

## POULTRY DEVELOPMENT INDUSTRY IN RURAL INDIA

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As the Poultry Industry is among the fastest growing in the world, it needs greater integration, better cost-effectiveness and improvement in the distribution. More retail outlets, mass gathering and creating awareness home to home about the nutrient values of chicken and eggs Poultry industry in India needs good branding system in order to increase the consumption of chicken. The poultry companies have to encourage direct procurement of maize from the farmers by using contract farming, models that are currently use in oilseeds and wheat.

**P**oultry is one of the fastest growing segments of the agricultural sector in India today. India is now the world's third largest egg producer and the fifth largest producer of broilers. Broiler production in 2016 is around 42 million tons which is approx. 8 per cent more than last year. The demand for processed chicken meat is growing between 15 to 20 per cent per year. Egg production in 2016 is approximately 80 billion eggs, upto 5per cent more than last year. While the production of agricultural crops has been rising at a rate of 1.5 to 2 per cent per annum, eggs and broilers has been rising at a rate of 8 to 10 per cent per annum. The four southern states - Andhra Pradesh, Karnataka, Kerala and Tamil Nadu - account for about 45 per cent of the country's egg production, with a per capita consumption of 57 eggs and 0.5 kg of broiler meat. The eastern and central regions of India account for about 20 per cent of egg production, with a per capita consumption of 18 eggs and 0.13 kg of broiler meat.

### Rise of Rural Backyard Poultry in India:

- Transformation from a Backyard Activity to a Major Commercial Activity.
- Good investments in breeding, hatching, rearing and processing.
- Rearing of descript hybrids such as is Hyaline, Shaver II, Babcock etc.
- More entry of private enterprise and increased scale of operation.
- Minimal government intervention.
- Considerable support from the complementary veterinary health, poultry feed, poultry equipment, and poultry processing sectors.
- Growing Production of Eggs and Broilers.
- Increase in manufacture of egg powder and frozen, processed broiler meat essentially to cater to export markets and markets in the metropolitan areas of India.



- Exports of poultry products from India comprise table eggs, meat, live birds and value-added products such as egg powder and frozen yolk.
- At least 80 per cent of employment in the poultry sector is generated directly, while 20 per cent is engaged in feed, pharmaceuticals, equipment and other services required by the poultry sector million people
- Source of cheap source of nutrition thereby healthy living.
- 70 per cent of the layer birds were in the states of Andhra Pradesh, Tamil Nadu, Maharashtra & Karnataka in South and only Punjab in the North.
- More production units are coming up in Uttar Pradesh, West Bengal, Bihar and North-Eastern states to get fresh eggs at more reasonable costs saving time and money on transport.
- Social issues around the large farm units like manure handling, labour availability and environment pollution are putting a limit on expansions.

### Present Scenario:

Poultry is the most organised sector in animal agriculture, worth rupees one lakh crores. The growth is 6-8 per cent in layers and 10-12 per cent in broilers per year against the growth of agriculture as a whole which is around 2.5 per cent. Eggs and chicken are accepted by all communities and are available at the most reasonable prices. There is scope for enhancing the production. Production is getting more organized and moving ahead of consumption is resulting in optimum prices and with minimum profits. More than 100 million people are employed in this industry. It accounts about 3 per cent of the total GNP and 10 per cent of the total GNP attributed to livestock products. This sector is growing rapidly at the rate of 15 to 20 per cent and it is about Rs 65 billion-mega industry. It accounts for a turnover of more than Rs 95 billion at the retail level.

### Present Consumption:

In the domestic market, the consumption of poultry meat has been low due to many reasons. The main reason is the low purchasing power of people. Only 25 per cent of the population living in urban areas consumes about 75-80 per cent of eggs and poultry meat. The per capita consumption of egg is 100 and poultry meat is 1.2 Kg per person per annum in urban areas. But in rural areas, it is only 15 eggs and 0.15 Kg poultry meat.

### Different Sectors

#### 1. Layer Industry:

- Large units with million birds and 100,000 birds in one house are coming up.

**Table 1: Growth of the Layer Industry in 25 years**

S.No	Parameter	1990	2015
1.	Layer birds (crore)	10	24
2.	Layer feed price (Rs)	12	22
3.	Egg price (Rs)	1.5	2.90
4.	Eggs per head/ year	20	68
5.	Eggs per hen	260	310
6.	Average layer farm size	20000	200000
7.	Separate brooding	10 per cent	80 per cent
8.	Feed automation	10 per cent	80 per cent
9.	Small eggs discount	Nil	Discounted
10.	Eggs cleaning & packing	No	Imp

#### 2. Broiler Industry:

- The commercial broiler chicks ready in 60 days with tender meat started coming after 1975.
- The breeding operations started in Delhi and later shifted to South India. Movement of parent stock, hatching eggs, day-old chicks initiated the broiler growing everywhere.
- The broiler growing period has gradually come down to less than 40 days from 60 days due to huge technical work in the fields of genetics, nutrition, breeder management, hatchery management, housing and disease management.
- "All-in-All-out" rearing is giving excellent results. 2 kg broilers produced on 36 days with 1.5 kg

feed per kg chicken with less than 3 per cent mortality are being achieved on low-cost open houses reared by ordinary farmers.

