

**BUREAU OF INDIAN STANDARDS**

**DRAFT FOR COMMENTS ONLY**

*(Not to be reproduced without the permission of BIS or used as an Indian Standard)*

*भारतीय मानक मसौदा*

**कृषि पद्धतियों और प्राकृतिक रूप से उत्पादित उत्पादों की लेबलिंग पर आवश्यकताएँ - प्राकृतिक कृषि  
उत्पादन प्रणाली**

*Draft Indian Standard*

**REQUIREMENTS ON FARMING PRACTICES AND LABELLING OF NATURALLY  
PRODUCED PRODUCTS - NATURAL FARMING PRODUCTION SYSTEM**

**ICS 65.020.99**

Agricultural Systems and Management Sectional  
Committee, FAD 22

Last date of comments:  
**26 December 2023**

**FOREWORD**

*(Formal clause will be added later)*

Natural farming is not a technique but a view, or a way of seeing ourselves as a part of nature, rather than separate from or above it. It is also referred as “the Fukuoka Method”, “the natural way of farming” or “do-nothing farming”. The title refers not to lack of effort, but to the avoidance of manufactured inputs and equipment. Natural farming is related to fertility farming, organic farming, sustainable agriculture, agroecology, agroforestry, eco-agriculture and permaculture. Natural farming system is a diversified farming system that integrates crops, trees and livestock, allowing the optimum use of functional biodiversity. Natural Farming if done effectively enhances farmers’ income while delivering many other benefits, such as restoration of soil fertility and environmental health, and mitigating and/or reducing greenhouse gas emissions. Natural Farming builds on natural or ecological processes that exist in or around farms and it believes on the principle ‘Natures knows it all’.

To motivate farmers to adopt chemical free farming and enhance the reach of natural farming, the Government formulated National Mission on Natural Farming (NMNF) as a separate and independent scheme from 2023-24 by upscaling the Bhartiya Prakritik Krishi Paddhati (BPKP). A need was felt to develop an Indian Standard on Natural farming production system in order to provide required guidance to the farming community and all concerned stakeholders of natural farming. This National Standard for Natural Farming Production system is applicable to all agricultural, horticultural, medicinal / herbal and agroforestry crops, livestock / fisheries/beekeeping systems and their products.

This standard will provide the basis for development of conformity assessment scheme in order to evaluate the natural farming production system and its products.

In reporting the result of a test made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'.

## **1 SCOPE**

**1.1** This standard covers the crop production requirements, soil and fertility management, nutrients management, pest management, contamination control, soil water conservation, processing and handling, storage, transportation, livestock management of natural farming production system. This standard also provides labelling requirements of products that are produced through the process of natural farming crop production up to packaging and transport of the final product.

**1.2** This Standard is applicable to all agricultural, horticultural, medicinal / herbal and agroforestry crops, livestock / fisheries/beekeeping systems and their products.

## **2 DEFINITIONS**

For the purpose of this standard following definitions shall apply:

### **2.1 Appetizers**

A small portion of food before a meal to stimulate the appetite.

### **2.2 Antibiotics**

Medicines that fight bacterial infections in people and animals. They work by killing the bacteria or by making it hard for the bacteria to grow and multiply.

### **2.3 Bio-Input Resource Centre (BRC)**

A resource centre, where time tested, locally prepared Inputs/formulations utilizing biological entities or biologically derived inputs useful for improving soil health, crop growth, pest or disease management and habitat management are made available for purchase by farmers in a defined geographical area.

### **2.4 Buffer zone**

A clearly defined and identifiable boundary area bordering natural farming production site that is established to limit application of, or contact with, prohibited substances from an adjacent area.

### **2.5 Certification**

A formal authentication whether individuals are knowledgeable enough in a given area to be labelled "competent to practice" in that area

### **2.6 Chemical Fertilizers**

An inorganic material of wholly or partially synthetic origin that is added to the soil to supply plant nutrient in soluble form to sustain plant growth.

### **2.7 Concoctions**

Concoctions are prepared by combining different ingredients of cow-based dung, urine mixed with natural on-farm resources.

### **2.8 Conventional Farming**

The farming systems dependent on input of artificial chemical fertilizers and/or chemicals and pesticides or which are not in conformity with the basic standards of natural and organic farming.

## **2.9 Conversion**

The process of changing an agricultural farm from conventional to natural farm. This is also called transition.

## **2.10 Conversion period**

The transition from conventional to natural farming within a given period of time, during which the provisions concerning natural production have been applied.

## **2.11 Composting**

An aerobic method of decomposing organic solid wastes. It can therefore be used to recycle organic material. The process involves decomposing organic material into a humus-like material, known as compost, which is a good fertilizer for plants. (*see 2.18*)

## **2.12 Compliance**

The adherence to the norms laid down in this standard.

## **2.13 Cover crop**

Plants or a green manure crop grown for seasonal soil protection or soil improvement. Cover crops help control soil movement and protect the soil surface between crops. Cover crop reduces wind erosion by shielding the soil with vegetation and anchoring the soil with roots. Cover crops consist of any vegetative cover that maintains more than 60 percent ground cover. Short-term cover is grown between major crops. Plants are then tilled into the soil prior to or during major crop planting. Longer-term cover may be maintained by periodic mowing to maintain at least 60 percent cover.

## **2.14 Crop rotation**

A process of growing different crops in succession on a piece of land in a specific period of time with an object to get maximum profit from least investment without impairing soil fertility.

## **2.15 Disinfectant**

A product that minimizes by physical or accepted chemical means, the number of harmful microorganisms in the environment, to a level that does not compromise food safety and suitability.

## **2.16 Farm Unit**

The agricultural farm area managed under natural package of practice, by a farmer or a group of farmers. (*see 2.30*)

## **2.17 Green manure**

Manure consisting of fresh green plant matter, which is ploughed in or turned into the soil for the purpose of soil improvement.

## **2.18 Habitat**

The region where a plant or animal naturally grows or lives; native environment. The area in which a plant or animal species naturally exists. The area or natural environment in which an organism or population normally lives.

