A Beginner's Guide to Organic Dairy Farming in India

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Organic farming is a comprehensive approach to production management that promotes and improves the health of the agro-ecosystem and biodiversity. It mainly focuses on the use of management practices above the usage of off-farm inputs while considering the need for regionally adapted systems according to regional conditions. Organic animal husbandry is a type of production system which intentionally avoids the synthetic inputs and uses the organic and biodegradable elements from the ecosystem in terms of animal nutrition, animal's health, animal housing and breeding. It such as feed additives, drugs, and genetically engineered breeding activities.

What is organic dairy farming?

Organic dairy farming means raising milch animals on organic feed (pastures cultivated without the use of fertilizers or pesticides), having access to pasture or outside, along with restricted usage of hormones and antibiotics. The products obtained from organic dairy farming are called organic dairy products. Ideal features of organic dairy farming:

- Cows and calves are fed only organic food.
- ➤ Fodder crops used for feeding animals are grown without the use of synthetic fertilizers.
- ➤ Prior to the first harvest, the land used for cultivating organic crops must be devoid of all prohibited minerals for at least three years.
- ➤ No use of genetically modified organisms.
- Calves must be fed on organic milk only. Use of synthetic milk replacers is not permitted.
- Natural behaviours of animals should not be altered. All animals (above six months of age) must have access to outdoor pastures.
- ➤ Use of slaughterhouse by products, urea is strictly prohibited.
- ➤ The welfare of the animals is given prime importance for which certain procedures like

- tail docking are prohibited and other managemental procedures like dehorning, must be done under minimal stress to the animal.
- ➤ All records should be up to date and sufficient records should be available to verify the compliance with the standards when inspected.

Organic Certification

Farms that want to produce organic milk must sign up with a natural control organization and adopt a generation framework that meets with organic standards. There are 468 organization worldwide which offers Organic Certification Services (Yadav, 2008) and most of the confirmation bodies are in Europe (37%) trailed by Asia (31 %) and North America (18%) (Yadav, 2008). In India NPOP (National Program for Organic Production) and its regulatory body APEDA (Agricultural and Processed Food Products Development Authority), Participatory Guarantee System (PGS -India) under Ministry of Agriculture and Farmer's Welfare are the apex authorities involved in organic production. There are 28 Accredited Certification bodies under NPOP and 562 regional councils under PGS in the country. All products that is organic certified displays the 'India Organic' logo for customer to easily identify certified products and the certificate issued will be valid for 3 years only and must be renewed after expiry.

Certifying bodies in India:

| Name of certifying agencies | Address |
|---|---------------------|
| National Organic Certification Association (NOCA) | Pune, Maharashtra |
| International Resources for Fair Trade (IRFT) | Mumbai, Maharashtra |



| Indian Organic | Cochin, Kerala |
|--------------------------|----------------------|
| Certification Agency | Cocinii, Refaia |
| (INDOCERT) | |
| | Aurangabad, |
| Ecocert International | Maharashtra |
| | |
| Association for | D 1 V (-1 |
| promotion of Organic | Bengaluru, Karnataka |
| Farming (APOF) | |
| Indian Society for | Coimbatore, Tamil |
| Certification of Organic | Nadu |
| Products (ISCOP) | |
| Lacon Quality | Thiruvalla, Kerala |
| Certification Pvt. Ltd. | |
| Skal Inspection and | Bengaluru, Karnataka |
| Certification Agency | |
| IMO Control Pvt. Ltd. | Bengaluru, Karnataka |

Labeling

Single ingredient products labelled as "Produce of organic agriculture". Mixed ingredient products are labeled as "Certified Organic" if minimum of 95% of the ingredients used are of certified organic origin, "organic" if more than 70% of the ingredients used in the product are of organic origin. And products containing less than 70% organic ingredients are not considered organic.









Recommendations that can be considered

CERTIFICATION PROCESS

Receipt of application

Certification body provides standards and operational documents to farmer

Agreement of roles and commitments between the farmer and the body

Regular Field inspection by internal quality system manager and external inspector

Document audit & fees

Preparation of reports by the field inspector

Review of report by a reviewing body

Decisions on certification

- 1. Conversion from traditional farming to organic farming: To convert the land to organic status, at least two years are needed. From the day that land achieves full organic status, organic milk can be produced. Herd likely started nine months before the anticipated date of organic milk production and feeding probably started six months before that.
- 2. **Feeding:** From the start of transformation, all feeds used on the farm must be confirmed to meet organic standards. Both compound ratios



- and acquired mixtures must be entirely organic. Supplementing with minerals is only permitted in cases when organic farming practices fall short of fulfilling certain requirements. However, only with the control body's permission and some synthetic vitamins could be used.
- 3. Health: Before heading to organic production all animals which were companions or offspring to the animal infected with Bovine Spongiform Encephalopathy should be culled. Use of antibiotic and other synthetic drugs should not be done as a preventive measure but can be done to anticipated problems in the event of disease or injury with a withdrawal time period that is at least twice as long as the stated withdrawal time period. Vaccination is allowed in risk prone areas. Except for vaccination, eradication schemes and parasitic treatment if the herd receives more than three courses of treatment its organic status will be lost.
- 4. **Housing:** Space requirements may differ among the control bodies however, loose housing with good bedding material is preferred with minimum space allowance of 6m² for adult animals and 1-1.75m²/100kg live weight of calves.
- 5. Herd replacements: Cattle should not be purchased from the stock which had cases BSE in the past five years. During conversion if old stocks are retained, milk and calves from them can be sold as organic only after the completion of conversion period. Each year breeding stock can be replaced from conventional herd at 10% rate. Up to 12 weeks of age calves should be fed with ration in which at least 51% is of whole organic milk. Bulls used for breeding should also meet organic standards. Artificial insemination is also permitted.

6. **Livestock Manure:** Manure for fodder cultivation can only be procured from organic farms. However, application should not exceed 250kgN/ha/yr.

Constraints:

- Lack of knowledge and awareness.
- Limited availability of organic feed ingredients for formulating compound organic feed.
- Problem of maintenance of proper records.
- limited reach of certification services.
- lack of proper procurement, processing and marketing infrastructure and network.

Opportunities

- Consumers are willing to pay premium price.
- Native breeds are more resistant to stress and diseases thereby decreasing the dependency of allopathic medication.
- Increased awareness about benefits of organic products through social media platforms.
- Increased number of health-conscious people who are diverting for organic habits.

Conclusion

Growing public awareness on food safety issues has fueled the expansion of organic farming over the past few years. Organic farming can provide high-quality food without having a negative impact on the environment or the health of the soil. A number of considerations must be made in order for organic livestock farming to be successful, including minimizing the paperwork and certification fees, obtaining organic feeds and fodder.

References

Yadav AK, 2008. The strategic significance of organic farming to India, In Global Organic Agribusiness.

Khan, M.N., 2017. Insight to organic dairy farming. *International Journal for Innovative Research in Multidisciplinary Field*, pp.6-9.

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