

# DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

No. R.

AGRICULTURAL PRODUCT STANDARDS ACT, 1990  
(ACT No. 119 OF 1990)

## REGULATIONS REGARDING CONTROL OVER THE SALE OF ORGANICALLY PRODUCED PRODUCTS IN THE REPUBLIC OF SOUTH AFRICA

The Minister of Agriculture has under section 15 of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990) --

- (a) made the regulations in the Schedule;
- (b) determined that the said regulations shall come into operation 30 months after date of publication thereof; and
- (c) determined that certifying organisations intending to certify organically produced products must apply within 12 months after publication of these regulations to the accreditation authority for accreditation or to verify accreditation status to ISO/IEC Guide 65.

### SCHEDULE

#### **Definitions**

1. In these regulations any word or expression to which a meaning has been assigned in the Act shall have that meaning, and --

"**accreditation authority**" means the South African National Accreditation System (SANAS) established by section 3 of the Accreditation and Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act No. 19 of 2006);

"**accreditation body**" means recognised as part of the International Laboratory Accreditation Cooperation (ILAC) / International Accreditation Forum (IAF) Mutual Recognition Arrangement (MRA);

"**additive**" means any substance not normally consumed as a food by itself and not normally used as a typical ingredient of the food, whether or not it has nutritive value, the intentional addition of which to food for a technological (including organoleptic) purpose in the manufacture, processing, preparation, treatment, packing, packaging, transport or holding such food results, or may be reasonably expected to result, (directly or indirectly) in the substance or its by-products becoming a component of or otherwise affecting the characteristics of such foods: Provided that the term does not include contaminants, or substances added to food for maintaining or improving nutritional qualities, or sodium chloride;

"**approved certifying organisation**" means an appropriately accredited certifying organisation (ISO/IEC Guide 65 and these regulations) and recognised by the Executive Officer;

"**audit**" means a systematic and functionally independent examination to determine whether activities and related results comply with planned objectives;

"**auditor**" means a person from an approved certifying organisation with the demonstrated personal attributes and competence to conduct an audit;

"**certification**"/"**certify**" means the procedure by which approved certifying organisations provide written or equivalent assurance that a product, process or service is in conformity with certain standards;

"**certification programme**" means an approved system of rules, procedures and management for carrying out certification;

"**conventional**" means any material, production or processing practice that is not certified "organic" or "organic in conversion";

"**distinctive mark**" means a distinctive mark or a symbol, prescribed under section 5(1) of the Act, that has been registered by the Executive Officer and used by an approved certifying organisation to indicate that compliance with these standards has been verified;

"**Executive Officer**" means the officer designated under section 2(1) of the Act;

"**extensive farming**" means farming that corresponds to at least the stocking densities as indicated in these regulations and includes the prescribed outdoor area requirements for the animals;

"**factory farming**" means industrial management systems that are heavily reliant on veterinary and feed inputs not permitted in organic agriculture and/or where the animals are hindered from moving freely around 360°, or kept in obscurity or deprived from litter and thus include animals kept in batteries or fattening of chickens with more than 25kg weight/m<sup>2</sup>;

"**genetically modified organisms and products**" means organisms or products produced through techniques in which the genetic material has been altered in a way that does not occur naturally by mating and or natural recombination;

"**ingredient**" means any substance including a food additive used in the manufacture or preparation of a food, or present in the final product, although possibly in a modified form;

"**inputs**" means all products and substances used on the operation, whether brought in or produced on the operation, that will eventually form part of or influence the organic production/processing practices on the operation and include, but are not limited to the following, fertilisers, manure and compost, pesticides, herbicides, insect attractants and repellents, veterinary treatments, irrigation and drinking water, animal feed and additives, cleaning and disinfection products, processing aids, substances and ingredients forming part of products, packaging;

"**inspection**" means the examination of food systems for control of food, raw material, inputs, production, processing, and distribution including in-process and finished product testing, in order to verify that they conform to requirements;

"**inspector**" means an official authorised by the Executive Officer to do inspection;

"**intensive farming**" means those practices that do not fit within the "factory farming" or "extensive farming" definitions;

"**ionising irradiation**" means high energy emissions from radio nucleotides, capable of altering food molecular structure for the purpose of controlling microbial contaminants, pathogens, parasites and pests in food, preserving food or inhibiting physiological processes such as sprouting or ripening;

"**labelling/labelled**" means any written, printed or graphic representation, particulars, information, trade mark, brand name, pictorial matter and symbol that is present on the label, container, packaging, document, notice board or collar of a product, accompanies the product or is displayed near the product, for the purpose of describing or promoting the sale or disposal of the product;

"**operation**" means a farm, production unit or project involved in the production and/or processing of products;

"**operator**" means any person who is involved at any stage of the chain of production, processing, storage, packaging, transporting, retailing, displaying, and importing of organic/organic in conversion products or who markets such products;

"**organic**" means produced by the specific management practices indicated in these regulations which are designed to -

- (a) enhance biological diversity within the whole system;
- (b) increase soil biological activity;
- (c) maintain and improve long term soil fertility;
- (d) recycle wastes of plant and animal origin in order to return nutrients to the soil, thus minimising the use of non-renewable resources;
- (e) rely on renewable resources in locally organised agricultural systems;
- (f) promote the healthy use of soil, water and air as well as minimise all forms of pollution thereto that may result from agricultural practices;
- (g) handle agricultural products with emphasis on careful processing methods in order to maintain the organic integrity and vital qualities of the product at all stages; and
- (h) become established on any existing farm through a period of conversion, the appropriate length of which is determined by site specific factors such as the history of the farm-land and type of crops and livestock to be produced;

**"organic chemistry"** means the chemistry of organic compounds;

**"organic compounds"** means chemical compounds containing carbon combined with hydrogen and often also with oxygen, nitrogen and other elements;

**"organic in conversion/in conversion"** means a production system which has adhered to these regulations for at least one year and has been certified as such but which does not qualify as fully organic: Provided that the term is applicable to only plants and plant products, not animals and animal products;

**"organic product"** means a product which has been produced, processed and/or handled in compliance with these regulations;

**"Participatory Guarantee System "** means a system based on the concept of organic production that cater for small scale production and associated sale at markets, and foster producer-consumer contact and trust, but is not certified;

**"primary forest"** means indigenous forest, including Bushveld type trees that are not indicators or a consequence of bush encroachment;

**"processed/processing"** means cooking, baking, heating, drying, mixing, crushing, pressing, churning, separating, extracting juices or other material, peeling, fermenting, eviscerating, preserving, dehydrating, freezing or manufacturing which materially alters the flavour, keeping quality, or any other property or the making of any substantial change of form, but does not include refrigeration at temperatures which are above freezing point or any other treatment which merely retards or accelerates the natural processes of ripening or decomposition;

**"processing aid"** means a substance or material, not including apparatus or utensils, and not consumed as a food ingredient by itself, intentionally used in the processing of raw materials, foods or its ingredients, to fulfil a certain technological purpose during treatment or processing and which may result in the non-intentional but unavoidable presence of residues or derivatives in the final product;

**"produce/d"** means the operations undertaken to supply agricultural products in the state in which they occur on the farm, including initial packaging and labelling of the product;

**"product/s"** means any commodity of vegetable or animal origin, or produced from a substance of vegetable or animal origin, and which consists wholly or partially of such substance (excluding water, salt and additives);

"**rotation programme**" means the practice of alternating the species or families of annual and biennial crops grown on a specific field in a planned pattern or sequence so as to break weed, pest and disease cycles and to improve soil fertility and organic matter content;

"**SANAS**" means the abbreviation for the South African National Accreditation System;

"**substance/s**" means all its components including active and inert ingredients;

"**synthetic**" means a substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant or animal sources: Provided that such term shall not apply to substances created by naturally occurring biological processes;

"**the Act**" means the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990); and

"**trade mark**" means a trade mark as defined in the Trade Marks Act, 1993 (Act No. 194 of 1993).

### ***Scope of these regulations***

2. (1) (a) These regulations apply to the following products which carry, or are intended to carry, descriptive labelling referring to organic production methods:
  - (i) plants and plant products;
  - (ii) live animals;
  - (iii) products from bee keeping;
  - (iv) processed and unprocessed products for human consumption derived mainly from those listed in subparagraph (i), (ii) and (iii); and
  - (v) inputs influencing, or resulting from, organic production methods.
- (b) A product will be regarded as bearing indications referring to organic production methods where, in the labelling of claims, including advertising material or commercial documents, the product, or its ingredients, is described by the term "organic" or derivatives referring to "organic" which suggests to the purchaser that the product or its ingredients were obtained according to organic production methods.
- (c) Subregulation (1)(b) does not apply where these indications referring to "organic" clearly bears no connection to the method of production described in these regulations, such as organic compounds referred to in organic chemistry.
- (d) Subregulation (1)(b) does not apply to products bearing indications to "organic" if the indications form part of a trade mark that has been in use on the date of commencement of these regulations: Provided that the indications that form part of a trademark do not suggest to the purchaser that the product or its ingredients were obtained according to organic production methods: Provided further that the Executive Officer will have the final decision on this issue and will make available a list of approved indications.

(2) These regulations are in addition to and not in substitution of any other relevant legislation applicable to the products, practices and inputs concerned.

***Restriction on the sale of organically produced products***

3. (1) No person shall sell organically produced products in the Republic of South Africa --
- (a) unless such products comply with the general standards referred to in regulation 4;
  - (b) unless such products from plant origin comply with the standards referred to in regulation 5;
  - (c) unless such products from animal origin comply with the standards referred to in regulation 6;
  - (d) unless such products comply with the bee keeping practices referred to in regulation 7;
  - (e) unless such products comply with the processing and handling practices referred to in regulation 8;
  - (f) unless the pest and disease control practices referred to in regulation 9 have been followed;
  - (g) unless the cleaning, disinfection and sanitising practices referred to in regulation 10 have been followed;
  - (h) unless such products are labelled and marked in the manner referred to in regulation 11; and
  - (i) unless such products have been audited and certified as organic as referred to in regulation 12.

