

Organic Poultry Farming in India

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Introduction:

Organic farming can be defined as an integrated agriculture approach where the aim is to create humane, environmentally and economically sustainable agricultural production systems. One of the major aim of organic farming is to produce acceptable level of crops for livestock and human nutrition while protecting them from pests and diseases to ensure optimal return to the human and other resources employed.

Increased awareness for health and well being among human beings has contributed to change in human preferences from conventionally produced food to organically grown food. Organic livestock farming is becoming popular at rapid pace worldwide due to ever increasing demand of organic milk, meat and eggs products and increased consumer awareness regarding quality of milk, meat and egg products. Due to the presence of various pesticides, insecticide, chemicals, drugs and hormone residues, life style related problems or issues like diabetes and cancer has increased. Due to intensive and mechanised agriculture, rate of cancer is much higher in developed countries in comparison to developing ones. The increasing demand for organic meat has encouraged nations to produce organic poultry products.

Organic livestock farming is most suitable to our Indian conditions because of indigenous technical knowledge and practices followed by Indian farmers but organic poultry production is still lagging behind. The poultry population in India is huge and a small shift from current conventional poultry farming into organic poultry farming can create a huge market for domestic use as well as export.

In organic farming the products follow the defined standard of production and handling. Organic Poultry is basically rearing of birds without cages, with outdoor access, organic feed and natural treatments.

Basic requirements for organic poultry farming:

- 1. Breeding:** One cannot pursue organic farming without selecting local and indigenous breeds as eggs or meat produced by genetically engineered breeds are not considered to be organic. Natural reproductive techniques should be followed. Birds should be purchased from production units that follow organic standards or should be purchased from farms where parents are raised under organic conditions. Vaccination against common diseases is allowed, however vaccines must not be genetically modified. Non organic poultry can be introduced only under only after obtaining information from accredited body under certain conditions like operating organic poultry farm for the first time, introducing a special breed, renewal of the herd in the farm etc.
- 2. Housing:** The main objective of the organic housing and management standards is to permit poultry birds to exhibit all their natural behaviour patterns and experience minimal stress. Poultry birds should have access to the outdoors, exercise areas, shade and direct sunlight, as appropriate to stage of life, climate and environment. Appropriate clean, dry bedding and shelter designed to allow for natural maintenance, comfort behaviours and opportunity to exercise should be there for poultry birds. Protecting birds from predators is one of the major concerns of housing as caging of birds is nor permitted in organic poultry production. Birds should be reared under deep litter system. Artificial light can be used in poultry farms according to the time prescribed by the certification agencies. Birds must be grown for usually a period of 81 days of age in the organic meat sector.



3. **Conversion period:** The establishment of organic poultry requires a specific period called as “conversion period”. This period is the time taken between the commencement of the organic management on farm and certification of authenticity to livestock farm and its product. The conversion period starts with the day of first inspection. There should be simultaneous conversion of both land and poultry. If the land and poultry conversion are not simultaneous, then the poultry must be raised for certain period of time (minimum time for raising meat poultry is from second day of hatching and for eggs is six weeks) as defined by organic board before the products could be sold as organic.
4. **Feeding:** Organically grown feed of good quality should be fed to the birds. Not more than 20% feed should come from non-organic sources. Except vitamin and mineral supplements, all ingredients must be certified as organic. The diet should be offered in a form in which birds can exhibit natural feeding behaviour and digestive needs. Organically produced concentrated balanced feed ration should be given. Home grown protein sources like peas, beans and rapeseed can be utilized. Peas can be included at the rate of 250-300g/kg for meat birds and 150-200g/kg for laying hens. Sprouted pulses are a good source of vitamins so they can be preferentially used to replace synthetic amino acids. Trace minerals incorporated in the diets should be preferably organic in nature. The quota of essential amino acids can be met through feeding Organic soybean, skim milk powder, potato protein, maize gluten etc. Overfeeding must be avoided. A continuous access and ample supply of drinking standard quality water free from residues should be given. A record of regular water testing should be maintained. Feed used must not contain animal products or any hormone to promote growth, urea or manure, feed or forage to which any antibiotic, including ionophores has been added and any feed, additives or supplements in violation of the Food and Drug Administration.
5. **Record keeping:** It is important to maintain record in organic poultry farming to make it available to the certifying body during inspection. A systematic documentation of all activities, observations and inferences from time to time for future references is advised. The types of records maintained are as following:
 - Parental origin and source breeding records



- Registers indicating source of animals purchase
- Source of organic feed ingredients
- Feed supplements and feed additives purchased
- Organic feed formulation record
- Organic poultry pasture record
- Inventory of health care products, sanitation products
- Monthly flock records of organic egg layers, organic meat poultry, organic poultry slaughter/sales
- Summary and monthly organic egg packing /sales record
- Other management records and materials used.

6. Health Management: In organic poultry, prevention is better than cure. So when all management practices are directed towards the well being of the birds they will achieve maximum resistance against diseases and overcome many infections.

Organic poultry producers must establish preventative health care practices which includes:

- By selection of breeds that are suitable for site specific conditions and resistant to prevalent diseases and parasites.
- Establishment of appropriate housing and pasture conditions.
- Proper sanitation and disinfection practices to minimize the occurrence and spread of diseases and parasites.
- Providing feed ration sufficient to meet nutritional requirements.

Use of antibiotics should be avoided; however vaccinations are permitted only when diseases are expected to be a problem. All vaccination used in poultry should have prior permission from organic council. Use of alternate medicine such as homeopathy and ayurveda should be encouraged for treating diseases. Probiotics, prebiotics and plant extract can be used in organic poultry farming to improve the growth and health status of poultry birds as an alternate source of antibiotics. Hormonal treatment that are therapeutic in nature can be carried out under supervision but growth stimulants are strictly prohibited.

7. Waste management: The waste from the farms should be properly disposed with minimum soil and water degradation.



8. **Transportation:** The birds should be transported very carefully. There should be no stress, injury, hunger, malnutrition, fear, discomfort, pain, disease or suffering during transportation.
9. **Slaughter of birds:** There should be minimum stress and suffering during slaughter of birds according to organic standards. Hygienic packing of poultry products while maintaining standards of organic council is of utmost importance. Use of chemicals while packing is strictly prohibited. Separate rooms for washing, slaughter and bleeding, feather removal etc are mandatory.

Constraints for organic poultry farming in India:

- Lack of proper knowledge about organic poultry farming on the parts of poultry farmers.
- Lack of awareness among consumers.
- Inadequate supporting infrastructure like lack of adequate financial support, lack of certifying agencies, lack of marketing channel etc.
- Adequate training facilities for poultry farmers are not there.
- Strict measures like sanitary conditions and quality followed by developed countries is an obstacle for small and marginal Indian poultry farmers to enter into export of organic products.
- Lack of support from government in form of subsidies for organic production.

Conclusion:

The ill effects of conventional farming are compelling the consumer to shift to the organic food products. In particular livestock revolution implies not only to increase quantum of production but to improve food security and safety of consumers also. India has tremendous potential in organic poultry production as large part of country is organic by default. A minimum support by the GOI for young entrepreneurs will help to reduce the risks related to the poultry sector. Endemics and epidemics like birdflu and Covid-19 has led to the huge losses to the sector. However, assurance of MSP and minimalistic support to farmers would encourage them to move towards organic poultry farming.