

## LMIS

Report on

# Poultry Sector

Agriculture Skill Council of India



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## **Introduction:**

India has emerged on the world poultry map as the 3rd largest egg (56 billion eggs) and 5th largest poultry meat (2.6 million tons) producer. Total chicken population has registered an annual growth of 7.3% in the last decade. While farm chicken grew at the rate of 12.4%, desi chicken showed much lower growth rate of about 2%. Other poultry species showed reduction of 2.3 % per annum between 2003 and 2007.

International trade in poultry meat and table eggs accounts for about 10% and 2.5% of their global annual output, respectively. India has also been exporting table eggs, hatching eggs and frozen chicken etc. mainly to Gulf, SAARC and SEA countries as well as dehydrated and frozen egg products mainly to Japan and some European countries but its export of poultry products in terms of volume constitutes about 0.6% of global trade.

The value of output from the poultry sector is nearly Rs 330 billion and there are a total of 300,000 poultry farms in India. Over 90 per cent of the poultry production comes from small poultry farmers, who are located in rural areas. There are about 123,000 poultry farmers in India. In recent years, poultry farming has gained much importance as a subsidiary occupation of the farmers. It could play an effective role in improving the socio-economic status of the rural people by increasing their income besides providing nutritious food through meat and egg. Poultry egg and meat, in recent years, have become important food for 68 percent of the non-vegetarian population of the country.

Poultry has also helped in developing many ancillary industries such as hatchery operation, poultry equipment and processing of poultry products. Egg is used for preparation of a variety of products such as medicines, paints, varnishes, soaps and shampoos.

#### **Human Resource Needs:**

Growing Indian poultry sector also requires trained manpower not only to man the commercial establishments but also to support the required R&D in sync with ever evolving scientific needs. It has been estimated that the highly skilled technical manpower requirement of the Indian poultry sector will almost double by 2050, at the present rate of outturn and the present capacity of the country's educational and training institutions. Besides, the sector would also witness growth in skilled and semi-skilled manpower requirement at least 5% per year for specific and general operations concerning poultry production and processing. Therefore, developing and sustaining the required capacity building infrastructure to meet the ever growing manpower demand of the poultry sector will be a challenge before the Country.

The available miniscule public funded institutional support is far from adequate for the mammoth Indian poultry sector worth Rs. 6000 crores. Support for Poultry Science education and R&D is

meagre in the National Agricultural Research System. Similarly, there is an urgent need to establish National Poultry Development Board on the lines of National Dairy Development Board in the Country in order to develop the Indian poultry sector in a regulated and planned manner, though National Meat and Poultry Processing Board has recently been set up for addressing key issues related to development of meat and poultry processing sector.

## **Issues in Poultry Sector:**

- Regional imbalance in poultry production, processing and demand for processed products continue to exist in the rural areas.
- Alternative poultry species have not found acceptability because of their poor production efficiency.
- Disorganized state of marketing of poultry products, except in case of vertically integrated units and Contract farming continues to be a major concern.
- There is inadequate infrastructure for processing, cold-chain and strict quality assurance of poultry products in domestic market.
- Credit facilities for small/medium poultry entrepreneurs are inadequate.
- Occurrence of emerging and re-emerging poultry diseases and lack of adequate linkages between R&D institutions and private sector to get feedback and transfer of proven technology.

## **Ongoing Programmes**

- Under development of Poultry Estates, two estates were decided to be established on pilot basis in low commercial activity states / region.
- Grants were provided to the State Governments for promoting smallholder poultry rearing in rural/tribal areas of the country with refinance from NABARD.
- Central Poultry Development Organizations have been promoting development of poultry through providing quality chicks for identified low-input technology poultry stocks; diversifying poultry rearing towards duck, turkey & emu, quail and guinea fowl; training of trainers, farmers, women beneficiaries, poultry organizations, NGOs, banks, cooperatives and foreign trainees etc. and regular testing of various stocks available in the country to assess their performance.
- Poultry Venture Capital Fund scheme has yielded good result and needs to be continued with thrust on wider publicity and awareness creation among target groups as well as the implementing agencies to derive maximum benefits to diverse stakeholders
- Support to rural poultry is also being made available under Swaranjayanti Gram SwarojgarYojana (SGSY) with particular emphasis on group formation of women and the weaker sections. Under Poultry Seed Project being executed by ICAR, rural chicken germplasm is being further improved, multiplied and distributed to various agencies.

