



Organic Seed Certification System in India

(*Munesh Kumar and Kana Ram Kumawat)

Rajasthan State Seed and Organic Certification Agency, Jaipur, Rajasthan-302005

*muneshbhu94@gmail.com

Organic certification is a process certification intended for producers of organic food and other organic agricultural products. In general, any business directly involved in food production can be certified, including seed suppliers, farmers (crop, livestock), food processors, retailers and restaurants. Requirements vary from country to country and generally involve a set of production standards for growing, storage, processing, packaging and shipping that include:

- ❖ Prohibition of synthetic chemical inputs (e.g. fertilizer, pesticides, hormones, antibiotics, food additives, etc) and genetically modified organisms.
- ❖ Use of farmland that has been free from chemicals for a number of years (often, two or more).
- ❖ Keeping detailed written production and sales records (audit trail);
- ❖ Maintaining strict physical separation of organic products from non-certified products.
- ❖ Undergoing periodic on-site inspections.

Chief object of Certification

Organic certification addresses a growing worldwide demand for organic food. It is intended to assure quality and prevent fraud. For organic producers, certification identifies suppliers of products approved for use in certified operations. For consumers, "certified organic" serves as a product assurance, similar to "low fat", "100% whole wheat", or "no artificial preservatives". Certification is essentially aimed at regulating and facilitating the sale of organic products to consumers.

Features of Organic Seed Certification

In simplified terms, the National Organic Program Standards require for crop farms:

- ❖ 3 years (36 months prior to harvest) with no application of prohibited materials (no synthetic fertilizers, pesticides, or GMOs) prior to certification.
- ❖ Distinct, defined boundaries for the operation.
- ❖ Proactive steps to prevent contamination from adjoining land uses.
- ❖ Implementation of an organic system plan, with proactive fertility management systems.
- ❖ conservation measures; and environmentally sound manure, weed, disease, and pest management practices.
- ❖ Monitoring of the operation's management practices to assure compliance.
- ❖ Use of natural inputs and/or approved synthetic substances on the National List, provided that proactive management practices are implemented prior to use of approved inputs
- ❖ No use of prohibited substances.

- ❖ No use of genetically engineered organisms (GMOs), defined in the rule as “excluded methods.
- ❖ No use of sewage sludge or irradiation.
- ❖ Use of organic seeds, when commercially available (must not use seeds treated with prohibited synthetic materials, such as fungicides).
- ❖ Use of organic seedlings for annual crops.
- ❖ Restrictions on the use of raw manure and compost.
- ❖ Must maintain or improve the physical, chemical, and biological condition of the soil, minimize soil erosion, and implement soil building crop rotation.
- ❖ Fertility management must not contaminate crops, soil or water with plant nutrients, pathogens, heavy metals or prohibited substances.
- ❖ Maintenance of buffer zones depending on risk of contamination.
- ❖ Prevent commingling on split operations (the entire farm does not have to be converted to organic production, provided that sufficient measures are in place to segregate organic from non-organic crops and production inputs).
- ❖ No field burning to dispose of crop residues (may only burn to suppress disease or stimulate seed germination flame weeding is allowed).
- ❖ No residues of prohibited substances exceeding 5% of the EPA tolerance (certifier may require residue analysis if there is reason to believe that a crop has come in contact with prohibited substances or was produced using GMOs)

Organic Crop Production Standards

1. Crop production plan: The producer is required to develop an organic crop production plan including:

- i. Details of crops to be grown, field wise.
- ii. Description of practices and procedures.
- iii. List of inputs used.
- iv. Source of organic planting material (seeds and seedlings).
- v. Descriptions of monitoring practices and procedures.
- vi. Description of management practices.
- vii. Description of record keeping system.

2. Conversion requirements and duration : For a farm and its crop production products to be certified organic under these rules it is mandatory that the farm and entire farming operations of organic production unit has under gone a period of conversion, complying with all the standard requirements under these rules for following period:

- i. 36 months for perennial plants
- ii. 24 months for plants/crops other then perennials

A reduction in conversion period up to 12 months can be granted if de-facto requirements under these standards are being met from last several years and this can be verified from various sources and necessary documentary evidences are available.