(2) The Executive Officer may exempt a person in writing, entirely or partially and on the conditions as he or she deems necessary, from the provisions of subregulation (1).

***General standards for organically produced products***

4. (1) Production shall address measures for the provision of and improvement of landscape and biodiversity and shall contribute to the equilibrium of agricultural production systems by providing for the nutrient requirements of crops and by improving the soil's organic matter.

(2) Landless animal husbandry and plant production operations and production units (such as animal feedlots, container growing, and plant production systems that use soil and gravel as anchoring substrate only) shall not be allowed.

(3) Synthetic chemicals (including pesticides and fertilisers) are not permitted other than those allowed by these regulations.

(4) All materials and/or the products produced from genetically modified organisms, with the exception of certain veterinary medicinal products, are not compatible with the principles of organic production and therefore are not accepted under these regulations.

(5) The use of ionising irradiation is not allowed in production and processing.

(6) A quality and safety management system shall be an integral part of the organic production system.

(7) A product certification audit and certification process, as referred to in regulation 12, shall be carried out before a product can be regarded as being organic.

(8) A product cannot be certified as organic unless the operation has been subjected to a conversion period: Provided that --

- (a) the length of the conversion periods shall be as indicated in these regulations;
- (b) a product entering the conversion period is subject to all the relevant standards in these regulations from the onset of the conversion period;
- (c) the start of the conversion period shall be calculated from the date of application to the approved certifying organisation or from the date of last application of unapproved farm inputs: Provided that it can be demonstrated that the relevant standards in these regulations have been met from that date;
- (d) a conversion period can be retroactively acknowledged where the relevant standards in these regulations have been met for at least three years and where it can be verified through various means; and
- (e) audits shall be carried out during the conversion period.

(9) Organic, organic in conversion and conventional production is allowed on the same operation: Provided that --

- (a) organic and organic under conversion farm-lands, animals, storage facilities and any other parts of the operation shall be clearly separated from conventional farm-lands, animals, storage facilities and other parts of conventional operation, and shall be available for inspection as such;
- (b) conventionally produced annual plants shall be from different varieties and grown in separate areas;
- (c) conventionally produced perennial plants may be of the same varieties: Provided further that --
  - (i) the production in question forms part of a conversion plan to organic production in a period which may not exceed a maximum of five years;
  - (ii) appropriate measures are taken to ensure the permanent separation of products obtained from each production unit;
  - (iii) the operator shall keep records of the exact quantities harvested together with any other particular distinguishing features such as quality, colour, weight, etc.; and
  - (iv) the operator provides the approved certifying organisation with the harvest information required in regulation 13(10), after which an audit may be scheduled;
- (d) means of production such as tractors and equipment shall not be used on both organic and conventional farm-lands unless they have been thoroughly cleaned before moving from the conventional farm-lands to the organic or organic under conversion farm-lands;

- (e) converted farm-land and animals shall not be switched back and forth between organic, organic in conversion and conventional production;
- (f) conventionally produced animals shall be from different species, and shall be reared and housed separately; and
- (g) conventionally produced animals of different species may use the same pasture/grazing: Provided further that –
  - (i) the approved certifying organisation is informed;
  - (ii) the conventionally produced animals are under extensive husbandry; and
  - (iii) the conventionally produced animals are not present on the pasture/grazing at the same time as the organically produced animals.

(10) All inputs (products and/or substances) into organic agriculture must comply with the principles of these regulations and may be certified as organic by an approved certifying organisation: Provided that the conventional inputs allowed by these regulations may be used: Provided further that the operator shall constantly strive to make use of more acceptable inputs by regularly evaluating all inputs and practices on the operation against the criteria indicated in Annexure I.

(11) The operator shall be required to keep documentation and up to date records, as required by these regulations and the approved certifying organisation, to demonstrate compliance with these regulations.

(12) Operations for organic products shall not be situated in areas (such as heavy industrial and mining areas, and conventional farming areas heavily reliant on conventional inputs) where pollution and the risk of contamination of the operation with substances from the environment or any other sources not compatible with the principles of organic production stipulated in these regulations are inevitable: Provided that the risks from the use of inputs and equipment or any other sources not compatible with the principles of organic production stipulated in these regulations (such as storm water from roads, use and disposal of equipment oil, vehicle oil leaks, household chemicals in wastewater used for food gardens, handling, storage and disposal of allowed chemicals), shall be determined, and eliminated or managed.

#### ***Standards for organically produced products from plant origin***

5. (1) Organically produced products from plant origin shall be produced as follows:
- (a) From organically propagated seed and plant material: Provided that when organically propagated seed and plant materials are not available, chemically untreated conventional material may be used: Provided further that the operator reconfirms the use thereof with the approved certifying organisation.
  - (b) Breeding of a new organic variety shall take place according to the principles set in these regulations and all steps of propagation (except in-vitro-cultivation) shall be under organic management.
  - (c) An existing variety shall be regarded as organic after at least three years of maintenance under organic management.
  - (d) Conventional seed and plant propagation material shall be regarded as organic if it has been under organic management for –

- (i) one generation for annuals; and
  - (ii) two growing periods (thus at least 18 months) for perennials.
- (e) Only saplings and seedlings may be grown in containers.
- (2) Organically produced products from plant origin shall comply with the following production practices:
- (a) Sufficient diversity shall be obtained in a manner that takes into account the beneficial and detrimental impact of insects, weeds, diseases and other pests, while maintaining or increasing soil organic matter, fertility, microbial activity and general soil health.
  - (b) Biodegradable material from microbial, plant or animal origin shall form the basis of the fertilisation programme and the fertility and biological activity of the soil shall be maintained or increased, where appropriate, by --
    - (i) cultivation of legumes, green manures or deep rooting plants in an appropriate multi-annual rotation programme;
    - (ii) incorporation of livestock manure from organic livestock production: Provided that the total amount of manure applied shall not exceed 170kg of Nitrogen per hectare/year of agricultural area used; and/or
    - (iii) incorporation in the soil of other biodegradable material, composted or not, from certified operations.
  - (c) Local conditions and the specific nature of crops shall be taken in consideration in determining the amount of biodegradable material from an outside source allowed onto an operation in order to restrict the risk of pollution.
  - (d) The substances allowed for use in fertilisation and soil conditioning are indicated in Annexure II: Provided that --
    - (i) the organic and mineral fertilisers mentioned in Annexure II shall be applied only where adequate nutrition of the crop or soil conditioning is not possible by the methods set out under subregulation (2)(b);
    - (ii) these substances may only be used to the extent that, in combination with the livestock manure mentioned in subregulation (2)(b), the total amount applied shall not exceed 170kg of Nitrogen per hectare/year of agricultural area used;
    - (iii) certain restrictions should be placed on the use of the substances in Annexure II where use could result in, or contribute to, unacceptable effects on, or contamination of, the environment, soil organisms and the quality and safety of the final product;
    - (iv) the use of the substances in Annexure II for the production of plant products and pastures and meadows shall be managed to limit the potential for microbial, chemical, physical and parasite contamination of the products and pastures and meadows;

- (v) the operator regularly evaluates the substances used on the operation against the criteria in Annexure I to re-confirm the organic status thereof or to identify possible alternatives that are of better organic status: Provided further that the operator reconfirms with the approved certifying organisation when substances are changed; and
  - (vi) the criteria in Annexure I shall be used to amend Annexure II or determine the need for use of the substances in Annexure II.
- (e) Manures containing human excrement (faeces and urine) shall not be used.
  - (f) Mineral fertilisers shall be applied in their natural composition (without chemical treatment to render it more soluble), with the exception of those listed in Annexure II.
  - (g) Plant based preparations or preparations of micro-organisms such as "bio-dynamic preparations" from stone meal, farmyard manure or plants may be used for compost activation or to improve the overall condition and nutrients of the soil.
  - (h) Chilean nitrate and all synthetic nitrogenous fertilisers, including urea, are prohibited.
  - (i) Pests, diseases and weeds shall be controlled by a combination of the following measures --
    - (i) choice of appropriate species and varieties;
    - (ii) appropriate rotation programmes;
    - (iii) mechanical cultivation procedures;
    - (iv) protection of natural enemies of pests through provisions favourable to them; and
    - (v) flame and steam weeding.
  - (j) Thermic sterilisation of soils to combat pests and diseases is restricted to circumstances where proper rotation or renewal of soil cannot take place.
  - (k) The substances allowed for plant pest and disease control, weed management and growth regulation are indicated in Annexure III: Provided that --
    - (i) the substances mentioned in Annexure III may be applied only in cases of immediate threat to the crop when control by the measures set out under subregulation (2)(i) are not adequate;
    - (ii) certain restrictions should be placed on the use of the substances in Annexure III where use could result in, or contribute to, unacceptable effects on, or contamination of, the environment, soil organisms and the quality and safety of the final product;
    - (iii) the operator regularly evaluates the substances used on the operation against the criteria in Annexure I to re-confirm the organic status thereof or to identify possible alternatives that are of better organic status: Provided further that the operator immediately reconfirms with the approved certifying organisation when substances are changed, after which an audit may be scheduled;

- (iv) when any substance or a mixture of substances from those listed in Annexure III is sold, and the labelling thereof refers to any remedial quality against a pest or pests, such as an insecticide, herbicide, fungicide, etc., then the product/s must be registered under the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947); and
  - (v) Annexure III may be amended using the criteria in Annexure I.
- (l) Products used for pest, disease and weed management, prepared on the farm from local plants, animals and micro-organisms are allowed: Provided that the operator can provide proof that the safety of the products used was investigated and regularly evaluates the products used on the operation against the criteria in Annexure I to re-confirm the safety and organic status thereof or to identify better alternatives: Provided further that the operator immediately reconfirms with the approved certifying organisation when products are changed, after which an audit may be scheduled.
  - (m) All equipment from conventional operations shall be properly cleaned and free from residues before being used on organically managed areas: Provided that dedicated equipment is preferred.
  - (n) The use of synthetic pesticides, herbicides, fungicides and insecticides are prohibited, with the exception of those listed in Annexure III.
  - (o) Clearing of vegetation by means of burning organic matter shall be restricted to a minimum.
  - (p) Clearing of primary forest is prohibited.
  - (q) Relevant measures shall be taken to prevent soil erosion.
  - (r) Excessive exploitation and depletion of water resources is not allowed.
  - (s) Appropriate stocking densities, which do not lead to veld degradation, soil erosion and pollution of ground and surface water, shall be followed.
  - (t) Relevant measures shall be taken to prevent salination of soil and water.
- (3) Organically produced products from plant origin shall be subjected to the following conversion practices:
- (a) Plant products from annual plants can be certified organic when the requirements have been met for a minimum of 24 months before the start of the production cycle.
  - (b) Perennial plants (excluding pastures and meadows) can be certified organic at the first harvest after the requirements have been met for at least 36 months.
  - (c) Pastures, meadows, fields and their products used for feed or grazing can be certified organic after the requirements have been met for 24 months.