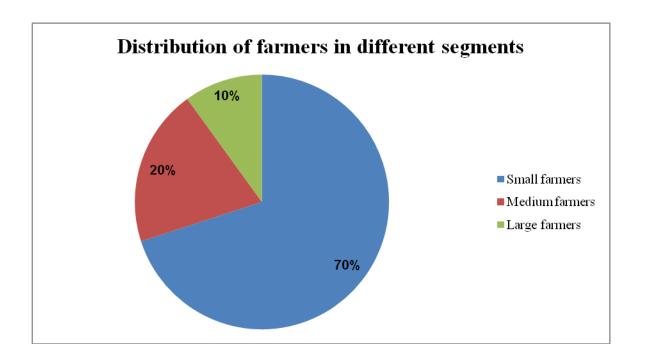
## **Potential for employment generation**

Poultry farming has tremendous potential for expansion and employment generation. Youth in general and educated unemployed youth in particular can take up this profession easily. The inputs required for poultry farming are available locally in rural areas. Simple equipment for feeding, watering and sheltering for small units can be manufactured from materials locally available in the villages with the help of local artisans. Land required for starting poultry units is small. Qualified veterinary doctors and even some businessmen have entered the field. Women are also engaged in decision-making related to poultry production. Poultry farming provides employment to those who are engaged in the production of eggs and chicken meat, hatchery operators, feed dealers, building materials, egg cases and trucks, processors of egg and poultry products and all dealers engaged in the marketing of eggs and poultry meat from the time they leave producers' premises until they are in the hands of the consumers. Poultry keeping is profitable not only to those who are engaged in their keeping but also others who are connected with this industry. According to the Perspective Plan for Tamil Nadu, poultry units are likely to provide employment to at least 150,000 of people. Another 20,000 people will get jobs in other ancillary activities. Poultry production may be taken up as a fulltime or part-time activity in specialised farms. A sizeable income may be realised even if the individual producer is engaged in some other occupation. Poultry farming can be taken as a part-time occupation especially by women, landless, small and marginal farmers. Traditional and commercial poultry is nowadays more popular among rural women. They can earn a handsome income within a short period of time by selling birds and eggs. A matured bird can fetch a profit of Rs 10-15. Poultry sector can absorb competent manpower at a rate of above 6.5 per cent per annum. Growth in veterinary professional manpower is around 2.5 per cent against the desired growth rate of 6.5 per cent per annum to meet requirements of the overall livestock sector. According to the ICAR Vision-2025, an increase in per capita availability of one egg will generate 50,000 more jobs. Similar increase in employment generation is anticipated due to acceleration in broiler production, marketing of eggs and meat, processing, etc. So increase in poultry production activities will help to generate more employment. It will also help to solve gender issues in employment since the poultry operations can be handled with ease both by men and women. Generally, small farms are expanded in the long run with greater strength to meet the increasing demand and there arises a need for engaging the labour from fixed and variable sources. Fixed sources of labour include family labour and permanent hired labour. Variable source of labour include short-term hired labour. With the globalisation of world trade, there are greater challenges today for making the Indian poultry farming globally competitive and viable. With the changing food habits and preferences, there is a great need to promote exportoriented poultry egg and meat-based processing units in the country. Global market surveys have identified India as a promising consumer market in the world. It is both a challenge and an opportunity for all those concerned with all-round development of this sector.

## **Need for training**

Provision of techno-scientific inputs on pros and cons of poultry science through adequately trained human resources is essential to usher the growth of poultry in the years to come. The changing scenario has posed new challenges. There is need to develop technologies that are competitive, costeffective, ecofriendly, farmer-friendly, sustainable, commercially viable and accepted internationally. This calls for modernisation of infrastructure and improvement of human resources. Challenges faced by poultry farmers today are the poultry quality and unorganised marketing sector. Total quality management should monitor the poultry farms for feed, water and environment quality. By adopting efficient quality management with suitable remedial measures, we can improve the poultry productivity and quality. As farmers take care of management, finance, administration, records keeping, etc, they are not able to concentrate on quality. Hatcheries are professionally managed with specialised people working in administration, sales service, finance, etc and farmers need to have at least one or two managers and supervisors for the farm management. Labour is a major operating expenditure next to feed cost. The demand for labour in the poultry houses varies depending upon the types of birds reared. In chick stage, more amount of labour is required due to the extra care and attention needed for chick rearing. Demand for labour can also be measured by keeping detailed labour requirement during different stages of operations. In large poultry farms, labour management calls for the need to appoint highly qualified technical personnel for feed formulation, vaccination and disease control and skilled personnel for feeding, watering and disinfecting the poultry houses and equipment. If there is excessive labour force in a particular farm, different strategies can be practiced for the unutilised labour force. For instance, educated excessive labour force may be sent to acquire more knowledge about the poultry industry by way of attending short-term training courses, seminars, farmer meets, etc. Labour engaged in poultry units is of two types, family labour and hired labour. Family members are closely associated with day-today operations in poultry farming. Training the hired labour for various poultry farm operations is a difficult task. But once trained, it would become the capital for the farm. Due to the recent and rapid migration of labour force from rural to urban areas, there exists a greater demand for trained manpower for poultry farming. In majority of farms, poultry raising and egg production supplement other farm operations. There is a need to train employed and unemployed youth in the poultry industry, in order to improve poultry productivity and quality. Good-quality poultry eggs and meat can fetch good price for the produce, improve consumption and help in branding of poultry products. These can also contribute to foreign exchange earnings of the country by way of increased exports.