## **2.19 Humus**

A dark brown or black substance formed by the decomposition of leaves and other plant/ organic material by soil microorganisms which improve the fertility and water retention of the soil and is therefore important for plant growth.

## **2.20 Ingredient**

Any substance, including a food additive, used in the manufacture or preparation of a food and present in the final product although possibly in a modified form

## **2.21 Intercropping**

The cultivation of two or more crops simultaneously on the same field. The most common goal of intercropping is to produce a greater yield on a given piece of land by making use of resources or ecological processes that would otherwise not be utilized by a single crop.

## **2.22 ITKs**

Indigenous Technical Knowledge (ITK) is specifically concerned with actual application of the thinking of the local people in various operations of agriculture and allied areas.

## **2.23 Labelling**

Any written, printed or graphic matter which is present on the label, accompanies the product, or is displayed near the product, including that for the purpose of promoting its sale or disposal.

## **2.24 Livestock**

Shall mean any domestic or domesticated animal including bovine (including buffalo and bison), porcine, caprine, equine, poultry and bees raised for food or in the production of food. The products obtained by hunting or fishing of wild animals shall not be considered as part of this definition.

## **2.25 Mulching**

The practice of adding live or dead matter to help with weed suppression, soil fertility, water retention etc.

## **2.26 Multiple cropping**

Growing two or more crops on the same piece of land in one agriculture year is known as 'Multiple cropping'. It is the intensification of cropping in time and space dimensions i.e., more number of crops within a year and more number of crops on the same piece of land. It includes intercropping, mixed cropping and sequence cropping.

**2.26.1 *Intercropping*** - Growing two or more crops simultaneously on the same piece of land with a definite row pattern.

**2.26.2 *Mixed cropping*** - the process of growing two or more crops together in the same piece of land. This system of cropping is generally practiced in areas where climatic hazards such as flood, drought, frost etc. are frequent and common.

**2.26.3 *Sequence cropping*** - growing of two or more crops in sequence on same piece of land in a farming year. Depending on number of crops grown in a year. It is called double, triple and quadruple cropping involving two, three and four crops respectively.

## **2.27 Multi-Layered farming**

Growing of plants of different heights in same field at the same time.

Ex: Coconut – Piper - banana – Pineapple.

### **2.28 Monocropping**

The practice of growing a single crop year after year on the same land.

### **2.29 Natural Farming**

An agricultural production system which mainly emphasizes on use of locally available on farm/traditional inputs integrated system with good agronomic practices that encourage coexistence, soil health, ecology, natural cycles, natural micro flora and fauna, diversity, production density and good production management system.

NOTE – Difference between Organic farming and Natural farming is given at Annex A for reference.

### **2.30 Operator**

A farmer, processor, trader, handler or exporter, who is under Natural Certification.

### **2.31 Organic Agriculture/ Farming**

A system of farm design and management to create an eco-system, which can achieve sustainable productivity without the use of synthetic external inputs such as chemical fertilizers, pesticides and synthetic hormones.

### **2.32 Package of Practices**

Package of practices is the guidelines for natural farming and processing for specific crop and region.

### **2.33 Part Conversion**

Part conversion is when part of a conventional farm or unit has already been converted to natural production and a part is still under conventional system.

### **2.34 Plant Protection Product**

Any substance intended for preventing, destroying, attracting, repelling, or controlling any pest or disease including unwanted species of plants or animals during the production, storage, transport, distribution and processing of food, agricultural commodities, or animal feeds.

### **2.35 Producer**

A producer shall mean an individual farmer or a group of farmers or a business enterprise practicing natural farming or natural processing.

### **2.36 Pesticides**

Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.

### **2.37 Preservatives**

A substance or a chemical that is added to products such as food products to prevent decomposition by microbial growth or by undesirable chemical changes.

### **2.38 Prophylactic**

Something that is intended to prevent disease.

### **2.39 Processing Aid**

A substance used in the production of processed food, and which may end up in the finished product, but which is not, by law, required to be disclosed to the consumer as an ingredient.

### **2.40 Roughage**

A diet containing the proper amount of foods, roughage, and water. Roughage is derived from plants such as vegetables, whole grains etc., also known as dietary fibres. They do not contain nutrients but add bulk to our diet and, as they help in digestion, are beneficial to our body.

### **2.41 Single Ingredient Product**

Raw or primarily processed agricultural products containing 100% certified natural ingredients (excluding water and salt, but including additives) may be labelled 'produce of natural farming' or such similar description.

### **2.42 Split Production**

Split production shall mean any production where the same unit is growing multiple crops and their handling or processing, both in a certified natural status and anon-certified natural status.

### **2.43 Synthetic**

Man-made; artificial; not of organic origin something resulting from synthesis rather than occurring naturally

### **2.44 Trap crops**

Crops grown on the borders or peripheries of fields, which are preferred more by a pest species are known as trap crops for that pest. By growing such crops on the border of the fields, pest population develop there which can be either killed by using pesticides or its natural enemies are allowed to develop there for natural control.

## **3 REQUIREMENTS**

### **3.1 Crop Production**

**3.1.1** Habitat care is the first step of natural farming conversion. To ensure proper living conditions for all living beings, steady supply of green material for manuring and to create diversified plant stand, diversified plants/ trees should be planted on bunds and other non-cultivated area of the farm. Idea is also to provide food and shelter to friendly insects and birds on farm. Adequate space shall be kept for rain water harvesting and creating fish ponds etc.

### **3.1.2 Agro Biodiversity**

Sufficient diversity in the farm land shall be maintained through diversified plantations, multiple cropping, mixed cropping, intercropping, sequence cropping, cover crops, trap crops, multi-layered farming and crop rotations etc.