- (d) The conversion periods prescribed in subregulation (3)(a), (b) and (c) can be extended depending on past conditions of the farm-land and environment.
  - (e) The conversion periods prescribed in subregulation (3)(a), (b) and (c) can be retroactively acknowledged if guarantees/proof can be obtained that the conversion practices have been met.
- (4) Organically produced products from plant origin shall comply with the following contamination control:
- (a) Only products based on polyethylene and polypropylene or other polycarbonates are allowed for protective structure coverings, plastic mulches, fleeces, insect nettings and silage wrapping: Provided that it shall be removed after use, may not be burned on the operation and is properly disposed of.
  - (b) In case of reasonable suspicion of contamination relevant products and possible sources of pollution shall be analysed to determine the level of contamination.
- (5) Organically produced products from plant origin can be non-cultivated natural plant material or honey collected as follows:
- (a) Shall be derived from a stable and sustainable growing environment: Provided that harvesting or gathering shall not exceed the sustainable yield of the ecosystem or affect the stability of the natural habitat or the maintenance of the species in the collecting area.
  - (b) The collecting area shall be clearly defined and may not be exposed to prohibited substances.
  - (c) The collecting area shall be an appropriate distance from conventional farming, pollution and contamination.
  - (d) The harvesters (persons) in the collecting area shall be familiar with the boundaries of the collecting area.
  - (e) The area shall have received no treatments with substances not allowed by these regulations for a period of three years before collection.

***Standards for organically produced animals and products thereof***

6. (1) Organically produced animals shall be produced as follows:
- (a) From organic livestock when available, and in the choice of breeds or strains account shall be taken of the capacity of the animals to adapt to local conditions and their vitality and resistance to disease, and specific diseases or health problems associated with some breeds or strains used in intensive and factory farming production shall be avoided.
  - (b) From breeds that can both copulate and give birth naturally.
  - (c) All animals shall be bred on the operation: Provided that only for poultry production may chicks be brought in without being bred on the operation.
  - (d) Artificial (instrumental) insemination of animals is allowed.

- (e) Embryo transfer techniques and other forms of assisted reproduction are not allowed in organic production.
  - (f) When a herd or flock is constituted for the first time, or with high mortality of animals caused by catastrophic circumstances, and organic livestock is not available, conventional animals may be brought in according to the following age limits:
    - (i) Chickens for the production of eggs and meat less than three days old.
    - (ii) Two week old birds for any other poultry.
    - (iii) Piglets, for breeding purposes, which shall be reared according to these regulations as soon as they are weaned and shall weigh less than 35 kg.
    - (iv) Calves, for breeding purposes, which shall be reared according to these regulations as soon as they are weaned and shall be less than six months old.
    - (v) Lambs and kids, for breeding purposes, which shall be reared according to these regulations as soon as they are weaned and shall be less than 60 days old.
    - (vi) Horses, for breeding purposes, which shall be reared according to these regulations as soon as they are weaned and shall be less than six months old.
  - (g) Breeding stock from conventional operations may be brought in when organically reared animals are not available, with a yearly maximum of 10% of adult equine or bovine livestock and 20% of the adult porcine, ovine and caprine livestock: Provided that for breeding units with less than ten equine or bovine animals or less than five porcine, ovine or caprine animals, a maximum of one animal per year may be allowed.
  - (h) The percentages mentioned in subregulation (1)(g) may be increased up to 40% in the following special cases –
    - (i) when a major extension to the stockfarm is undertaken;
    - (ii) when a breed is changed;
    - (iii) when a new livestock specialisation is developed; or
    - (iv) when breeds are in danger of being lost to farming: Provided that animals of these breeds need not be nulliparous.
  - (i) The brought-in conventional animals mentioned in subregulation (1)(f), (g) and (h) shall be subject to the conversion periods prescribed for the animals in subregulation (3)(c).
  - (j) All brought-in conventional animals shall come from extensive husbandry practices.
- (2) Operations for organically produced animals shall comply with the following production practices:
- (a) Management of the animal environment shall take into account the size of the group, the animals' sex and the behaviour/needs of the animals and provides for:

- (i) Access to grazing/pastures appropriate to the type of animal and season: Provided that the Executive Officer shall approve the need for restricting access to grazing/pastures.
- (ii) Sufficient free movement in free-range, open-air exercise areas or open air runs, mainly covered by vegetation, and which may be partially covered.
- (iii) Sufficient fresh air and natural daylight according to the needs of the animals.
- (iv) Protection against excessive sunlight, temperatures, rain and wind shall be provided for use by the animals.
- (v) Stock densities in buildings shall be such as to allow adequate area according to the species, breed, age and needs of the animals, to assume all natural postures and to make natural movements such as standing, lying, grooming, turning around, stretching and wing flapping.
- (vi) Natural materials shall be used for animals requiring bedding and ample relatively clean dry bedding should be provided in the rest area.
- (vii) Ample and easy access to fresh potable water and fresh palatable feed according to the needs of the animals.
- (viii) Adequate facilities for expressing behaviour in accordance with the biological and ethological needs of the species.
- (ix) No construction materials or production equipment shall be used in a way that may significantly harm human and animal health.
- (x) Herd animals shall not be kept individually: Provided that the stage of development and behavioural needs of the species concerned shall be considered when deciding on the size of the group.
- (xi) Keeping livestock tethered is forbidden.
- (xii) Housing construction shall ensure that air circulation, dust level, temperature, relative humidity and gas concentration are kept within limits not harmful to the animals: Provided that housing is not mandatory in areas with appropriate climatic conditions.
- (xiii) The perches, indoor housing and outdoor exercise areas shall be of a number and size to commensurate with the size of the group of animals/birds and the minimum surface areas for perches, indoor housing and outdoor exercise areas are laid down in Annexure IV: Provided that in poultry houses for laying hens a sufficiently large part of the floor area shall be available to the hens for the collection of bird droppings.
- (xiv) At least half the floor area of livestock housing shall be solid, not of slatted or of grid construction and the floors shall not be slippery: Provided that the solid floor area may be reduced to one third for poultry that shall be covered with litter material.

- (xv) Calves may not be housed in individual boxes after the age of one week.
  - (xvi) Sows shall be kept in groups except in the last stages of pregnancy and during the suckling period and piglets may not be kept in piglet pens.
  - (xvii) The exercise areas for pigs shall permit dunging and rooting by the animals: Provided that for the purposes of rooting different substrates can be used.
  - (xviii) Housing, equipment and utensils shall be properly cleaned and disinfected to prevent cross-infection and the build up of disease carrying organisms and faeces, urine and uneaten or spilt feed shall be removed as often as required to minimise smell and to avoid attracting insects or rodents.
  - (xix) Water fowl shall have access to a stream, pond or lake.
  - (xx) Poultry houses/buildings shall have exit/entry pop-holes of adequate size for the birds and the pop-holes shall have a combined length of at least 4 m per 100 m<sup>2</sup> of the house/building available to the poultry.
  - (xxi) Poultry buildings shall be emptied of livestock between each batch of poultry reared, cleaned and disinfected and the buildings and open air runs shall be left empty for at least two months for health reasons and for the vegetation to grow back.
- (b) When natural day length is prolonged by artificial lighting maximum hours respective to species, geographical considerations and general health of animals, shall be used: Provided that for poultry a maximum of 16 hours light per day is permitted followed by a continuous nocturnal rest period without artificial lighting for at least eight hours.
- (c) Physical castration by competent personnel is allowed, except for castration in poultry (capons).
- (d) Mutilation shall not be allowed, with possible exceptions for castration (excluding poultry), tail docking of lambs, dehorning and ringing: Provided that suffering shall be minimised, anaesthetics used where appropriate, operations are carried out at the most appropriate age by competent personnel and the treatments are intended to improve the health, welfare or hygiene of the animals: Provided further that these exceptions are subject to need.
- (e) The allowed feed and substances used in feeding stuffs as well as the fodder preservatives and processing aids for silage are indicated in Annexure V: Provided that the operator regularly evaluates the feed and substances used on the operation against the criteria in Annexure I to re-confirm the organic status thereof or to identify possible alternatives that are of better organic status: Provided further that the operator immediately reconfirms with the approved certifying organisation when the feed or substances are changed, after which an audit may be scheduled.
- (f) Animals should be fed 100% organic feed: Provided that --

- (i) in the case of herbivores at least 50% of the feed shall come from the operation itself or be produced in co-operation with other organic operations in the region;
  - (ii) up to 30%, on dry basis, of the feed formula or rations on average may comprise of in-conversion feed or up to 60% if the feed comes from the operation itself;
  - (iii) feed from conventional operation origin may be allowed, in situations where it is impossible to obtain adequate organic feed, to a maximum of 5% dry matter for herbivores and 10% dry matter for other species (calculated on an annual basis);
  - (iv) at least 60% of the dry matter in daily rations of herbivores shall consist of roughage, fresh or dried fodder, or silage;
  - (v) roughage, fresh or dried fodder, or silage shall be added to the daily ration for pigs and poultry; and
  - (vi) the feed formula used in the fattening stage of poultry shall contain at least 65% cereals.
- (g) The following products may not be included in, nor added to the feed or in any other way be given to the animals:
- (i) Synthetic appetisers.
  - (ii) Preservatives, except when used as processing aids.
  - (iii) Artificial colouring agents.
  - (iv) Urea.
  - (v) Farm animal by-products, with the exception of those listed in Annexure V.
  - (vi) Droppings, dung or other manure.
  - (vii) Feed subjected to solvent extraction or the addition of other chemical agents.
  - (viii) Pure amino acids.
  - (ix) Substances such as antibiotics, coccidiostatics, medical substances, growth regulators for production, stimulation or suppression of natural growth.
  - (x) Hormones for heat induction and heat synchronisation unless used for an individual animal against reproductive disorders, justified by veterinary indications.
- (h) Feeding shall be such as to ensure quality production rather than maximising production, while meeting the nutritional requirement of the animals at various stages of their development: Provided that fattening practices are allowed in so far as they are reversible at any stage of the rearing process.
- (i) Force feeding is forbidden.