There are estimated to be around one lakh layer farmers in India and an equal number of broiler farmers. About 70 percent of these are small-scale farmers (3,000-10,000 birds) and medium scale farmers (10,000-50,000 birds). Only 10 percent are large scale farmers with units varying from 50,000 to 4 lakh birds.



## **Sub-sectors of Poultry sector:**

- Breeding
- Broiler Farming
- Hatchery
- Layer Farming
- Poultry

## **Areas of Employment:**

## **Breeding:**

- Inseminators
- Brooder House Assistant
- Selection and culling Assistant
- Healthcare Service Assistant
- Poultry farm supervisor

## **Broiler Farming:**

- Cleaning Assistant
- Brooding Assistant
- Feeding Assistant
- Bio-security Assistant
- Assistant-poultry worker( Outbreak & Crisis Management)
- Poultry worker( Waste and litter disposal)
- Broiler disposal & selling Assistant

- Vaccination Assistant
- Records Assistant/ Writer

## **Hatchery:**

- Hatchery operation Assistant
- Poultry bio-security Assistant
- Hatchery Operations Supervisor

## **Layer Farming:**

- Cleaning Assistant
- Brooding Assistant
- Feeding assistant
- Bio-security Asst.
- Asst.-poultry worker( Crisis and outbreak management)
- Poultry Worker (Waste and Litter disposal)
- Medication assistant
- PM Assistant
- Service (Vaccinations and Debeaking)

#### **Poultry:**

- Egg Selling Asst.
- Raw Material Ware House Asst.
- Feed Mixing Asst.
- Premix Asst.
- Disease Prevention bio-security Supervisor

## **Recommendation:**

- There is a need for introduction of vocational poultry diploma courses (poultry polytechnics) in SAUs/State Veterinary Universities (SVUs) for matriculates/10+2 students to meet the shortage of middle-level technicians in private sector.
- The Depart of Animal Husbandry &Fishery may consider initiating a rural poultry mission with focus on multiplying low input birds and diversified poultry species viz. duck, quails, turkey, emu etc. and their distribution along with package of practices for efficient and economic management. The ongoing central sector and central sponsored schemes on poultry should be dovetailed to this mission. Poultry Venture Capital Fund scheme should also be part of the mission. ICAR may participate in the mission and make available the low input birds for rural poultry production
- Poultry farming being a component of agriculture, which is a state subject, needs to be
  categorized either a industrial or agricultural activity by the state governments so that the
  concerned stakeholders may reap the benefits accordingly.
- Enhancing poultry production include increasing access to micro finance to the smallholders

- on the lines of crop loans or Kisan Credit Card; removing poultry from the negative list for purpose for extending financial support;
- Increased level of investment in the poultry infrastructure such as cold chain, storage, semiautomatic processing, and providing incentives in the form of subsidy to the poultry exporters.
- A mechanism for efficient marketing network particularly for small and medium poultry farmers as well as quality assurance of poultry products along the value-chain with adequate refrigerated transport/cold storage facilities at terminal markets should be further strengthened.
- Augmentation and modernization of infrastructure and establishment of hi-tech laboratories in
  the area of disease diagnostics & forecasting, feed/food microbiology, feed and poultry
  processing and quality as per International Standards are essential to face the R&D challenges
  emanating from rising demands, imbalances in production-consumption systems and growing
  globalization, etc.

## **Conclusion:**

Public and private sectors need to take up training programme for middle-level management at poultry farms. Several policy interventions are required to protect and improve the poultry farming and create more employment opportunities in the country. Rapid growth in the Indian poultry industry is being driven by a combination of rising incomes, a young and urbanizing population, and declining real poultry prices. The expanding role and influence of poultry integrators, primarily in southern and western India, have been key factors in both boosting production and reducing prices. The integrators appear to have helped increase production efficiency and significantly reduce marketing margins and consumer prices. The pace at which integrated poultry operations spread in the West, East, and North will be a key to the future expansion of India's poultry industry.