**Table 2: Growth of Broiler Industry in 25 Years**

S.No	Parameters	1990	2015
1.	Broiler parents housed (cr)	0.7	3.5
2.	Broilers/month (crore)	5	25
3.	Broiler feed price (Rs/kg)	20	30
4.	Chick- en per head (kg)	0.4	2.5
5.	Broiler price/ kg live (Rs)	25	65
6.	Broiler integration	0 per cent	60 per cent
7.	Broiler FCR	2.2	1.65
8.	Days to slaughter (2 kg)	48	38
9.	Multi- age group farms	90 per cent	10 per cent
10.	Chicken processing	1 per cent	7 per cent
	Antibiotics issue	Nil	50 per cent

### Eggs and Chicken: Backyard Production

India has 60 per cent rural population depending on agriculture. Poultry has been there in the backyards of most of the houses since ages, forming a part of nutrition and family income so government has started encouraging the backyard poultry. Improved varieties "Low technology input birds" are bred for this purpose, which are genetically more efficient in production compared to "Native chicken." The birds grow faster than native chicken reaching 1.5 kg weight in 45 days but can withstand variable feed qualities and also supplement themselves by scavenging.

The low technology input birds are mostly dual purpose. "Mother Units" are being encouraged to take care of the brooding & vaccination in the early part of growing (first four weeks) before they are distributed to ensure disease security. "Cluster farming" in rural areas is possible with

these chicken for enhancing the meat production on the lines of broiler farming in which group of 8 to 10 farmers or educated youth can form a cluster and grow the birds in groups of 500 to 1,000 birds in low-cost houses as "organic chicken" by making their own low-cost feeds without chemicals and antibiotics.

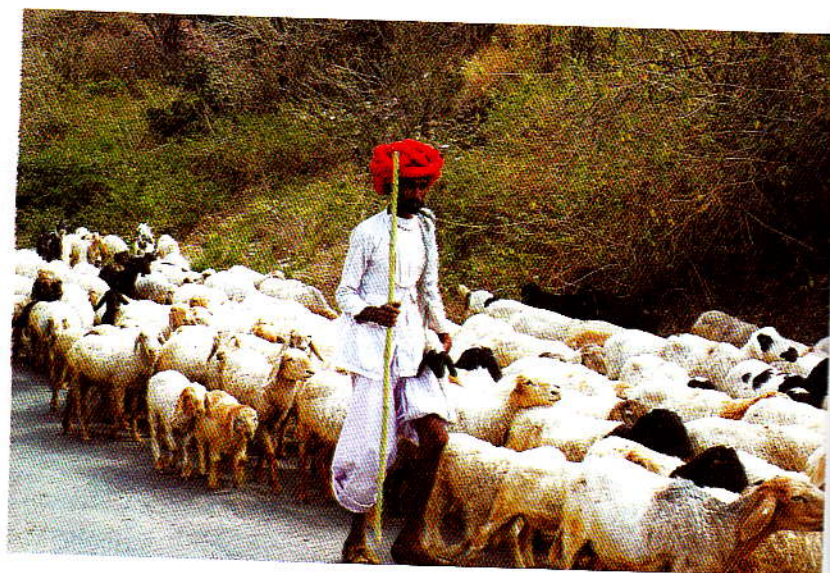
### Strengths in Poultry Industry:

- Fresh, chilled chicken availability in every form from whole, cut-ups, de-boned or in processed, ready to cook, ready to eat form.
- More successes in end product distribution.
- Rationalized pricing of breeder and commercial stock.
- Live chicken sales at retail level will continue to thrive and succeed
- Feed Manufacturing mills have increased in number and quality.
- Feed raw materials will be purchased with ease.
- Better breeding of the birds leading to better stock performance.
- Superior, cleaner and hygienically-maintained live bird outlets to give good quality broilers.
- Emergence of competition in the breeder and commercial layer markets.
- Stabilisation in egg product exports
- Marketing of branded eggs would bring value addition and promote consumption Important role of integrators and corporates in promoting live and fresh chilled chicken sales at retail and institutional levels will give more strength to the industry.

### Opportunities of Growth:

- Government policies relating to investments in poultry and related industries, taxation, import duties, excise duties are favourable.
- Increase in income generation in the rural poor and marginal farmers.
- Consumer awareness and acceptability of eggs and chicken as good source of protein and healthy food is increasing.

- The National Egg Coordination Committee has plans to raise the per capita consumption of eggs in India to 180 by 2015.
- The country has developed strong development network to provide necessary support by building CPDO's (Central Poultry Development Organization) in different regions of India
- The Indian Council of Agricultural Research is the nodal organization for agricultural research in the country is playing vital role.



It undertakes research in its own institutes Central Avian Research Institute, Izatnagar and Project Directorate on Poultry Hyderabad and also in state agricultural universities through All India Coordinated Research Projects and Cess Fund Projects.