### **3.1.3 Landscape**

3.1.3.2 Areas which are managed naturally may facilitate biodiversity, *inter alia* in any one of the following or their combination:

- a) In general, all areas which are under rotation and are not heavily manured.
- b) Extensive pastures, waste lands, meadows, extensive grassland, extensive orchards, hedges, hedgerows, groups of trees and/or bushes and forest lines.
- c) Ecologically rich fallow land or arable land.
- d) Ecologically diversified (extensive) field margins (farm boundary and bunds).
- e) Agro forestry system, diversification, mixed farming, multi-cropping, inter-cropping and relay cropping.

### **3.1.4 Seeds and planting material**

**3.1.4.1** All seeds and planting materials shall be of natural farming origin.

**3.1.4.2** When natural farming seeds/ planting material are not available, organically grown seeds can be used. In case no alternate options are available, conventionally grown seeds may also be used but without chemical treatment. Frequent use of conventional seeds shall be avoided and efforts should be made to have a nursery of conventional seeds without chemical treatment. Farmers having own seed bank or nursery for natural farming shall be encouraged.

### **3.1.5 Diversity in Crop Production and Management Plan**

**3.1.5.1** The basis for crop production in natural farming shall take into consideration the structure and fertility of the soil and the surrounding ecosystem, with a view to minimize nutrient losses.

**3.1.5.2** Where appropriate, the natural farms shall 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, soil fertility, microbial activity and general soil health. For non-perennial crops, this is normal, but not exclusive, achieved by means of crop rotation preferably by leguminous crops.

### **3.1.6 Soil and fertility Management**

**3.1.6.1** Soil fertility shall be maintained through, the cultivation of legumes or deep-rooted plants and the use of green manures, along with the establishment of a programme of crop rotation and manuring with natural ITKs.

**3.1.6.2** Green manuring, legume cover crop/ intercropping, multi cropping, effective crop rotations and recycling of organic farm generated plant biomass through composting or mulching shall form the basis of nutrient management.

**3.1.6.3** Use of fermented dung-urine based; on-farm made microbial formulations shall form the basis for soil fertility management. In cases where farmers do not have livestock, such microbial inputs can be sourced from fellow farmers from within the local area of village/ Gram Panchayat/goshalas/local bio input resource centres (BRCs).

**3.1.6.4** Mulching is an essential component of natural farming. Mulching shall be practiced with on-farm biomass of natural farming source. Mulching with conventional biomass/ crop residue is prohibited. Plastic mulching is not allowed under natural farming systems.



**3.1.6.5** On farm made cow slurry, composts etc. prepared from crop residue and animal wastes are allowed for farm application.

**3.1.6.6** Soil preparation/ Land remediation/conversion methodology shall be done using natural materials – based on animal and agriculture waste.

**3.1.6.7** Practices for use in soil preparation and soil enrichment shall be carried out in accordance with package of practices (PoPs) developed by State/Central authorities or other natural methods recognized by Krishi Vigyan Kendra (KVKs) or Indian Council of Agriculture Research (ICAR) Institutions. A list of such practices has been provided at Annex B for reference.

### **3.1.7 Insect, Pest and Weed Management**

**3.1.7.1** Insect pest and disease control should rely primarily on best management practices such as balanced soil fertility management, use of crops and varieties resistant to pests and adapted to local situations, diversity management, effective crop rotations, multi-cropping/ intercropping, green manures, manipulation of planting and sowing time and habitat manipulation through diversified plants, hedge rows, plants, trap crops etc.

**3.1.7.2** Pest problems may also be controlled through physical, mechanical and biological approaches such as (but not limited to):

- a) Removal of infested plants/ parts,
- b) Collection and destruction of egg masses
- c) Use of naturally available traps, yellow and blue sticky traps, pheromone traps etc.,
- d) Mechanical such as tilling, scrapping, hoeing
- e) Installing bird perches

**3.1.7.3** In cases where cultural and preventive approaches are not sufficient and there is imminent threat to the crop then plant protection products derived from plant or animal origin and prepared on-farm by using physical, mechanical or biological methods can be used.

**3.1.7.4** Prophylactic application of plant extract-based concoctions can be used.

**3.1.7.5** Use of commercially made or purchased organic/ biological/ inputs shall not be carried out.

**3.1.7.6** Use of all synthetic chemicals in any form directly or indirectly is prohibited.

**3.1.7.7** Practices for seed treatment, plant pest and disease management shall be carried out in accordance with package of practices (PoPs) developed by State/Central authorities or other natural methods recognized by Krishi Vigyan Kendras (KVKs) or Indian Council of Agriculture Research (ICAR) Institutions. A list of such practices has been provided at Annex C for reference.

**3.1.7.8** Additional inputs shall always be evaluated as per the criteria given in Annex D before approval is given for on-farm use.

### **3.1.8 Contamination Control**

**3.1.8.1** Adequate measures shall be taken to prevent contamination through water, air drift or mixing through:

- a) Separate storage in both time and space for inputs and farm produce
- b) Buffer zones between natural and conventional farms.
- c) Cleaning of tools before using in natural farm
- d) Any other measures suggested by the farmer group or advised under certification programme

**3.1.8.2** Tall trees should be planted on the borders of the farm to prevent contamination by chemical pesticide through air from adjoining farmlands practicing conventional agriculture.

**3.1.8.3** Drying and threshing in open place, exposed to the elements, animal or human faeces shall be avoided.

**3.1.8.4** Cold Storage where chemical fumigation is done shall be avoided for storing the produce/products.

### **3.1.9 Transition / conversion Period and requirements for Transition**

**3.1.9.1** For a farm and its crop production products to be certified natural, it is mandatory that the farm shall undergo a transition period of minimum 6 months.

**3.1.9.2** If the farm is located in traditional natural areas with no past history of chemical usage, entire area can be considered for condonation of transition period.

**3.1.9.3** Farmers certified under any organic certification system can be certified directly under natural Farming certification without any transition period.

### **3.1.10 Soil and Water Conservation**

**3.1.10.1** Soil and water resources shall be handled in a sustainable manner. Relevant measures shall be taken to minimize erosion and other forms of degradation of soil, excessive and improper use of water and the pollution of ground and surface water.