- (j) Young stock from mammals shall be raised on organic milk, preferably from their own species.
- (k) Minimum weaning times shall be --
  - (i) three months for bovines and equidae;
  - (ii) 45 days for sheep and goats; and
  - (iii) 40 days for pigs.
- (l) Disease prevention shall be based on encouraging the resistance to disease and prevention of infections and health problems by:
  - (i) The selection of appropriate breeds or strains of animals.
  - (ii) The application of stress free animal husbandry practices appropriate to the requirements of each species.
  - (iii) The use of high quality feed, together with regular exercise and access to pasturage.
  - (iv) Assuring an appropriate density of livestock.
  - (v) Regular observation of animal's condition and early intervention if needed.
- (m) The well-being of the animals is the primary consideration in the choice of illness treatment and a sick or injured animal shall be treated immediately, in isolation or appropriate housing where necessary, irrespective of the consequence to the certification status of the animal: Provided that if an animal is so severely diseased or injured or that to prolong its life would cause unnecessary suffering, it shall be immediately and humanely destroyed.
- (n) The use of veterinary medicinal products shall comply with the following:
  - (i) Phytotherapeutic, homeopathic and trace elements and other substances listed in Part 3 of Annexure V, effective for the species of animal and condition for which the treatment is intended, shall be used in preference to chemically-synthesised allopathic veterinary medicinal products or antibiotics.
  - (ii) If the products in subregulation (n)(i) are not, or is unlikely to be, effective in combating illness or injury and treatment is essential to avoid suffering or distress to the animal, chemically-synthesised allopathic veterinary medicinal products or antibiotics may be used under the responsibility of a veterinarian.
  - (iii) The use of chemically-synthesised allopathic veterinary medicinal products or antibiotics for preventive treatment is prohibited.
  - (iv) The use of substances to promote growth or production, the use of hormones and similar substances to control growth or reproduction, are prohibited: Provided that the substances may be used for an individual animal against reproductive disorders, justified by veterinary indications.
  - (v) When veterinary medicinal products are used it shall be recorded together with the details of the diagnosis, method of administration, duration of treatment and legal withdrawal period.

- (vi) Livestock treated shall be clearly identified, individually in the case of large animals and individually or by batch in the case of poultry and small animals.
- (vii) Vaccinations, treatments for parasites as well as legally required veterinary treatments to animals, buildings, equipment and facilities shall be allowed, including cases where a disease has been recognised as present in a specific area and these treatments may include genetically modified organisms and products derived from such organisms.
- (viii) When allopathic veterinary medicinal products are used the withdrawal period shall be at least double the legal period or at least 48 hours when no withdrawal period is specified.
- (ix) With the exception of the treatments as indicated in subregulation (n)(vii), where an animal or a group of animals receive more than two courses of treatments with chemically-synthesised allopathic veterinary medicinal products or antibiotics within one year, the animals shall again undergo the prescribed conversion periods.

(3) Organically produced animals and the farm-land and feed associated with their production are subject to the following conversion practices:

- (a) The conversion periods for products from plant origin, as prescribed in regulation 5(3), shall apply to pastures, meadows, farm-land and their products used for feed and grazing.
- (b) The conversion period shall be reduced to one year for pastures, open air runs and exercise areas used by non-herbivore species: Provided that the conversion period can be reduced to six months if guarantees/proof can be obtained that the conversion practices have been met.
- (c) Animal products can be certified organic after the animals on the operation or relevant part thereof have been under organic practices for at least --
  - (i) twelve months in the case of equidae and bovines for meat production;
  - (ii) six months in the case of small ruminants and pigs;
  - (iii) six months in the case of animals for milk production;
  - (iv) ten weeks for poultry for meat production, brought in before they are three days old; and
  - (v) six weeks in the case of poultry for egg production, brought in before they are three days old.

(4) Organically produced animals shall be transported and slaughtered as follows:

- (a) The handling during transport and slaughter shall be gentle without the use of electric sticks and such instruments.
- (b) Slaughter and transportation standards shall take into consideration:
  - (i) Stress caused to the animal.
  - (ii) Fitness of the animal.
  - (iii) Loading and unloading.

- (iv) Mixing different groups of animals or animals of different sex.
  - (v) Quality and suitability of mode of transport and handling equipment.
  - (vi) Temperature and relative humidity.
  - (vii) Hunger and thirst.
  - (viii) Specific needs of each animal.
- (c) No chemically or synthesised tranquillisers/sedatives or stimulants shall be given prior to or during transport.
  - (d) Each animal or group of animals shall be identifiable during transport and slaughter.
  - (e) Slaughterhouse journey times shall not exceed eight hours.
  - (f) For poultry, the minimum age at slaughter shall be --
    - (i) 81 days for chickens;
    - (ii) 49 days for Peking ducks;
    - (iii) 70 days for female Muscovy ducks;
    - (iv) 84 days for male Muscovy ducks;
    - (v) 92 days for Mallard ducks;
    - (vi) 94 days for guinea fowl;
    - (vii) 140 days for turkeys and roasting geese; and
    - (viii) where producers do not apply these minimum slaughter ages, they shall use slow-growing strains.
- (5) Livestock manure shall be handled as follows:
- (a) Stocking density shall be such that the total amount of manure applied per hectare shall not exceed 170 kg of Nitrogen per hectare/year of agricultural area used.
  - (b) The density of livestock equivalent to 170 kg of Nitrogen per hectare/year is given in Annexure VI to be used as a guideline.
  - (c) Storage facilities for livestock manure shall be of a capacity to prevent the pollution of water by direct discharge or by run-off or infiltration of the soil.
- (6) Organic livestock and livestock products shall be identified at all stages of their production, preparation, transport and marketing.

### ***Standards for organic bee keeping***

7. Organic bee keeping shall comply with the following production practices:

(1) Hives shall be situated in organically managed fields and farm-land or uncultivated areas/bush/veld and shall be collected as prescribed in regulation 5(5).

(2) When the survival of the hives is endangered due to extreme climatic conditions feeding shall take place --

- (a) after the last harvest and before the next season;
- (b) only if the feed consist of certified organic honey, sugar syrup, sugar molasses;
- (c) to such an extent that the feed is not stored by the bees; and
- (d) if the following information is recorded with regard to the feeding: Type of product, dates, quantities and hives where used.

(3) The foundation comb shall be made of organic beeswax.

(4) The bee hive shall primarily consist of natural materials and the use of materials with potentially toxic effects are prohibited.

(5) Mutilation such as wing clipping is not allowed.

(6) Artificial (instrumental) insemination of bees is not allowed.

(7) Destruction of bees as harvesting method is prohibited.

(8) When working with bees no repellent consisting of prohibited substances, such as synthetic repellents, shall be used.

(9) Replacement of the queen bees involving the killing of the old queen is permitted.

(10) Beekeeping products can be sold as organic only when the provisions of these regulations have been met for at least one year.

(11) Simultaneous conventional and organic production are allowed: Provided that the hives are clearly identified and conventional and organic hives are sited at least 6 km from each other.

(12) The siting of the hives during production shall --

- (a) ensure sufficient natural nectar, honeydew and pollen sources and access to water;
- (b) be such that, within a radius of at least 3 km from the hive, nectar and pollen sources consist essentially of organically managed fields and farm-land or uncultivated areas/bush/veld; and
- (c) maintain enough distance from any non-agricultural activities, such as urban areas, motorways, industrial areas, waste dumps, that can possibly lead to contamination of the sources, products or bees.

(13) New hives shall be established by means of colonies or the acquisition of swarms from operations complying with the provision of these regulations: Provided that 10% per year of queen bees and swarms not complying with the provisions of these regulations can be incorporated into organic production without undergoing the conversion period.

(14) Hives shall be left with reserves of honey and pollen sufficiently abundant to survive lean times: Provided that feeding shall take place due to the conditions and according to the specifications prescribed in subregulation (2).