3. Landscape: Organic farming shall contribute beneficially to the ecosystem. The certification programme shall set standards/procedures for a minimum percentage of the farm area to facilitate biodiversity and nature conservation.

4. Choice of crops and varieties: All seeds and plant material shall be certified organic. Species and varieties cultivated shall be adapted to the soil and climatic conditions and be resistant to pests and diseases. When certified organic seed and plant materials are not available, chemically untreated conventional seed and plant material shall be used. The use of genetically engineered seeds, transgenic plants or plant material is prohibited.

5. Diversity in Crop Production & Management Plan: The basis for crop production in organic farming shall take into consideration the structure and fertility of the soil and the

surrounding ecosystem, with a view to minimizing nutrient losses. Where appropriate, the organic farms shall be required to maintain sufficient diversity in a manner that takes into account pressure from insects, weeds, diseases and other pests, while maintaining or increasing soil organic matter, fertility, microbial activity and general soil health.

6. Nutrient Management: Sufficient quantities of biodegradable material of microbial, plant or animal origin produced on organic farms shall form the basis of the nutrient management. Non synthetic mineral fertilisers and brought-in bio fertilisers (biological origin) shall be regarded as supplementary. Mineral fertilizers shall only be used in a supplementary role to carbon based materials. Mineral fertilisers shall be applied in their natural composition and shall not be rendered more soluble by chemical treatment. Fertilization management should minimize nutrient losses and the desired pH levels shall be maintained in the soil by the producer. Manures containing human excreta (faeces and urine) are prohibited. List of permitted, restricted and prohibited inputs are given in Annex 1 of Appendix 1 of NPOP. Products not listed in Annex 1 shall be evaluated as per the procedure given in Annex 3 of Appendix 1 and on being found complaint may be approved for use by certification body.

Pest, Disease and Weed Management: Organic farming systems shall be carried out in a way which ensures that losses from pests, diseases and weeds are minimized. Emphasis is placed on the use of a balanced fertilizing programme, use of crops and varieties well-adapted to the environment, fertile soils of high biological activity, adapted rotations, intercropping, green manures, etc. Growth and development shall take place in a natural manner. Products used for pest, disease and weed management, prepared at the farm from local plants, animals and microorganisms, shall be allowed. The use of synthetic herbicides, fungicides, growth regulators, synthetic dyes insecticides and other pesticides are prohibited. Permitted products for plant pest and disease control are listed in Annex 2 of Appendix I of NPOP. Products not listed in Annex 2 shall be evaluated as per the procedure given in Annex 3 of Appendix 1 and on being found complaint may be approved for use by certification body. All the equipment from conventional farming systems shall be properly cleaned and free from residues before being used on organically managed areas.

8. Contamination Control: All relevant measures shall be taken to minimize contamination from outside and within the farm. Buffer zones shall be maintained to prevent contamination from conventional farms. The buffer Zone should be sufficient in size to prevent the possibility of unintended contact of prohibited substances applied to adjacent conventional land areas/farms. Polyethylene and Polypropylene or other polycarbonate coverings such as plastic mulches, fleeces, insect net and silage wrapping are allowed. These shall be removed from the soil after use and shall not be burnt on the farmland. Use of polychloride based products is prohibited.

9. Soil and Water Conservation: Soil and water resources shall be handled in a sustainable manner. Relevant measures shall be taken to prevent erosion, salination of soil, excessive and improper use of water and the pollution of ground and surface water. Clearing of land through the means of burning organic matter e.g. slash-and-burn, straw burning shall be restricted to the minimum. The clearing of primary forest is prohibited.

10. Collection of non cultivated material of plant origin/ forest produces: The collection of wild plants and parts thereof, grown naturally and in forest shall be certified as organic provided the collection areas have not received any treatment with products other than those authorised for use in organic production. The act of collection should positively contribute to the maintenance of natural areas. In harvesting or gathering the products, attention shall be paid to maintenance and sustainability of the ecosystem. Organic operators should collect products only from within the boundaries of the clearly defined wild collection area and the collection area shall be at appropriate distance from the conventional farming, pollution and contamination.

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