**3.1.10.2** Clearing of land through the means of burning organic matter, for example slash-and-burn, straw burning is prohibited. The clearing of primary forest is also prohibited.

### **3.1.11 Collection of Non-Cultivated Material of Plant Origin/Forest Produce**

**3.1.11.1** The collection of wild plants and parts thereof, growing naturally, in natural areas and forest shall be accepted as natural production methods provided that these areas have not received treatment with products other than those permitted for use in natural production.

**3.1.11.2** In case cultivation is carried out in forest area, procedures similar to those followed in natural farm cultivation shall be followed.

**3.1.11.3** Natural collection management shall ensure that, in case of minor forest produce collection, the relevant State Government Act shall be applicable. Also, the collection shall not exceed sustainable yield of the collected species so as not to threaten the local ecosystem.

**3.1.11.4** The act of collection should positively contribute to the maintenance of natural areas. When harvesting or gathering the products, attention shall be paid to maintenance and sustainability of the ecosystem. Natural operators shall collect products only from within the boundaries of the clearly defined wild collection area.

**3.1.11.5** Wild harvested products shall only be claimed to be natural if derived from a stable and sustainable growing environment. Harvesting or gathering the product shall not exceed the sustainable yield of the ecosystem, or threaten the existence of plant or animal species.

**3.1.11.6** Products can only be claimed to be natural if derived from a designated area for collection, clearly depicted in the map of the authorized area of collection by the forest department or state department, which is subject to inspection by concerned authority.

**3.1.11.7** The collection area shall be at an appropriate distance from conventional farming, pollution and contamination.

**3.1.11.8** The collector managing the harvesting or gathering of the products shall be clearly identified and be familiar with the collecting area in question.

## **3.2 Livestock Production**

### **3.2.1 General Requirements**

**3.2.1.1** Livestock production under natural farming systems is an integrated activity with crop production. Farmers having no land shall not be considered for natural farming certification unless they have entered an agreement for continuous supply of naturally grown feed and fodder from a certified natural farmer within the local area of village or Gram Panchayat.

**3.2.1.2** Breeds adapted to local climatic conditions shall be selected for certification.

**3.2.1.3** Livestock raised on conventional units shall be subjected to conversion period of minimum six months and during this period; they shall be reared fully on naturally grown feed and fodder. However, the livestock raised on organic farming units can be taken directly under natural farming system without any transition period.

### **3.2.2 Feed and Fodder**

**3.2.2.1** Livestock and poultry shall be fed with certified Natural farming / NPOP-Organic /PGS-Organic feed and fodder from second day of hatching till the entire period of life.

**3.2.2.2** Synthetic feed, feed additives, appetizers, preservatives, supplements, colouring agent or products of solvent extraction or from genetically modified sources shall not be used.

**3.2.2.3** But in case of emergencies and to correct any deficiency, feed supplements from synthetic sources can be given on the prescription of veterinarian.

### **3.2.3 Health care**

**3.2.3.1** The livestock and poultry, in general, should follow the basic principles of preventive health and productivity management wherein the focus would be on preventing diseases, detecting underlying fertility and production problems and its correction primarily on correcting management, nutrition and sanitation. The health care shall be based on the following broad principles:

- a) Appropriate breeds suitable to environment shall be chosen;
- b) Practices focused on encouraging strong resistance to disease and prevention of infections;
- c) The use of good quality feed, together with regular exercise and access to fodder/roughages, and/or open-air runs;

**3.2.3.1** The use of veterinary medicinal products shall comply with the following principles:

- a) All vaccinations required by law of the land shall be permitted.
- b) Where specific disease or health problems occur, therapeutic use of veterinary drugs are permitted under prescription and supervision of a registered veterinarian, provided that the double the mandatory withdrawal periods as prescribed for that drug is followed. In drugs where withdrawal period is not prescribed, a minimum of 48 hours of withdrawal period shall be observed;
- c) For purpose of treatment and prevention of diseases herbal/phyto- therapeutic (excluding antibiotics), homeopathic or ayurvedic products shall be preferred to allopathic veterinary drugs or antibiotics;
- d) In case alternative therapeutic or preventive measures are unlikely to be effective, allopathic veterinary drugs or antibiotics may be used under the strict supervision of a veterinarian.

## **3.3 Processing and Handling**

### **3.3.1 General Requirement**

**3.3.1.1** Processing and handling of natural farming operation is limited to an on-farm processing and handling by individual farmers or by group of natural farmers certified under these standards.

**3.3.1.2** If required many natural farmer groups can make their federation and get their federation registered with natural farming product certification for collective processing, handling and storage.

**3.3.1.3** As organized production and processing units are not part of natural farming certification, any processing away from natural farmers or group of natural farmers cannot be considered for certification.

**3.3.1.4** Processing methods allowed are physical, mechanical or biological in nature.

**3.3.1.5** If facility is not available locally the processor should have been covered under NF / organic certification system.

**3.3.1.6** Handling should cover drying on clean, uncontaminated polythene covers, threshing, milling, dehusking, dehulling etc. with separate set of tools or tools cleaned before use, packing in polyethylene (PE) bags.

### **3.3.2 Ingredients**

**3.3.2.1** All ingredients and additives of agriculture origin shall be from naturally certified farm system.

**3.3.2.2** A processed product can be declared natural farm product if minimum of 90% of ingredients are certified as natural produce and balance 10% are either from certified organic sources or mineral sources or from sources free of chemical residues (based on test reports for pesticide residue).

**3.3.2.3** Water and salt (NaCl and KCl) may be used without any restriction.

### **3.3.3 Processing Methods**

**3.3.3.1** Processing methods allowed under natural farming systems are physical (such as grinding, milling, polishing, dal making, cold press oil extraction, heating, boiling etc), mechanical (use of machines for change of form such as atta making, dal making etc) or biological (such as fermentation).