(15) Disease prevention shall be based on the application of stress free practices encouraging resistance to disease and the prevention of infections, such as regular renewal of queen bees, systematic inspection of hives to detect any health anomalies, control of drone broods in the hives, disinfecting of materials and equipment at regular intervals, destruction of contaminated material or sources, regular renewal of beeswax and sufficient reserve of pollen and honey in hives

(16) The use of veterinary medicinal products shall comply with the following:

- (a) Phytotherapeutic and homeopathic products shall be used in preference to chemically-synthesised allopathic veterinary medicinal products: Provided that their therapeutic effect is effective for the condition for which the treatment is intended.
- (b) If the products in subregulation (16)(a) are not, or is unlikely to be, effective in combating illness or injury, chemically-synthesised allopathic veterinary medicinal products or antibiotics may be used under the responsibility of a veterinarian.
- (c) The use of chemically-synthesised allopathic veterinary medicinal products or antibiotics for preventive treatment is prohibited.
- (d) For pest and disease control and for hive disinfection the following substances may be allowed: Provided that the operator regularly evaluates the substances used on the operation against the criteria in Annexure I to re-confirm the organic status thereof or to identify possible alternatives that are of better organic status: Provided further that the operator immediately reconfirms with the approved certifying organisation when substances are changed, after which an audit may be scheduled:
  - (i) Caustic soda.
  - (ii) Lactic, oxalic, acetic acid.
  - (iii) Formic acid.
  - (iv) Sulphur.
  - (v) Menthol, thymol, eucalyptol or camphor.
  - (vi) *Bacillus thuringiensis*.
  - (vii) Physical treatments such as steam or direct flame.
- (e) When veterinary medicinal products are used it shall be recorded together with the details of the diagnosis, the posology, method of administration, duration of treatment and legal withdrawal period.
- (f) When chemically-synthesised allopathic products are used for treatment, then --
  - (i) the hives shall be placed in isolation;
  - (ii) the wax shall be replaced; and
  - (iii) the conversion period of one year will apply.
- (g) Any veterinary treatment or treatments to hives, combs, etc., which are compulsory under national legislation shall be authorised.

(17) Hives shall be identified/marked and records, such as where the hives are kept, maps locating the beehives, the movement or removal of supers, transport of bees, feeding, treatments, general checkups and extraction, shall be kept.

***Processing, handling, packaging, storage, distribution and retailing of organically produced products***

8. (1) All equipment, vehicles and re-usable containers used for conventional product shall be properly cleaned and free from residues before being used for organically produced products: Provided that dedicated lines are preferred.

(2) Material used for packaging shall not contaminate the products and the use thereof shall take into consideration the effect it may have on the environment: Provided that if second hand containers such as carton boxes are used for packing or transport, the previous use thereof shall be noted and special care shall be taken to prevent contamination of the product.

(3) Organically produced products shall be protected from co-mingling with conventional products during processing, handling, packaging, storage, distribution and retailing.

(4) All products shall be adequately identified through the whole process.

(5) Methods shall be set to prevent and control pollutants and contaminants.

(6) Decontamination, cleaning and/or disinfection programmes shall be set for facilities where organic products are kept, handled, processed, stored and sold.

(7) Compliance to regulation 8(1) to (6) need to be demonstrated through documentation such as the defining of separation measures, records, cleaning records, measures to avoid contamination with lubricants and cleaning agents, packaging material specifications, standard operating procedures, building plans and sketches.

(8) The following treatments/conditions of storage are permitted:

(a) Modified and controlled atmosphere.

(b) Temperature control.

(c) Drying.

(d) Humidity regulation.

(9) The ingredients of non-agricultural origin allowed in processing of organically produced products as well as the permitted processing aids are indicated in Annexures VII and VIII: Provided that --

(a) they are indispensable for ensuring the safety of the food;

(b) they are essential to prepare or preserve such food; or

(c) they are legally required.

(10) The operator shall regularly evaluate the substances indicated in Annexures VII and VIII which are used on the operation against the criteria in Annexure I to re-confirm the organic status thereof or to identify possible alternatives that are of better organic status: Provided further that the operator immediately reconfirms with the approved certifying organisation when substances are changed, after which an audit may be scheduled.

(11) Synthetic dyes may not be used for cosmetic alteration of organic product.

(12) The following processes are permitted:

(a) Mechanical and physical.

(b) Biological.

(c) Smoking.

(d) Extraction.

(e) Precipitation.

(f) Filtration.

(g) Distillation.

(h) Microwaving.

(13) Extraction shall only take place physically or with water, ethanol, plant and animal oils, vinegar, carbon dioxide, nitrogen or carboxylic acids of food grade quality.

(14) Filtration substances shall not contain asbestos or other substances that can negatively affect the product.

#### ***Pest and disease control***

9. (1) The following measures should be used in order of priority:

(a) Preventative methods such as disruption, elimination of habitat and access to facilities.

(b) Mechanical, physical and biological methods.

(c) The substances allowed in the Annexures.

(d) Substances used in traps.

(2) Prohibited substances, such as pesticides not listed in Annexure III, should not come in contact with organic products.

#### ***Cleaning, disinfection and sanitising***

10. (1) A list of the cleaning, disinfecting and sanitising agents allowed for livestock buildings and installations is indicated in Annexure IX: Provided that the operator regularly evaluates the agents used on the operation against the criteria in Annexure I to re-confirm the organic status thereof or to identify possible alternatives that are of better organic status or less harmful: Provided further that the operator immediately reconfirms with the approved certifying organisation when the agents are changed, after which an audit may be scheduled.

(2) Necessary precautions shall be taken to protect organic food against contamination by cleaning, disinfecting and sanitising not allowed for use in certified organic facilities.

(3) Organic food may come into contact with surfaces where an approved cleaner, sanitiser or disinfectant has been used only after any one or a combination of the intervening events, as listed below, have been used:

- (i) Hot water rinse.
- (ii) Flush with organic products, that may not be sold as organic.
- (iii) Adequate time for the substance to volatilise.

(4) Where supermarket groups/chains prescribe specific cleaning procedures/cleaning, disinfecting and sanitising agents, these may be used: Provided that any one or a combination of the intervening events described in subregulation (3) shall be used thereafter: Provided further that the operator make use of the least harmful agents available.

(5) An organic cleaning procedure, suitable for the type of operation, shall be established and documented.

(6) Monitoring shall take place to determine the adequacy of the cleaning procedure and whether the equipment and/or finished products are free of detergent and sanitiser residues.

(7) Residues of boiler water additives shall be prevented from coming into contact with organic food.

(8) Waste water from the operation, containing cleaning, disinfecting and sanitising agent residues that may pose a contamination threat to the environment shall not be used for irrigation but captured in a system where it is biologically treated.

***Labelling and marking requirements for organically produced products***

11. (1) The indications "produce of organic agriculture in process of conversion" or "organic in conversion" or similar expression referring to "organic" and "conversion", having the same meaning—

- (a) may be indicated on the labelling of organically produced products from plant origin in conversion after a conversion period of 12 months: Provided that –
  - (i) the product contains only one crop ingredient from agricultural origin; and
  - (ii) the expression is indicated in letters of the same size, type and colour and the word "organic" may not be more prominent than the rest of the expression; and
- (b) may not be indicated on the labelling of animal products.

(2) Organically produced products from plant and animal origin may be labelled as "product of organic agriculture", "organic", "organically produced", "certified organic" or with a similar expression referring to "organic", having the same meaning.

(3) A registered distinctive mark, indicating that the products are covered by the product certification scheme of an approved certifying organisation shall appear on the labelling of organically produced products: Provided that, subject to the provisions of regulation 2, no labelling of a product may refer to organic production methods without indicating a distinctive mark of the approved certifying organisation.

(4) Products covered by these regulations which are in final packaging shall, subject to any other applicable legislation, also indicate the name and address of the certified operator responsible for the production or preparation of the products or the certification number of the certified operator.

(5) Products covered by these regulations which are not in final packaging may be transported to other premises only in appropriate packaging or containers which are adequately labelled and identified to include all of the following:

- (a) The name and address of the certified operator responsible for the production or preparation of the products.
- (b) The name of the product.
- (c) The certification carried by the product.
- (d) An indication specifying that the product is covered by the regular audits of an approved certifying organisation.

(6) Products containing partly organically produced ingredients may be labelled in the following way (raw material weight):

- (a) Where a minimum of 95% of the ingredients are of organic agricultural origin, products may be labelled as organic or organic in conversion as indicated in subregulation (1) and (2) and shall carry the distinctive mark of the approved certifying organisation: Provided that the balance of the ingredients of the products may only be --
  - (i) ingredients of non-agricultural origin as indicated in Annexure VII;
  - (ii) ingredients which have not been produced organically as indicated in Annexure X; and
  - (iii) the operator regularly evaluates the ingredients used on the operation against the criteria in Annexure I to re-confirm the organic status thereof or to identify possible alternatives that are of better organic status: Provided further that the operator immediately reconfirms with the approved certifying organisation when ingredients are changed, after which an audit may be scheduled.
- (b) Where less than 95% but not less than 70% of the ingredients are of organic origin the word "organic" may be used on the principal display panel only in expressions like "made with organic (in conversion) ingredients", "with organic (in conversion) ingredients" and appearing with the distinctive mark of the approved certifying organisation: Provided that --
  - (i) the expression is indicated in letters of the same size, type and colour and the word "organic" may not be more prominent than the rest of the expression;
  - (ii) there is a clear statement of the proportion of the organic ingredients;
  - (iii) the balance of the ingredients of the products may only be ingredients of non-agricultural origin as indicated in Annexure VII and ingredients which have not been produced organically as indicated in Annexure X; and

(iv) the operator regularly evaluates the ingredients used on the operation against the criteria in Annexure I to re-confirm the organic status thereof or to identify possible alternatives that are of better organic status: Provided further that the operator immediately reconfirms with the approved certifying organisation when ingredients are changed, after which an audit may be scheduled.

(c) Where less than 70% of the ingredients are of certified organic origin, the indication that an ingredient is organic or organic in conversion may only appear in the ingredient list.

(d) Added potable water and salt shall not be included in the percentage calculations of organic ingredients.

(7) No wording, mark, illustration, depiction or any other method of expression that constitutes a misrepresentation or directly or by implication creates or may create a misleading impression regarding the quality, nature, class, origin or composition of organically produced products and organically produced products in conversion shall be marked on a container of such products.

(8) Any non-certified production system, such as Participatory Guarantee System, although based on organic principles, may not refer to "organic" in any way except for a written explanation on a pamphlet indicating that the system is based on the "organic principles" as required by these regulations: Provided that the production system is based on the requirements of these regulations: Provided further that the word "organic" in the writing shall not be larger or more prominent than the rest of the writing.