- Many countries, which are non-traditional poultry growers, are giving incentives to their poultry industry thus the global demand is increasing.
- Concept of organic chicken – as in India chicken is traditionally raised in backyards and is called "free range birds" is growing.
- Indian eggs are cheapest in the world market (50cents a Kg).

#### Challenges in Poultry Development:

- Poor infrastructure for export is hindering the export of poultry products.
- Competition from international players on opening up duty-free imports, lifting of trade barriers.
- Increasing propaganda and demonstrations by organizations on promoting vegetarianism and Animal rights.
- Occurrence of Salmonella and other diseases in poultry meat.
- Many countries are dumping their poultry products i.e. exporting eggs at prices lower than production cost.

- Many countries are protecting their poultry industry from foreign competition by protective measures like restricting imports, keeping egg prices at lower level etc.
- Stiff competition from Sri Lanka, Pakistan, Brazil and France, all these countries provide subsidies, export incentives to exporters, and keep their price low.

#### Rural Backyard Poultry Development : Government Initiatives

- Objective-** To encourage poultry farming activity and to provide employment opportunities in backward areas.
- Implementing bodies-** GoI, Ministry of Agriculture, Deptt. Of Animal Husbandry, Dairy and Fisheries
- Eligibility/norms/coverage-** Farmers, individual entrepreneurs, NGOs, companies, cooperatives, Self Help Groups (SHGs), Joint Liability Groups (JLGs) etc.
- Nature of support-** 25 per cent subsidy in normal case and 33.33 per cent in case of SC/ST, subject to a maximum ceiling depending upon the schemes component.

Centrally Sponsored Scheme for Establishing Poultry Estates and Mother Units For Rural Backyard Poultry (**Funded by NABARD**)-The scheme has following three components namely, (i) Assistance to State Poultry Farms, (ii) Rural Backyard Poultry and (iii) Poultry Estates.

- i) **Assistance to State Poultry Farms :** Under this component, 100 per cent financial assistance would be provided for strengthening the existing State Poultry Farms. This assistance would be 100 per cent centrally funded for North Eastern States and for other States, the expenditure would be shared between Centre and State on 80:20 basis
- ii) **Rural Backyard Poultry Development :** Under this component, mother units with a unit size of 1500 chicks would be established for rearing one day old chicks of low input birds upto 4 weeks, after which the birds would be supplied to beneficiary families. The mother units will be eligible for a subsidy amount of Rs.0.20 lakh per unit which would be directly routed by the State Department of Animal Husbandry to the financing bank. The mother units will also be eligible for Interest Free loan of Rs.0.36 lakh per unit which will be routed through the financing banks by NABARD.
- iii) **Poultry Estates :** This component will be implemented on pilot basis and only two poultry estates in low commercial activity States/region like Bihar, Chhattisgarh, Jharkhand, Gujarat, Madhya Pradesh, Orissa, Uttarakhand, some districts of Uttar Pradesh and West Bengal, Vidarbha Region of Maharashtra and North Eastern States are expected to be established at this stage. While grant for infrastructure development will be provided to States in the ratio of 75:25 (Center to State), for other components 100 per cent grant assistance will be provided through NABARD. The scheme envisages establishment of a maximum of 100 broiler or layer units of 2000 birds each, per poultry estate, which will be eligible for Interest Free Loan @ 50 per cent of total financial outlay (TFO) of the project. Feed manufacturing units that are set up in poultry estates will also be eligible for Interest free loan @ 50 per cent of the outlay.

**National Livestock Mission:** Various departmental poultry farms will be strengthened in a phased manner. The chicks of low input technology type are being produced at the departmental

hatcheries. These chicks are reared for 2-3 weeks at different government poultry farms/ extension centres prior their distribution in the field. In case, there is demand for day old chicks, then the same are also provided to the farmers.

The Central Poultry Development Organization, Govt. of India, Ministry of Agriculture, Department of Animal Husbandry Dairying and Fisheries, is serving as single window to meet out all the technical requirements of the poultry farmers of the northern region of India and working for the development of the poultry in India. Now it has been renamed as Chandigarh Rangeen (CHABRO) from the year 2007 as one of the Low input bird identified found suitable for rural Poultry. Rural Development through poultry farming is one of the modern as well as multidimensional activities which divide income generation employment opportunity and expert potential etc. Government of India gives special emphasis on rural poultry because rural poultry is pro poor and pro women in nature and also a special tool for women empowerment.

#### **Conclusion:**

As the poultry industry is among the fastest growing in the world, it needs greater integration, better cost-effectiveness and improvement in the distribution. More retail outlets, mass gathering and creating awareness home to home about the nutrient values of chicken and eggs Poultry industry in India needs good branding system in order to increase the consumption of chicken. The poultry companies have to encourage direct procurement of maize from the farmers by using contract farming, models that are currently use in oilseeds and wheat. The feed cost can be reduced by integration and even small reduction per Kg of feed can make the difference in the net realization. Also, the collection of reliable, updated statistics are necessary for immediate and long term planning and thereby helping in preventing shortages. Developing efficient, independent, authority for disease monitoring, biological quality control and biosecurity measures.

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