**3.3.3.2** All processing equipment and machinery shall be properly washed and made contamination free before use.

**3.3.3.3** All processing equipment and filtration aids shall be free from contamination.

**3.3.3.4** Use of genetically modified organisms or their products are prohibited.

**3.3.3.5** Measures shall be in place to prevent possible mixing and contamination of natural farm products with others

### **3.3.4 Packaging**

**3.3.4.1** All certified natural farm products should be traded in packaged form. However, perishable products such as fresh fruits, vegetables and dairy products (fresh milk, curd, butter milk, Chhach etc.) can be sold in loose but the sellers are required to keep adequate records to prove their certification status.

**3.3.4.2** Preferably biodegradable, recyclable, reusable systems and eco-friendly packaging materials shall be used wherever possible.

**3.3.4.3** Material used for packaging shall not contaminate food.

**3.3.4.4** The packages shall be closed in such a manner that substitution of the content cannot be achieved without manipulation or damage of the seal.

### **3.3.5 Labelling:**

#### **3.3.5.1 *General Requirements***

- a) Labelling shall convey clear and accurate information on the natural status of the product.
- b) When all the requirements of this standard are complied with, products shall be sold as “natural products”. Natural products in conversion shall be sold as “produce of natural agriculture in conversion” or of a similar description, when the requirements of this standard have been met for at least 12 months.
- c) The label for conversion products shall be distinguishable from the label for natural products by mentioning the year of conversion.
- d) The name and address of the person or company legally responsible for the production of the product shall be mentioned on the label.
- e) Additional product information shall be made available on request.
- f) Ingredients or products derived from wild production shall be declared as such.

#### **3.3.5.2 *Processed Products***

- a) Single ingredient products shall be labelled as “Natural” when all requirements of this standard have been met.
- b) Multi ingredient products where not all ingredients, including additives, are of natural origin shall be labelled in the following way (raw material weight):
  - 1. Where a minimum of 95 percent of the ingredients are of certified natural origin, products shall be labelled “natural”.
  - 2. Where less than 95 percent but not less than 70 percent of the ingredients are of certified natural origin, products shall not be labelled “natural”. The word “natural” may be used on the principal display in statements like “made with natural ingredients” provided, there is a clear statement of the proportion of the natural ingredients.

3. Where less than 70 percent of the ingredients are of certified natural origin, the indication that an ingredient is natural may appear in the ingredients list. Such a product shall not be labelled “natural”.
4. Added water and common salt shall not be included in the percentage calculations of natural ingredients.
5. All raw materials of a multi-ingredient product shall be listed on the product label in order of their weight percentage. It shall be clearly indicated which raw materials are of natural certified origin and which are not. All additives shall be listed with their full name.
6. Natural products shall not be labelled as GE (genetic engineering) or GM (genetic modification) free, in order to avoid potentially misleading claims about the end product. Any reference to genetic engineering on product labels shall be limited to the production method.
7. The label of a certified natural product shall depict the name and logo of the Certification Body.

### **3.3.6 Storage and Transport**

**3.3.6.1** Natural products shall be stored at ambient temperature or at following special conditions of storage :

- a) Controlled atmosphere,
- b) Cooling,
- c) Freezing,
- d) Drying, and
- e) Humidity regulation.

**3.3.6.2** Product integrity shall be maintained during storage and transportation of natural products. Natural Products shall be protected at all times from coming in contact with conventional products and from contact with materials and substances not permitted for use in natural farming/processing and handling.

**3.3.6.3** Where only part of the unit is certified and other products are conventional, the natural products shall be stored and handled separately to maintain their identity.

**3.3.6.4** Bulk stores for natural products shall be separate from conventional product stores and clearly labelled to that effect.

**3.3.6.5** Storage areas and transport containers for natural products shall be cleaned using methods and materials permitted in natural production. Measures shall be taken to prevent possible contamination from any pesticide or other treatment.

**3.3.6.6** Storing in cold storage where chemical fumigation is done shall be avoided.

**3.3.6.7** Crops/produce can be protected from destruction by rodents by physical barriers, sound, ultrasound, light and UV-light, traps (including pheromone traps and static bait traps), and diatomaceous earth.

**3.3.6.8** In the absence of a natural remedy to preserve a natural produce/product totally natural in such case remedy with organic origin can be considered.

### **3.7 Certification and Marking**

**3.7.1** In addition to the labelling requirements given, each package of the natural product shall also be marked with the following details:

- a) Name of the product;
- b) Net quantity;
- c) Batch or Code No. (where ever applicable);
- d) The words 'Best before .....' (month and year to be indicated); and
- e) Any other requirements as specified under the *Legal Metrology (Packaged Commodities) Rules, 2011* and *Food Safety and Standards (Food Product Standards and Food Additives) Regulation, 2011* and the Rules framed there under.

**3.7.2** *BIS Certification Marking*

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the Bureau of Indian Standards Act, 2016 and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.



**ANNEX A**  
(Clause 2.29)

**DIFFERENCES BETWEEN ORGANIC AND NATURAL FARMING**

**A-1** Natural farming is by principle different from Organic farming system. The following difference between natural farming and organic farming have been tabulated for the reference:

<b>SI No.</b>	<b>Organic Farming</b>	<b>Natural Farming</b>
1.	<p>It helps to maintain environment health by reducing the level of chemicals in the soil.</p> <p>It reduces human and animal health hazards by reducing the level of residues in the product. It helps in keeping agricultural production at a sustainable level.</p>	<p>Natural Farming can be defined as “chemical-free farming and livestock based”.</p> <p>Soundly grounded in agro-ecology, it is a diversified farming system that integrates crops, trees and livestock, allowing the optimum use of functional biodiversity. It reduces the cost of agricultural production and also improves the soil health.</p>
2.	<p>Organic Farming is based on</p> <ul style="list-style-type: none"><li>a) Principles of Health – The health of the ecosystem, people, and communities.</li><li>b) The Principles of Ecology – The right balance between ecosystem and environment or nature.</li><li>c) Principles of Fairness – Good human relationships and quality of life.</li><li>d) Principles of Care</li></ul>	<p>Natural farming is based on the principals of</p> <ul style="list-style-type: none"><li>a) Recycling of naturally available nutrients in fields.</li><li>b) Recycling of on-farm generated biomass.</li><li>c) Use of on Farm developed and refined practices based on plant, animal and microbial source as raw materials.</li><li>d) Adoption of diversified cropping system-based agriculture</li></ul>
3.	<p>A combination of organic farming and improved sludge, biochar with organic fertilizer, biofertilizers, organic minerals is of utmost importance in organic farming.</p>	<p>In natural farming, neither chemical nor organic fertilizers are added to the soil. No external/ off farm/synthetic fertilizers are added to soil or sprayed to the plants. The entire production system is based animal waste, plant based, bio mass recycling.</p>
4.	<p>Involves production outside the farm-burning of fossil fuel cannot be ruled out.</p>	<p>Involves only natural constituents hence no burning of fossil fuels, zero GHG emissions in to the environment.</p>
5.	<p>Duration of conversion period is 3 years</p>	<p>Conversion in the soil quality happens in less than 12 months period</p>
6.	<p>Organic farming doesn’t necessarily depend on the farm animals hence</p>	<p>Natural farming is mainly based on the 4 pillars – Beejamruth, Jeevamruth, Mulching and use of plant-based plant protection</p>

	integration of farm animals with farm is only a notional	methods and waphsa. All these inputs made from Desi Cow. This system compulsorily integrates farm animals with the farm.
7.	Farm Yard Manure, Vermi compost, Verm wash, bone meal, composting are allowed for use in order to fertilize the soil.	Use of compost/ vermicompost and minerals are not allowed.
8.	Rock phosphate is allowed	Rock Phosphate is not allowed
9.	Organic farming is based on the guidelines of organic farming originating from the standards of USFDA	Natural farming is based on the Indigenous Technical Knowledge originating from a treatise called Vrikshayurveda – Science of plant life.
10	Certain chemicals / compounds are allowed such as; alcohol as sanitizer, chlorinated water for disinfection, copper sulphate to suppress growth of algae, peracetic acid for spraying on fam machinery, soap based weedicides, ammonium carbonate as bait for flies and insects, sodium carbonate peroxyhydrate is used as a disinfectant, sulphur substances as insecticides and pesticides, Magnesium sulfate, or Epsom salts, is allowed as a supplement to correct a soil deficient in magnesium, Boric acid for pest control and growth promotion.	No Chemicals are used for any of the process. The process uses animal waste such as cow urine and cow dung for soil fertilization, seed treatment and for enhancing growth with Jeevamruth, Beejamruth and Panchagavya respectively and plant protection – Astras made of laves of plants such as Neem, custard apple, pomegranates, datura, tobacco leaves, green chillies etc.  Storing, processing, packaging involves natural constituents, mechanical and manual processes only.

**ANNEX B**  
(Clause 3.1.6.7)

**PRACTICES FOR USE IN SOIL PREPARATION, SOIL ENRICHMENT**

**B-1** In Natural farming practices the widely practiced methodology in India is native breed of Cow based or Go Aadharith Vyavasay. This Cow based or Go aadharith Vyavasay is based on use of bio-formulations like Jivamrita, Bijamrita, Ghanjeevamrit, Neemastra and cultural practices such as Achhadana and Whapasa. These are formulas, methods and treatments which help the crops grow with natural constituents. The combination of these concoctions and practices makes it possible to achieve a more sustainable farming.

Natural farming system shall avoid use of purchased inputs (chemical or otherwise). Therefore, all inputs shall be prepared on-farm or sourced locally on exchange basis from fellow natural farmers within the 10 km radius and maximum upto Taluk/Tehsil Level. Authorised Gaushalas upto District level can also be considered for purchase of Natural Farming inputs.

Many of these inputs are restricted for use in organic production. In this Annex “restricted” means that the use of these inputs shall be subject to conditions. Factors such as contamination, risk of nutritional imbalances and depletion of natural resources shall be taken into consideration and as recommended by the relevant Government agencies of the region.

<i>Inputs</i>	<i>Condition for Use</i>
<b>Practices followed on a Natural Farm Unit</b>	
Diversified plantations, multiple cropping, mixed cropping, intercropping, cover crops, trap crops, multi-layered farming and crop rotations	Permitted
Integration of legumes or deep-rooted plants in cropping systems, frequent use of green manures, planned rotations and fertilization with on-farm natural inputs	Permitted
<b>Matter Produced on a Natural Farm Unit</b>	
Green manuring, legume cover crop/ intercropping, multi cropping, effective crop rotations and recycling of organic farm generated plant biomass through composting or mulching should form the basis of nutrient management	Permitted
Use of fermented dung-urine based, on-farm made microbial formulations shall form the basis for soil fertility management. In cases where farmers do not have livestock, such microbial inputs can be sourced from fellow farmers from within the local area of village/ Gram Panchayat	Permitted
Mulching (Achhadan) should be practiced with on-farm biomass of natural farming source. Mulching with conventional biomass/ crop residue is prohibited. Plastic mulching is not allowed under natural farming systems	Restricted
On farm made cow slurry, composts etc. prepared from crop residue and animal wastes are	Permitted
ITKs such as Jeevamrit, Beejarmit, Ghanjeevamrit, Neemastra, Dashparni extract and similar formulations	Permitted
<b>Matter Produced Outside the Natural Farm Unit</b>	
Blood meal, meat meal, bone meal and feather meal without preservatives	Not permitted