#### ***Auditing and certification***

12. (1) Only approved certifying organisations, complying with the requirements of regulation 13, may audit and certify organically produced products.

(2) All organically produced products shall be certified through an approved certifying organisation: Provided that the operator and operation shall be regarded as an integral part of the product.

(3) Audits shall include the whole system (from production to market).

(4) Only products certified as organic by a recognised certification organisation may be imported: Provided that importers shall apply to the Executive Officer before importing such a product in order for the Executive Officer to determine the equivalency status of and recognise the certification organisation: Provided further that the equivalency determination of the certifying organisation shall be based on—

(a) recognition by the competent authorities in the country of origin; and

(b) the system of production and auditing and certification indicated in these regulations; or

(c) Codex Alimentarius standards and accreditation of the certification organisation by an accreditation body to ISO/IEC GUIDE 65 or similar standard.

(5) Imported products shall be accompanied by a certificate of certification or equivalent document issued by the recognised certifying organisation indicating that the lot designated in the certificate --

(a) was obtained within a system of production applying equivalent standards; and

- (b) was subject to an equivalent system of audit and certification.

***Auditing and certification programme***

13. (1) In order to become an approved certifying organisation, an organisation shall make an application to the Executive Officer, and if the organisation complies with the criteria set out in subregulation (2) to (16), and provide evidence of appropriate accreditation to ISO/IEC Guide 65, the Executive Officer may request the Minister to appoint the organisation as an assignee and register a distinctive mark for the approved certifying organisation: Provided that the Executive Officer may conditionally allow the certifying organisation to function and use their distinctive mark until the Minister appoint them as assignee and register the certification mark.

(2) A certifying organisation shall have a detailed organic operation manual, based at least on the interpretation of the specifications of these regulations and the requirements of ISO/IEC Guide 65: Provided that the organic operation manual may form part of the documented management system of the organisation mentioned in subregulation (3).

(3) For an organisation to become an approved certifying organisation, the following also have to be complied with:

- (a) A management system which describes the operation of the organisation as required by ISO/IEC Guide 65.
- (b) The actions which the organisation intends to take where irregularities from the requirements of these regulations are found.
- (c) The availability of appropriate resources in the form of qualified staff, administrative and technical facilities, auditor competence and reliability.
- (d) The objectivity, impartiality and transparency of the organisation with respect to the operators subject to its audits.
- (e) Accreditation to ISO/IEC GUIDE 65: General requirements for bodies operating product certification systems.

(4) Before and after an organisation has become an approved certifying organisation the accreditation authority shall --

- (a) ensure that the audits and decision-making procedures carried out by the organisation are objective;
- (b) verify the effectiveness of the organisation's audits; and
- (c) withdraw the approval of any certifying organisation where it fails to satisfy the requirements referred to in these regulations.

(5) An approved certifying organisation shall --

- (a) make publicly accessible information about certifications granted, suspended or withdrawn, available to the Executive Officer by 30 April each year;
- (b) present to the Executive Officer a concise annual report;
- (c) not disclose information and data it obtains in its audit activities other than to the operator responsible for the undertaking concerned and, on a confidential basis to the Executive Officer;

- (d) make available to the Executive Officer, for inspection purposes access to offices and facilities together with all information and assistance deemed necessary to establish compliance with these regulations; and
- (e) be subject to inspection by the Executive Officer.

(6) In order for an operator to apply for certification by an approved certifying organisation, a formal application form, requesting relevant information, shall be used.

(7) The approved certifying organisation shall ensure that an applicant signs an undertaking to at least carry out the requirements in accordance with these regulations.

(8) The approved certifying organisation shall prescribe the keeping of up to date records covering production, processing, handling, transport, storage and sale of organic products as well as documentary accounts to enable the approved certifying organisation to trace the origin, nature and quantities of all raw material brought in and the use of such materials, including the nature, quantities and consignees of all certified agricultural products.

(9) The operator shall undertake to give the Executive Officer, accreditation authority and certifying organisation free access to the production, processing, packaging, storage and retailing area and premises as well as to the accounts and relevant supporting documents deemed necessary for the purposes of the inspection or audit.

(10) The operator shall, in the case of organic, organic in conversion and conventional production of perennial plants on the same operation, undertake to do the following--

- (a) have the conversion plan and the measures referred to in regulation 4(9)(c) yearly confirmed by the approved certification organisation;
- (b) notify the approved certifying organisation of the harvest of each of the products concerned at least 48 hours in advance, to allow the approved certifying organisation to audit the process if need be; and
- (c) immediately upon completion of the harvest inform the approved certifying organisation of the exact quantities harvested on the operations concerned together with any particular distinguishing features (such as quality, colour, average weight, etc.) and confirm that the measures taken to keep the products separate have been applied, after which the certifying organisation may audit the process to verify and confirm the information submitted.

(11) A testing programme shall be carried out where there is any basis for concern of possible contamination of soil and products with chemicals and heavy metals.

(12) Apart from annual full physical inspections in accordance with its rules of operation, an approved certification organisation shall make unannounced inspection visits to at least 15% of the operations as well.

(13) The approved certifying organisation shall be required to undertake at least the following for each audit --

- (a) verify that the operator drew up a full description of the operation, showing the storage and production premises, production units and/or collection areas, livestock buildings, pastures and open-air exercise areas, packaging and processing areas, raw materials and inputs, storage of compost and manure, and any other description that may be relevant in ensuring compliance with the provisions of the regulations;

- (b) verify that the operator drew up all the practical measures to be taken at operation-level to ensure compliance with the provision of these regulations, including management plans, planting schedules, feeding schedules;
- (c) be notified by the operator of its schedule of production of crops including a breakdown by production units, and harvesting times.
- (d) review the questionnaire with the operator noting any misunderstandings, discrepancies, or departures from original application;
- (e) audit the operations, inputs, storage, handling and marketing facilities;
- (f) include in the audit the production units, storage premises, processing areas and inputs of products not produced according to the provisions of these regulations and ensure that these products are adequately separated from organic product throughout the whole production process;
- (g) ensure that written and/or documentary accounts are kept by the operator which enable the approved certifying organisation to trace the origin, nature and quantities of all raw materials bought, the use of such materials, the nature, quantities and consigners of all agricultural products sold or arriving at the holding, and any other records that may be relevant in ensuring compliance with the provisions of these regulations;
- (h) review the quality and safety management system of the operator; and
- (i) prepare a detailed audit report and recommendation, which shall be countersigned by the operator concerned.

(14) An approved certifying organisation may accommodate the certifying of other operators by for example allowing for —

- (a) the inclusion of operator/s under the certification of an operator that act as guardian; or
- (b) the certification of smallholder groups subject to the following conditions:
  - (i) The group shall be constituted of operations with similar production systems.
  - (ii) Large operations shall not form part of such a group.
  - (iii) The group shall have a viable internal control system that assures compliance with these regulations and internal inspection shall cover all operators annually.
  - (iv) The group shall have coordinated marketing to enable oversight of production flow and product integrity.
  - (v) The group shall be certified as a whole, not individually.
  - (vi) The establishment of formal cooperatives are preferred.

(15) An approved certifying organisation shall --

- (a) ensure that, where a product carries reference to the approved certifying organisation and does not comply with the requirements of these regulations, all non-complying product is identified to the Executive Officer and the approved certifying organisation responsible must ensure that appropriate corrective action is taken; and
- (b) have and apply a legally enforceable agreement for the use of its mark, and for the measures to be adopted in case of misuse, including false claims as to certification and false use of certifying organisation marks.

(16) The approved certifying organisation shall issue a certificate of certification stating that the organic product designated in the certificate --

- (a) was obtained within an operation applying these regulations; and
- (b) was subject to the system of audit prescribed by these regulations.

***Offences and penalties***

14. Any person who contravenes or fails to comply with the provisions of these regulations shall be guilty of an offence and upon conviction be liable to a fine or imprisonment in accordance with section 11 of the Act.

**ANNEXURE I****CRITERIA TO EVALUATE INPUTS TO ORGANIC AGRICULTURE**

1. The inputs (products and/or substances) to organic agriculture shall be certified as organic by an approved organic certifying organisation.
2. If the input (products and/or substances) to organic agriculture is not an organic input or certified by an approved organic certifying organisation, but allowed by the prescribed practices in these regulations, then the following criteria (where applicable) must be used to evaluate the input --
  - (a) the input shall be essential for achieving or to fulfil specific needs or requirements for specific purposes which cannot be satisfied by the practices outlined in these regulations;
  - (b) the input shall be regularly evaluated to determine whether there are alternatives available that are certified as organic or more in line with the principles of organic production, especially where the input is conventional but allowed by these regulations;
  - (c) the input shall be able to satisfy the principles of organic production as indicated under the definition for “organic” in these regulations;
  - (d) the inputs shall be of plant, animal, microbial or mineral origin which were produced by the following processes --
    - physical
    - enzymatic;
    - microbial; andmay not be synthetic (i.e. a substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant or animal sources: Provided that this requirement shall not apply to substances created by naturally occurring biological processes);
  - (e) the inputs shall not be genetically modified organisms and products (i.e. organisms or products produced through techniques in which the genetic material has been altered in a way that does not occur naturally by mating and or natural recombination);
  - (f) the input shall not be from industrial management systems that are heavily reliant on veterinary and feed inputs not permitted in organic agriculture (i.e. “factory farming”);
  - (g) the use of irradiation is not allowed in production and processing of inputs;
  - (h) the use of the input shall not result in, or contribute to, unacceptable effects on, or contamination of, the environment (must contribute to the improvement of landscape and biodiversity);
  - (i) the use shall not have unacceptable effects on the quality and food safety of the final product;
  - (j) legally required inputs and treatments (i.e. where there are no legal alternatives) to plants, animals, buildings, equipment and facilities are allowed and may include genetically modified organisms and products derived from such organisms; and

- (k) inputs used shall comply with any other relevant legislation applicable to the products/substances, and in the absence thereof the use shall be in accordance with good practices.

