to the total cost is found to be high in small farms which is Rs. 74,119/- which is accounting for 56.21 percent followed by Rs. 23,70,368/- on large broiler farms and Rs. 17,47,364/- on medium broiler farms which accounting for 44.83 percent. The expenditure on feed cost constituted the most important input it is inverse relationship between farm size and cost of feed. The cost of main variable is day old chick, the cost of chicks is found to be high in small poultry farms Rs. 2,97,500/- which is accounting for 22.60 percent followed by large poultry farms Rs. 10,50,000/-(19.02 percent) and Rs. 6,65,000 on medium farms, its accounting for 17.06 percent.

Next cost of poultry farming is interest on variable cost is found to be high in small poultry farms which is 5.03 percent followed by 3.94 percent on large and 3.91 percent on medium broiler farms. And interest on fixed cost is found to be high in medium farms which is accounting for 2.81percent, followed by large farms (2.76%) and small broiler farms (1.02%). The marketing cost like transport and advertising cost is found to be high is large farms small and medium farms are not spent on transport and advertisement. The cost of labour is found to be high on small farms Rs. 25,000/-, Rs. 55,000/- spent on medium and Rs. 60,000/- on large farms.

The data on cost of broiler farming is clearly concluded that the fixed cost is increasing with increasing the poultry farm size. The cost of feed is important variable its share is found to be high in small poultry farms (56.21%), medium (44.83%) and large (42.94%). Another major variable day old chick is found to be high in small farms (22.60%) large farm (19.02%) and medium poultry farms (17.06%)

**Table-3 Average Cost and Revenue of Poultry Farmers**

	Small	%	Medium	%	large	%
Building construction	35000	2.66	600500	15.40	1283255	23.25
Store room	35000	2.66	372500	9.56	85000	1.54
Motor pump	15687	1.19	25255	0.65	22500	0.41
Pipeline fitting	5000	0.38	7888	0.20	10166	0.18
Water tank	4000	0.30	8000	0.21	8000	0.14
Feeder	4543	0.35	10892	0.28	15800	0.29
Waterer	5000	0.38	15333	0.39	20700	0.38
Brooder	4875	0.37	7113	0.18	12333	0.22
Electricity fitting	4725	0.36	7666	0.20	12350	0.22
Ventilation cloth	5152	0.39	8790	0.23	15800	0.29
Sprayer	1500	0.11	3750	0.10	5000	0.09
Fogger	10000	0.76	12000	0.31	15000	0.27
Fan	3500	0.27	8000	0.21	10000	0.18
Spray pump	0	0.00	2500	0.06	2800	0.05
Weighing machine	0	0.00	5000	0.13	5000	0.09
Interest on total fixed cost @ 10%	13398.2	1.02	109519	2.81	152370.4	2.76
Total fixed cost	147380	11.19	1204706	30.90	1676074	30.36
Cost of chicks	297500	22.60	665000	17.06	1050000	19.02
Cost of fed	740119	56.21	1747364	44.83	2370368	42.94
Cost of litter	2000	0.15	4600	0.12	8500	0.15
Cost of medicine	15937	1.21	34546	0.89	58758	1.06
Cost of vaccination	6000	0.46	8000	0.21	14000	0.25
Electricity bill	15000	1.14	24000	0.62	56000	1.01
Transportation	0	0.00	0	0.00	5000	0.09
Human labour	25000	1.90	55000	1.41	60000	1.09
Miscellaneous (Repairing)	1500	0.11	2500	0.06	3500	0.06
Interest on total variable cost @ 6%	66183	5.03	152461	3.91	217568	3.94
Total Variable Cost	1169239	88.81	2693471	69.10	3843694	69.64
Total cost	1316619	100.00	3898177	100.00	5519768	100.00

**Source:** Primary Data

### **PROBLEMS FACED BY THE POULTRY FARMERS**

Poultry Farmers were asked to rank the problems faced by them while doing their farming. The problems were listed and the farmers were asked to rank these problems in their order of priority. The ranks were then converted into percent position and from the percent position the individual scores were determined on a scale of 100 points by using Garrett's Rating Scale. The average scores and the ranks corresponding to each problem are presented in table 4. The major problem faced by the farmers were High Feed Cost and Low meat Prices (1st rank), followed by Labour Problems (2nd rank), Investment (3rd rank) Feed and Marketing (4th rank), insufficient Power Supply (5th rank), Managerial Problems', (6th rank), Control Measures (7<sup>th</sup> rank), lack of Export Facilities (8th rank), Lack of Transport/Storage Facilities (9th rank), Health Coverage (10th rank), Availability of Raw Materials (11th rank), Extension and Training Facilities (12th rank) and cannot utilize Improved Technology (13th rank). In short the poultry

farmers wanted to get high price for meat, solution for labour problems, to encourage investment and continuous power supply for their industry production

**Table -4 Problems of the Poultry Farmers**

S.No	Problems	Mean	Rank
1.	Availability of Raw Materials	38.3083	11
2.	Improved Technology	32.3583	13
3.	Control Measures	48.025	7
4.	High Feed Cost and Low meat Prices	73.775	1
5.	Lack of Transport/Storage Facilities	47.8333	9
6.	Investment	60.9417	3
7.	Labour Problem	61.5915	2
8.	Power Supply	53.2667	5
9.	Feed and Marketing	57.9	4
10.	Export Facilities	48.0167	8
11.	Health Coverage	43.625	10
12.	Managerial Problems	48.125	6
13.	Extension and Training Facilities	35.5833	12

Source: Primary Data

**Conclusion:**

The poultry farming in India occupies an important position due to its enormous potential to bring about rapid economic growth, particularly benefiting the weaker sections due its low investment requirement and short gestation period. Poultry is important for increasing productivity in Livestock sector. Poultry sector provides employment to over Six million people in the Country. Poultry sector is dubbed as the one having highest employability per unit of investment among all the livestock sectors. The Indian poultry sector with 7.3% growth in poultry population, has witnessed one of the fastest annual growth of about 6% in eggs, 10% in meat production and 8.35% in broiler production over the last decade amongst all animal based sectors. Despite such progress, the average per capita availability is still merely 73 eggs and 3.4 kg of poultry meat against the recommended levels of 180 eggs and 11kg meat per annum. The organised sector of Indian poultry industry contributes nearly 70% of the total output whereas the rest emanates from the unorganized sector. In spite of a spectacular growth in the poultry sector during the past two decades, a huge gap exists between availability and need of poultry products. Maharashtra was the leading producer of chicken meat (632.32 hundred metric tonnes) in 2020 with a percentage share of (15.57 percent) followed by Haryana (478.63 hundred metric tonnes) with a percentage share of (11.78 percent). West Bengal (475.42 hundred metric tonnes) and Tamil Nadu (467.51 hundred metric tonnes) are in third and fourth position with a percentage share of 11.70 percent and 11.61 percent respectively. total poultry meat consumption in India was (4,107.00 thousand metric tonnes) in the year 2021. When compared with previous years, the total consumption of poultry meat increased every year from 2013 to 2021.

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