<i>Inputs</i>	<i>Condition for Use</i>
Compost made from any carbon based residues (animal excrement including poultry)	Not permitted
Farmyard manure, slurry, cow urine (preferably after control fermentation and/or appropriate dilution)	Restricted
Fish and fish products without preservatives	Restricted
Guano	Not permitted
Human excrement	Not permitted
By-products from the food and textile industries of biodegradable material	Not permitted
Sawdust, wood shavings, wood provided it comes from untreated wood	Restricted
Seaweed and seaweed products obtained by physical processes, extraction with water or aqueous acid and/or alkaline solution	Restricted
Sewage sludge and urban composts from separated sources which are monitored for contamination	Not permitted
Straw	Permitted
Vermicasts	Permitted
Animal charcoal	Not permitted
Compost and spent mushroom and vermiculate substances	Permitted
Compost from organic household waste	Permitted
Compost from plant residues	Permitted
By products from oil palm, coconut and cocoa	Permitted
By products of industries processing ingredients from organic agriculture	Permitted
Tea and Tea skiffings	Permitted
<b>Minerals Produced Outside the Natural Farm Unit</b>	
Basic slag	Not permitted
Calcareous and magnesium rock	Not permitted
Calcified seaweed	Not permitted
Calcium chloride	Not permitted
Calcium carbonate of natural origin (chalk, limestone, gypsum and phosphate chalk)	Restricted
Mineral potassium with low chlorine content (for example sulphate of potash, kainite, sylvinite)	Restricted
Natural phosphates (for example Rock phosphates)	Not permitted
Pulverised rock	Not permitted
Sodium chloride	Permitted
Trace elements (Boron, Ferrous, Manganese, Molybdenum, Zinc)	Not permitted
Wood ash from untreated wood	Not permitted
Magnesium sulphate (Epson salt)	Not permitted
Gypsum (Calcium sulphate)	Not permitted
Silage and silage extract	Not permitted
Aluminum calcium phosphate	Not permitted
Sulphur	Not permitted
Stone meal	Not permitted
Clay (bentonite, perlite, zeolite)	Not permitted
Vermiculite	Not permitted
Peat	Not permitted
Biodynamic preparations	Not permitted

**Doc No. FAD 22 (22873) WC**  
**October 2023**

<i>Inputs</i>	<i>Condition for Use</i>
Plant preparations and botanical extracts	Not permitted
Microbiological Preparations	Not permitted
Bacterial preparations (biofertilizers)	Not Permitted

**ANNEX C**  
(Clause 3.1.7.7)

**PRACTICES FOR SEED TREATMENT, PLANT PEST AND DISEASE MANGEMENT**

Use of synthetic/ chemical inputs (chemical fertilizers, pesticides, hormones or synthetic growth hormones/ growth stimulants, synthetic feed additives) and Genetically Modified organism's (GMOs), GMO seeds/planting material or their derivatives or their products directly or indirectly are prohibited.

Many of these inputs are restricted for use in organic production. In this Annex "restricted" means that the use of these inputs shall be subject to conditions. Factors such as contamination, risk of nutritional imbalances and depletion of natural resources shall be taken into consideration and as recommended by the relevant Government agencies of the region.

<i>Inputs</i>	<i>Condition for Use</i>
<b>Practices for Seed Treatment</b>	
Seed treatment by ITKs Beejamrit formulation	Permitted
If Natural farming origin, seeds/ planting material are not available, organically grown seeds can be used	Permitted
Conventionally grown seeds can also be used but without chemical treatment.	Restricted
<b>Practices for Plant Pest and Disease Management</b>	
Best management practices such as balanced soil fertility management, use of crops and varieties resistant to pests and adapted to local situations, diversity management, effective crop rotations, multi-cropping/ intercropping, green manures, manipulation of planting and sowing time and habitat manipulation through diversified plants, hedge rows, plants, trap crops etc	Permitted
Removal of infested plants/ parts, Collection and destruction of egg masses Use of Naturally available traps, yellow and blue sticky traps, pheromone traps etc., Mechanical practices such as tilling, scrapping, hoeing Installing bird perches	Permitted
Plant protection products derived from plant or animal origin and prepared on-farm by using physical, mechanical or biological methods can be used	Permitted
Prophylactic application of plant extract-based concoctions can be used	Permitted
Prevent contamination through water, air drift or mixing through: <ul style="list-style-type: none"> <li>a) Separate storage in both time and space for inputs and farm produce</li> <li>b) Buffer zones between natural and conventional farms.</li> <li>c) Cleaning of tools before using in natural farm</li> <li>d) Any other measures suggested by the group or advised under certification programme</li> </ul>	Permitted
Use of commercially made or purchased organic/ biological/ inputs	Restricted
Use of all synthetic chemicals in any form directly or indirectly	Not permitted

<b>Use of Preparations made from Natural Origin</b>	
Agniastra,	Permitted
Brahmastra	Permitted
Neemastra	Permitted
Local made ITKs	Permitted
<b>Substances from Plant , Animal, Microbial &amp; Chemical origin (On farm production)</b>	
<i>Azadiracta indica</i>	Permitted
Neem oil	Restricted
Preparation of rotenone from <i>Derris elliptica Lonchocarpus, Thephrosiaspp</i>	Not permitted
Gelatin	Not permitted
Propolis	Not permitted
Plant based extracts – garlic, pongamia etc	Permitted
Preparation on basis of pyrethrins extracted from <i>Chrysanthemum cinerariaefolium</i> , containing possibly a synergist <i>Pyrethrum cinerifolium</i>	Not permitted
Preparation from <i>Quassiaamara</i>	Not permitted
Preparation from <i>Ryania</i> species	Not permitted
Tobacco tea	Restricted
Lecithin	Restricted
Casein	Restricted
Sea weeds, sea weed meal, sea weed extracts, sea salt and salty water	Restricted
Extract from mushroom (Shiitake fungus)	Restricted
Extract from Chlorella	Restricted
Natural acids (vinegar)	Not permitted
Minerals	Not permitted
Chloride of lime/soda	Not permitted
Clay (for example bentonite, perlite, vermiculite, zeolite)	Not permitted
Copper salts/inorganic salts (Bordeaux mixture, copper hydroxide, copper oxychloride)used as a fungicide depending upon the crop.	Not permitted
Mineral powders (for example stone meal)	Not permitted
Diatomaceous earth	Not permitted
Light mineral oils	Not permitted
Permanganate of potash	Not permitted
Lime sulphur (calcium polysulphide)	Not permitted
Silicates, clay (Bentonite)	Not permitted
Sodium bicarbonate	Not permitted
Sulphur (as a fungicide, acaricide, repellent)	Restricted
Microorganism used for biological pest control	Restricted
Fungal preparations (such as <i>Trichodermaspp, Metarhizium, Beauveria, Verticillium, Nomeria</i> , etc)	Restricted
Bacterial preparations (such as <i>Bacillus spp, Pseudomonas fluorescens</i> )	Restricted
Release of parasites, predators, natural enemies of pest and sterilized insects	Restricted
<b>Others</b>	
Carbon dioxide and nitrogen gas	Not allowed
Soft soap (potassium soap)	Not allowed
Ethyl alcohol	Not allowed
Homeopathic and Ayurvedic preparations local	Restricted