## ANNEXURE II

## SUBSTANCES THAT MAY BE USED FOR USE IN FERTILISING AND SOIL CONDITIONING

SUBSTANCE	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS OF USE
Farmyard and poultry manure	Products comprising a mixture of animal excrements and vegetable matter (animal bedding). Indication of animal species. Coming from extensive farming, but if sourced from intensive farming or not sourced from organic production systems then the need for use thereof must be motivated to the approved certifying organisation, and it shall be composted.
Slurry or urine (not from human origin)	If not from organic sources then the need for use thereof must be motivated to the approved certifying organisation. Use after controlled fermentation and/or appropriate dilution. Factory farming sources not permitted. Indication of animal species.
Composted animal excrements, including poultry manure	Factory farming sources not permitted. Need for use thereof must be motivated to the approved certifying organisation. Indication of animal species.
Dried farmyard manure and dehydrated poultry manure	Need for use thereof must be motivated to the approved certifying organisation. Indication of animal species. Coming from extensive farming, but if from intensive farming sources it must be composted.
Guano (bird and bat)	Need for use thereof must be motivated to the approved certifying organisation.
Straw	Need for use thereof must be motivated to the approved certifying organisation.
Composts from spent mushroom substrates & dejecta of worms and insects (vermiculture substrates)	The initial composition limited to products on this list.

SUBSTANCE	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS OF USE
Composted or fermented organic household refuse	Organic vegetable and animal waste separated from household waste, which has been subjected to composting or anaerobic fermentation for biogas production. Need for use thereof must be motivated to the approved certifying organisation. Maximum concentrations in mg/kg of dry matter: Cadmium: 0,7; Copper: 70; Nickel: 25; Lead: 45; Zinc: 200; Mercury: 0,4; Chromium (total): 70; Chromium (VI): 0(*). (* ) = limit of determination.
Composted or fermented plant residues	Need for use thereof must be motivated to the approved certifying organisation. Mixtures of plant matter which has been subjected to composting or anaerobic fermentation for biogas production.
Products and by-products of animal origin from slaughterhouses & fish industries: <ul style="list-style-type: none"> <li>- blood meal</li> <li>- hoof meal</li> <li>- horn meal</li> <li>- bone meal or degelatinised bone meal</li> <li>- fish meal</li>   <li>- meat meal</li> <li>- feather, hair and "chiquette" meal</li> <li>- wool</li> <li>- fur</li>   <li>- hair</li> <li>- dairy products</li> </ul>	Need for use thereof must be motivated to the approved certifying organisation. <ul style="list-style-type: none"> <li>-</li> <li>-</li> <li>-</li> <li>-</li> </ul> Heavy metal contamination monitoring necessary. <ul style="list-style-type: none"> <li>-</li> <li>-</li> <li>-</li> </ul> Maximum concentration in mg/kg of dry matter of Chromium (VI):0 (*). (* ) = limit of determination <ul style="list-style-type: none"> <li>-</li> <li>-</li> </ul>
By-products of food & textile industries	Not treated with synthetic additives. Need for use thereof must be motivated to the approved certifying organisation.
Seaweeds and seaweeds products	Need for use thereof must be motivated to the approved certifying organisation. Directly obtained by -- physical processes; extraction with water or acid and/or alkaline solution; and fermentation.
Sawdust, bark and wood waste	From wood not chemically treated after felling.
Wood ash	From wood not chemically treated after felling.

SUBSTANCE	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS OF USE
Natural phosphate rock	Need for use thereof must be motivated to the approved certifying organisation. Cadmium should not exceed 90 mg/kg of P <sub>2</sub> O <sub>5</sub> .
Basic slag	Need for use thereof must be motivated to the approved certifying organisation.
Rock potash, mined potassium salts (e.g. kainite, sylvinite)	Need for use thereof must be motivated to the approved certifying organisation.
Potassium sulphate, possibly containing magnesium salt	Obtained by physical procedures but not enriched. Need for use thereof must be motivated to the approved certifying organisation. Derived from crude potassium salt.
Calcium carbonate of natural origin (e.g. chalk, marl, maerl, limestone, phosphate chalk)	-
Magnesium and calcium carbonate of natural origin (e.g. magnesian chalk, ground magnesium limestone)	-
Industrial lime from sugar production	Need for use thereof must be motivated to the approved certifying organisation.
Epsom salt (magnesium-sulphate)	-
Gypsum (calcium sulphate)	Only of natural origin.
Stillage and stillage extract	Ammonium stillage excluded.
Sodium chloride	Only mined salt. Need for use thereof must be motivated to the approved certifying organisation.
Aluminium calcium phosphate	Cadmium should not exceed 90 mg/kg of P <sub>2</sub> O <sub>5</sub> . Use limited to basic soils (pH > 7,5).
Trace elements (e.g. boron, copper, iron, manganese, molybdenum, zinc)	Need for use thereof must be motivated to the approved certifying organisation.
Sulphur	Need for use thereof must be motivated to the approved certifying organisation.
Stone meal	-

<b>SUBSTANCE</b>	<b>DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS OF USE</b>
Clay (e.g. bentonite, vermiculite, perlite, zeolite)	-
Naturally occurring biological organisms (e.g. worms)	-
Peat	Excluding synthetic additives; permitted for seed, potting module composts (limited to horticulture).
Calcium chloride solution	Need for use thereof must be motivated to the approved certifying organisation. Foliar treatment of apple trees after identification of deficit of calcium.
By-products of industries processing ingredients from organic agriculture	Need for use thereof must be motivated to the approved certifying organisation.

## ANNEXURE III

## SUBSTANCES THAT MAY BE USED FOR PLANT PEST AND DISEASE CONTROL, WEED MANAGEMENT AND GROWTH REGULATION

SUBSTANCE <sup>#</sup>	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS FOR USE
<b>I. Plant and Animal</b>	
Preparations on basis of pyrethrums extracted from <i>Chrysanthemum cinerariaefolium</i> , containing possibly a synergist.	Need for use thereof must be motivated to the approved certifying organisation. Insecticide.
Preparations of Rotenone from <i>Derris spp</i> , <i>Lonchocarpus</i> , <i>Thephrosia spp</i> .	Need for use thereof must be motivated to the approved certifying organisation. Insecticide.
Preparations from <i>Quassia amara</i>	Insecticide, repellent.
Azadirachtin extracted from <i>Azadirachta indica</i> (Neem tree)	Need for use thereof must be motivated to the approved certifying organisation. Insecticide.
Plant oils (e.g. mint oil, pine oil, caraway oil)	Insecticide, acaricide, fungicide and sprout inhibitor.
Gelatine	Insecticide.
Lecithin	Fungicide.
Extract (aqueous solution) from <i>Nicotiana tabacum</i>	Insecticide. Only against aphids in subtropical fruit trees (e.g. oranges, lemons) and tropical crops (e.g. bananas); use only at the start of the vegetation period. Need for use thereof must be motivated to the approved certifying organisation.
Bees wax	Pruning agent.
<b>II. Mineral</b>	
Copper salts (copper hydroxide, copper oxychloride, tribasic copper sulphate, cuprous oxide)	Need for use thereof must be motivated to the approved certifying organisation. Fungicide. Shall not exceed 6kg copper/ha or 38kg copper/ha for perennial crops.
Lime sulphur (calcium polysulphide)	Need for use thereof must be motivated to the approved certifying organisation. Fungicide, insecticide, acaricide.

SUBSTANCE <sup>#</sup>	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS FOR USE
Sulphur	Fungicide, acaricide, repellent.
Potassium permanganate	Fungicide, bactericide. Only in fruit trees, olive trees, vines.
Paraffin oil	Insecticide, acaricide.
Mineral oils	Insecticide, fungicide. Only in fruit trees, vines, olive trees and tropical crops (e.g. bananas). Need for use thereof must be motivated to the approved certifying organisation.
Ethylene	Degreening bananas.
Potassium alum (kalinite)	Prevention of ripening of bananas.
Quartz sand	Repellent.
<b>III. Micro organisms used for biological pest controls</b>	
Micro-organisms (bacteria, viruses, fungi) e.g. <i>Bacillus thuringiensis</i> , <i>Granulosis virus</i> , etc.	Need for use thereof must be motivated to the approved certifying organisation.
<b>IV. Other</b>	
Potassium soap (soft soap)	Insecticide.
<b>V. Traps</b>	
Pheromone preparations	Insecticide attractant: Sexual behaviour disruptor. Only in traps and dispensers.
Preparations on the basis of metaldehyde	Containing a repellent to higher animals species and as far as applied in traps. Molluscicide.
Pyrethroids (only deltamethrin or lambda-cyhalothrin)	Insecticide. Only in traps with specific attractants. Only against <i>Batrocera oleae</i> and <i>Ceratitidis</i> species. Need for use thereof must be motivated to the approved certifying organisation.
Diammonium phosphate	Attractant. Only in traps.

SUBSTANCE <sup>#</sup>	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS FOR USE
<b>VI. <i>Spread between cultivated plants</i></b>	
Iron III orthophosphate	Molluscicide.

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 form: Provided that the conditions for their use do not directly or indirectly contribute to contamination of the environment or the product.

# When any substance or a mixture of substances from those listed in Annexure III is sold or presented for use, and the labelling thereof refers to any remedial quality against a pest or pests, such as an insecticide, herbicide, fungicide, etc. then the product/s must be registered under the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947).

