

# ORGANIC MEAT PRODUCTION: INDIAN PERSPECTIVE

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Confronted with the effects of environmental degradation, as well as with the increasing consciousness on animal welfare, the developed countries are searching for alternative livestock production systems, allowing for preservation of the environment and with high standard of animal welfare without compromising food security and food safety. As a result, many consumers are seeking alternatives to conventionally produced meat. Organically produced meat and the demand for this 'organic meat' is sharply increasing day by day in the so-called developed countries. It is appropriate to give a definition of 'organic agriculture' before discussing 'organic meat'. Lampkin (1990) defined organic agriculture as "a production system which avoids or largely excludes the use of synthetically compounded fertilizers, pesticides, growth promoters and livestock feed additives. To the maximum extent feasible, organic farming systems rely on crop rotations, crop residues, animal manures, legumes, green manures, off farm organic wastes and aspects of biological pest control to maintain soil productivity, to supply plant nutrients and to control insects, weeds and other pests". In a broader sense, we can say 'organic' is not only a matter of final product but the whole process of production has importance under the organic production system. It is a life style, which aims at broader sustainability of life and resources on this planet.

## Requirements for Organic meat Production

Production of organic meat is founded upon a number of basic principles, which are embodied within the standards for organic production. In India, The National Standards for Organic Production developed by Ministry of Commerce and Industry, Government of India, provide guidelines for organic production. Some of those relevant to organic livestock production are discussed below to illustrate the concept.

All animals intended for final sale as organic meat or meat products must be raised on an organic farm. When organic livestock is not available, certification

programme shall allow brought-in conventional animals according to the following age limits- two day old chickens for meat production, 18 week old hens for egg production, piglets up to six weeks and after weaning, calves up to 4 weeks that have received colostrum and have been fed a mainly milk diet. Breeding stock may be brought-in from conventional farms but maximum replacement rate will be 10 percent. Breeds should be chosen which are adapted to local conditions. Reproduction techniques should be natural. Hormonal treatments are not allowed. The livestock should be fed 100% organically grown feed. More than 50% of the feed shall come from the farm unit itself or shall be produced within the region. However, in some cases 15-20% of total feed could be obtained from conventional farms. An important objective of organic livestock husbandry is the avoidance of reliance up on routine and/ or prophylactic use of conventional veterinary medicines. The use of conventional veterinary medicines are allowed when no other non- allopathic alternative is available and where these are used, the withholding period shall be twice the legally required period.

Apart from above mentioned standards, there are several other standards concerning mutilation, record keeping, transport and slaughter. So briefly, 'organic meat' is obtained from animals or birds raised in an organic system, which are based on the physiological and behavioral needs of animals. Animals are not caged, tethered or confined in

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buildings without adequate natural ventilation and lighting. They are given enough room for free movement and kept in appropriate size herds and flocks.

### **SAFETY OF ORGANIC MEAT**

Organic meat production undoubtedly reduces the risk of potential public health problems occurring by prohibiting the use of antibiotics, hormones and pesticides which are suspected to have endocrine disrupting, carcinogenic and immunosuppressive effects and by applying more stringent safety margins to acceptable practices such as use of antibiotics on individual sick animals. The 'organic' label provides the assurance that no food ingredient is subject to irradiation and that genetically modified organisms have been excluded (Kouba, 2001). However, it seems that organic farming leads to higher risk for the contamination of products by parasites of livestock and by microbes present in the manure (Avery, 2001).

### **Animal welfare aspects**

The question sometimes raised on individual welfare of animals with respect to health care, as there is a prohibition on conventionally used veterinary medicines (except in emergencies). The studies of Bennedsgaard and Thamsborg (2000) indicated the welfare of animals was better in Danish organic dairy herds as compared to conventional herds in terms of general health (i.e. production, body condition, hock lesion, chronic infection) and udder health (mastitis occurrence and somatic cell count). The most common health problem on organic farms is parasitism (Biswas et al., 2004). All the leading animal welfare organizations support organic farming. Royal Society for the Prevention of Cruelty to Animals (RSPCA) have stated " we hope that more people/ consumers will become aware of the potential for organic farming as one means of alleviating the suffering of farm animals" (Redman and Holden, 1994).

### **Consumer concerns on Organic meat**

The main motivations for buying organic food are concerns about the personal health, environment and food safety although many consumers also prefer to buy organic food for enhanced flavour and freshness (Krystallis, 2001). Ethical concerns regarding animal welfare and support organic farmers were also motives for some organic consumers. Because organic foods are generally priced higher than conventional food, organic consumers generally have above average income (Hager, 2000). They are also usually relatively well educated and are aware of environmental and health issues. Consumers of organic foods are often young or with young families. Consumers with high

meat consumption were more likely to purchase the labeled (Organic or Bio or Green) meat (Badertscher et al., 1998).

### **Certification and standards**

Implementing organic standards require inspection and the end product of the inspection is certification. Certification ensures that organic products are produced, processed and packaged according to organic standards. Certification also ensures that consumers, producers and traders against fraudulent labeling of non-organic products. There are few international standards for organic production like the IFOAM Basic Standards, EU Regulation No-1804/1999 and Codex Alimentarius ALINORM 99/22A (Schmid, 2000). India too has developed National Standards for Organic Production (NPOP, 2000).

### **Indian scenario**

The problems of developing countries like India are entirely different from those of developed countries. In most of the developed countries, the problem is over production. Whereas, in India the problems are poverty, malnutrition and unemployment, so here food security is the prime goal rather than food safety. In this situation, development of the organic sector itself is very difficult and development of an organic meat sector is more difficult. In India most of the animal husbandry practices are traditional with close resemblance to prescribed organic practices, but we failed significantly to convert our advantages into fruitful gains. Small land holding, low level of literacy, lack of information, inadequate production of feed and fodder, high cost of certification and absence of marketing facilities are some of the hindrances prevailing in India, in the way of conversion from traditional to organic (Biswas et al., 2004).

### **Areas to be strengthened**

1. Organic standards should be modified according to regional agro-climatic conditions.
2. Regional standards should be developed to bridge the gap between the National and International standards.
3. A low cost certification agency must be established, that small farmers can afford.
4. A strong domestic market should be developed, otherwise the benefits of producer's can't be protected as international markets are always fluctuating.

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