Herbal and biodynamic preparations	Allowed
Physical methods (Chromatic traps, Mechanical traps, sticky traps and Pheromones)	Allowed



**ANNEX D**  
(Clause 3.1.7.8)

**PROCEDURE TO EVALUATE ADDITIONAL INPUTS TO NATURAL AGRICULTURE**

**D-0** This Annex outlines the procedure to evaluate other inputs into natural production.

**D-1** The following checklist should be used for amending the permitted substance list for fertilising the soil conditioning purposes:

- a) The material is essential for achieving or maintaining soil fertility or to fulfill specific nutrient requirements, for specific soil conditioning and rotation purposes which cannot be satisfied by the practices outlined in 3.1.6 of this standard or of other products included in Annex A and the ingredients are of plant, animal, microbial or mineral origin which may undergo the following processes;
  - i. physical (mechanical, thermal);
  - ii. enzymatic;
  - iii. microbial (composting, digestion);
- b) Their use does not result in, or contribute to, unacceptable effects on, or contamination of, the environment, including soil organisms; and
- c) Their use has no unacceptable effect on the quality and safety of the final product.

**D-2** The following checklist shall be used for amending the permitted substance list for the purpose of plant disease or pest and weed control:

- a) The material is essential for the control of a harmful organism or a particular disease for which other biological, physical or plant breeding alternatives and/or effective management techniques are not available.
- b) The substances (active compound) shall be plant, animal, microbial or mineral origin which may undergo the following processes:
  - 1) physical
  - 2) enzymatic
  - 3) microbial
- c) Their use does not result in, or contribute to, unacceptable effects on, or contamination of, the environment.
- d) Nature identical products such as pheromones, which are chemically synthesised may be considered if the products are not available in sufficient quantities in their natural farm, provided that the conditions for their use do not directly or indirectly contribute to contamination of the environment or the product.

**D-3 EVALUATION**

When an input is to be evaluated it must first be investigated to see whether it fulfils the following six criteria. An input shall fulfil all the following requirements before it can be accepted as suitable for use in natural agriculture. Inputs should be evaluated regularly and weighed against alternatives. This process of regular evaluation should result in natural production becoming ever more friendly to humans, animals, environment and the ecosystem.

### **D-3.1 Necessity**

The necessity of each input shall be established. This will be investigated in the context in which the product will be used. Arguments to prove the necessity of an input may be drawn from such criteria as yield, product quality, environmental safety, ecological protection, landscape, human and animal welfare.

The use of an input may be restricted to:

- a) Specific crops (especially perennial crops)
- b) Specific regions
- c) Specific conditions under which the input may be used

### **D-3.2 Natural origin**

The origin of the input should usually be (in order of preference):

- a) Natural – Local resources

When there is any choice, renewable locally available inputs are preferred.

### **D-3.3 Collection**

The collection of the raw materials comprising the input must not affect the stability of the natural habitat nor affect the maintenance of any species within the collection area.

### **D-3.4 Environment**

#### **D-3.4.1 *Environmental Safety***

The input/concoctions must not be harmful or have a lasting negative impact on the environment. Nor should the input give rise to unacceptable pollution of surface or groundwater, air or soil. All stages during processing, use and breakdown must be evaluated.

The following characteristics of the input must be taken into account:

- a) *Degradability* — All inputs or concoctions must be degradable to their mineral form. Inputs with a high acute toxicity to non-target organisms should have a maximum half-life of five days. Natural substances used as inputs which are not considered toxic do not need to be degradable within a limited time.
- b) *Acute toxicity to non-target organisms* — When inputs have a relatively high acute toxicity for non-target organisms, restrictions for their use is needed. Measures have to be taken to guarantee the survival of these non-target organisms. Maximum amounts allowed for application may be set. When it is not possible to take adequate measures, the input shall not be used.
- c) *Long-term chronic toxicity* — Inputs which accumulate in organisms or systems of organisms and inputs which have, or are suspected of having, mutagenic or carcinogenic properties shall not be used. If there are any risks, sufficient measures have to be taken to reduce any risk to an acceptable level and to prevent long lasting negative environmental effects.

- d) *Chemically synthesized products and heavy metals* — Inputs should not contain harmful amounts of man-made chemicals (xenobiotic products). Chemically synthesized products may be used only if identical to the local natural product. Mineral inputs should contain as few heavy metals as possible.
- e) *Human Health* — Inputs must not be harmful to human health. All stages during processing, use and degradation must be taken into account. Measures must be taken to reduce any risks and standards set for inputs used in natural production.
- f) *Product Quality* — Inputs must not have negative effects on the quality of the product – for example taste, keeping quality, visual quality.

#### **D-3.5 Ethical Aspects — Animal Welfare**

Inputs must not have a negative influence on the natural behaviour or physical functioning of animals kept at the farm.

#### **D-3.6 Socio Economic Aspects**

Inputs should not meet resistance or opposition of consumers of natural products. An input might be considered by consumers to be unsafe to the environment or human health, although this has not been scientifically proven. Inputs should not interfere with a general feeling or opinion about what is natural; for example, genetic engineering.