



Organic Poultry Farming

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Abstract

Organic Poultry farming aims at animal welfare with environmental and resource sustainability in poultry. With growing population, there is increase in demand of protein diet, farmer's are in quest to use chemicals to maximize the weight gain and increase in egg productions but has paved way for decreased quality of egg and meat and also added to health issues in population mainly related to hormonal imbalance. To combat this, organic poultry production has come into limelight where use of housing systems allows natural behavior pattern (free rearing system) with consideration to animal welfare, use of renewable resources and organic food for feeding to save the environment and maintain a healthy food chain, use of preventive measures to maintain health thereby minimizing the use of therapeutic agents.

Keywords: Farming; Organic; Poultry

Introduction

In recent years, organic farming has developed rapidly whether it be agricultural sector or livestock sector including poultry farming. This is due to the fact that there has been an increased health concern over quality of egg and meat products due to the presence of various drugs and pesticide residues in the conventional products. Organic poultry production is an approach where the aim is to achieve animal welfare, environmental and resource sustainability. Reliance on external inputs, whether chemical or organic is reduced as far as possible. For poultry farming, all the biological and only farm based resources are relied upon to be fed to poultry during rearing. The main objective of organic farming is to optimize breeding, rearing, feeding, housing and general management in order to achieve stability and balance in poultry farm, maximize the health of birds and minimize disease pressure and stress [1].

General principles of organic poultry production

- Reliance on feed resources produced organically, which the birds can adapt to as well as which minimize competition for food suitable for human consumption.
- Maintenance of health of birds with preference to preventive measures and prohibiting the use of prophylactic treatment or drugs with chemotherapy.
- Use of housing system which allows natural behaviour pattern of the birds to be followed, that is, free range system which gives high priority to animal welfare.
- Only natural molting should be allowed to occur in a flock. There should be no incidence of forced molting. Plucking of birds feathers for collection should not take place.
- Organic egg and meat producers cannot use antibiotics except during an infectious outbreak.

Housing and management

- The birds reared for organic production should be raised in a deep litter system of rearing with easy access to free range where their natural movement is not altered due to any reason. The free range should be large enough for proper movement of birds without any hindrance [2].
- Stocking density for deep litter system is 7 birds per m² and it can be 10 birds per m².
- If the rearing system is completely free range, there should be a covered area to protect the birds from rain and other climatic conditions.
- Provide one nest hole for each 8 birds in order to collect the eggs easily.
- If the pullets were initially on conventional grower feed, the organic eggs must be collected only 6 weeks after organic feed is fed to the pullets. So these replacement pullets must be housed separately than the pullets that are fed organic feed from birth.

Feeding

- All organic standards say that ideally 100% of the feed fed to poultry for organic farming should be organic but it give some allowance for some non organic components of the diet.
- Vitamins and amino acids are permitted in the diet.
- In case of scarcity of organic raw materials, conventional feed ingredients free from pesticide residues can be used upto 30% of the total diet.
- The free range area for poultry rearing must have a good organic green pasture without any usage of insecticide or herbicide on the pasture.
- Animal by products like fish meal, bone meal or meat meal are not allowed in organic feed.
- For organic egg and meat production, feed must be free from any drug, pesticide or synthetic performance enhancers.
- In case of a disease outbreak, if we use antibiotics in poultry feed the eggs collected during those 2-3 weeks after antibiotic administration are sold as regular eggs and not as organic eggs [3].

Health and medication

- Vaccinations are only permitted upto 18 weeks as in conventional birds. Afterwards, vaccinations are only given during a disease outbreak but genetically engineered vaccines are not allowed.

- Where possible, treatment is approached by aiding bird's own resistance to disease and use of complementary therapy like homeopathy.
- Organic regulation allows only two treatment courses in a year for a bird otherwise its organic status will be lost.
- Growth promoters, hormones and routine use of antibiotics that are used in conventional poultry birds strictly prohibited as their residues can be found in eggs and meat produced by the birds.
- Deworming is normally not allowed. But if the worm load on bird increases, deworming is done but the eggs produced by those birds are not ranked organic for next 3 weeks [4].

Advantages of organic poultry production

- Organic meat has less fat content compared with commercially raised chicken.
- No residues of antibiotics and pesticides in eggs and meat which is beneficial for the health of human population consuming it [5].
- On organic farms, soil fertility is maintained with organic matter in contrast to conventional farmers who use a load of pesticides and chemical fertilizers deteriorating soil fertility.
- Organic chicken meat tend to be more tender and have more complex and rich flavours.
- Organically produced eggs are way healthier than conventionally produced eggs by poultry.

Disadvantages of organic poultry production

- Due to high cost of organic feed that is to be fed to birds, the farmers didn't find it economical.
- Organic farming leads to decrease in egg production in layers due to which the annual egg production of layers decrease than conventional layers [6].
- It leads to slower growth rate in broilers which increases the time of broilers to reach market weight.
- Less awareness about the health benefits of organic production lessens its demand.

Conclusion

Regardless of a number of health benefits of organic poultry production, still it is not widely practiced in our country because of certain issues- which could be the higher prices of feed grains for organic chicken farming which the farmer is not ready to pay

or it could be the lack of awareness about the health benefits of organic poultry farming and health hazards of conventional poultry production. These issues of cost, handling and production techniques are all measured and researched. Hopefully, the research and awareness will create a circle of balance between the organic poultry production and farmer needs.

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