## ANNEXURE IV

**MINIMUM SURFACE AREAS INDOORS AND OUTDOORS AND OTHER  
CHARACTERISTICS OF HOUSING IN THE DIFFERENT SPECIES AND  
TYPES OF PRODUCTION**

1. **BOVINES, OVINES, EQUIDAE AND PIGS**

	INDOOR AREA (net area available to animals)		OUTDOOR AREA (exercise area, excluding pasturage)
	Live weight minimum (kg)	m <sup>2</sup> /head	m <sup>2</sup> /head
Breeding and fattening bovine and equidae	Up to 100	1,5	1,1
	Up to 200	2,5	1,9
	Up to 350	4,0	3
	Over to 350	5 with a minimum of 1 m <sup>2</sup> /100 kg	3,7 with a minimum of 0,75 m <sup>2</sup> /100 kg
Dairy cows		6	4,5
Bulls for breeding		10	30
Sheep and goats		1,5 sheep/goat 0,35 lamb/kid	2,5 2,5 with 0,5 per lamb/kid
Farrowing sows with piglets up to 40 days		7,5 sow	2,5
Fattening pigs	Up to 50	0,8	0,6
	Up to 85	1,1	0,8
	Up to 100	1,3	1
Piglets	Over 40 days and up to 30 kg	0,6	0,4
Brood pigs		2,5 female	1,9
		6,0 male	8,0

## 2. POULTRY

	<b>INDOOR AREA</b> (net area available to animals)			<b>OUTDOOR AREA</b> (m <sup>2</sup> of area available in rotation/head)
	<b>No animals/m<sup>2</sup></b>	<b>cm perch/animal</b>	<b>nest</b>	
Laying hens	6	18	8 laying hens per nest or in case of common nest 120 cm <sup>2</sup> /bird	4, provided that the limit of 170 kg of N/ha/year is not exceeded
Fattening poultry (in fixed housing)	10 with a maximum of 21 kg live weight/m <sup>2</sup>	20 (for guinea fowl only)		4 broilers and guinea fowl 4,5 ducks 10 turkey 15 geese In all the species mentioned above the limit of 170 kg of N/ha/year shall not be exceeded
Fattening poultry in mobile housing	16 in mobile poultry houses with a maximum of 30 kg live weight/m <sup>2</sup>			2,5, provided that the limit of 170 kg of N/ha/year is not exceeded

**ANNEXURE V****FEED MATERIALS, FEED ADDITIVES, PROCESSING AIDS AND SUBSTANCE USED IN FEEDING STUFFS****1. FEED MATERIALS FROM PLANT ORIGIN****1.1 Cereals, grains, their products and by-products. Included in this category are the following:**

Oats as grains, flakes, middlings, hulls and bran; barley as grains, protein and middlings; rice germ expeller; millet as grains; rye as grains and middlings; sorghum as grains; wheat as grains, middlings, bran, gluten feed, gluten and germ; spelt as grains; triticale as grains; maize as grains, middlings, bran, germ expeller and gluten; malt culms; and brewers' grains.

**1.2 Oil seeds, oil fruits, their products and by-products. Included in this category are the following:**

Rape seed, expeller, and hulls; soya bean as bean, toasted, expeller and hulls; sunflower seed as seed and expeller; cotton as seed and seed expeller; linseed as seed and expeller; sesame seed as seed and expeller; palm kernels as expeller; pumpkin seed as expeller; olive pulp (from physical extraction of olives); and vegetable oils from physical extraction.

**1.3 Legume seeds, their products and by-products. Included in this category are the following:**

Chick peas as seeds, middlings and bran; ervil as seeds, middlings and bran; chickling vetch as seeds submitted to heat treatment; peas as seeds, middlings and bran; broad beans as seeds, middlings and bran; horse beans as seeds, middlings and bran; vetches as seeds, middlings and bran; and lupin as seeds, middlings and bran.

**1.4 Tuber roots, their products and by-products. Included in this category are the following:**

Sugar beet pulp, potato, sweet potato as tuber, potato pulp (by-product of the extraction of potato starch), potato starch, potato protein and manioc.

**1.5 Other seeds and fruits, their products and by-products. Included in this category are the following:**

Carob, carob pods and meal thereof, pumpkins, citrus pulp, apples, quinces, pears, peaches, figs, grapes and pulp thereof, chestnuts, walnut expeller, hazelnut expeller, cocoa husk and expeller, and acorns.

**1.6 Forages and roughages. Included in this category are the following:**

Lucerne, lucerne meal, clover, clover meal, grass (obtained from forage plants), grass meal, hay, silage, straw of cereals, and root vegetables for foraging.

**1.7 Other plants, their products and by-products. Included in this category are the following:**

Molasses, seaweed meal (obtained by drying and crushing seaweed and washed to reduce iodine content), powders and extracts of plants, plant protein extracts (solely provided to young animals), spices and herbs.

**2. FEED MATERIALS FROM ANIMAL ORIGIN****2.1 Milk and milk products. Included in this category are the following:**

Raw milk, milk powder, skimmed milk, skimmed milk powder, buttermilk, buttermilk powder, whey, whey powder, whey powder low in sugar, whey protein powder (extracted by physical treatment), casein powder, lactose powder, curd and sour milk.

- 2.2 Fish, other marine animals, their products and by-products. Included in this category are the following:

Fish, fish oil and cod-liver oil not refined; fish, molluscan or crustacean autolysates, hydrolysate and proteolysates obtained by an enzyme action, whether or not in soluble form, solely provided to young animals; and fish meal.

- 2.3 Eggs, their products and by-products. Included in this category are the following:

Eggs and egg products for use as poultry feed, preferably from the same operation.

### 3. **FEED MATERIALS FROM MINERAL ORIGIN**

The following substances are included in this category:

#### **Sodium:**

Unrefined sea salt  
Coarse rock salt  
Sodium sulphate  
Sodium carbonate  
Sodium bicarbonate  
Sodium chloride

#### **Potassium:**

Potassium chloride

#### **Calcium:**

Lithotamnion and maerl  
Shells of aquatic animals (including cuttlefish bones)  
Calcium carbonate  
Calcium lactate  
Calcium gluconate

#### **Phosphorus:**

Defluorinated dicalcium phosphate  
Defluorinated monocalcium phosphate  
Monosodium phosphate  
Calcium-magnesium phosphate  
Calcium-sodium phosphate

#### **Magnesium:**

Magnesium oxide (anhydrous magnesia)  
Magnesium sulphate  
Magnesium chloride  
Magnesium carbonate  
Magnesium phosphate

#### **Sulphur:**

Sodium sulphate

### 4. **FEED ADDITIVES**

- 4.1 Trace elements. The following substances are included in this category:

#### **Iron:**

Ferrous (II) carbonate  
Ferrous (II) sulphate monohydrate and/or heptahydrate  
Ferric (III) oxide

#### **Iodine:**

Calcium iodate, anhydrous  
Calcium iodate, hexahydrate  
Sodium iodide

**Cobalt:**

Cobaltous (II) sulphate monohydrate and/or heptahydrate  
 Basic cobaltous (II) carbonate, monohydrate

**Copper:**

Copper (II) oxide  
 Basic copper (II) carbonate, monohydrate  
 Copper (II) sulphate, pentahydrate

**Manganese:**

Manganous (II) carbonate  
 Manganous oxide and manganic oxide  
 Manganous (II) sulfate, mono- and/or tetrahydrate

**Zinc:**

Zinc carbonate  
 Zinc oxide  
 Zinc sulphate mono- and/or hepta-hydrate

**Molybdenum:**

Ammonium molybdate, natrium molybdate

**Selenium:**

Sodium selenate  
 Sodium selenite

- 4.2 Vitamins, provitamins and chemically well defined substances having a similar effect. The following substances are included in this category:

Vitamins authorised under the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947).

- Preferably derived from raw materials occurring naturally in feeding stuffs; or
- Synthetic vitamins identical to natural vitamins only for monogastric animals.

- 4.3 Enzymes. The following substances are included in this category:

Enzymes authorised under the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947).

- 4.4 Micro-organisms. The following micro-organisms are included in this category:

Micro-organisms authorised under the Fertilizers, Farms Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947).

- 4.5 Preservatives. The following substances are included in this category:

Sorbic acid  
 Formic acid  
 Acetic acid  
 Lactic acid  
 Propionic acid  
 Citric acid

- 4.6 Binders, anti-caking agents and coagulants. The following substances are included in this category:

Calcium stearate of natural origin  
 Colloidal silica  
 Kieselgur  
 Sepiolite  
 Bentonite  
 Kaolinitic clays

Vermiculite  
Perlite  
Natural mixtures of stearites and chlorite

4.7 Antioxidant substances. The following substances are included in this category:

Tocopherol-rich extracts of natural origin

5. **PROCESSING AIDS USED IN FEEDING STUFFS**

5.1 Processing aids for silage. The following substances are included in this category:

Sea salt, coarse rock salt, whey, sugar, sugar beet pulp, cereal flour and molasses.

Enzymes, yeasts and bacteria authorised under the Fertilizers, Farms Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947).

When weather conditions do not allow for adequate fermentation, the approved certifying organisation may allow the use of lactic, formic, propionic and acetic acids in the production of silage.

6. **OTHER PRODUCTS**

6.1 The following substances are included in this category:

Brewer's yeast

## ANNEXURE VI

**GUIDELINE: DENSITY OF LIVESTOCK EQUIVALENT TO 170 KG OF  
NITROGEN PER YEAR/HECTARE**

<b>Class or species</b>	<b>Maximum number of animals per ha equivalent to 170kg N/ha/year*</b>
Equines over six months old	2
Calves for fattening	5
Other bovine animals less than one year old	5
Male bovine animals from one to less than two years old	3,3
Female bovine animals from one to less than two years old	3,3
Male bovine animals two years old or over	2
Breeding heifers	2,5
Heifers for fattening	2,5
Dairy cows	2
Cull dairy cows	2
Other cows	2,5
Female breeding rabbits	100
Ewes	13,3
Goats	13,3
Piglets	74
Breeding sows	6,5
Pigs for fattening	14
Other pigs	14
Table chickens	580
Laying hens	230

\* 170kg of Nitrogen per hectare per year equals one livestock unit.

## ANNEXURE VII

## INGREDIENTS OF NON-AGRICULTURAL ORIGIN

## Food additives, including carriers

INS	NAME	SPECIFIC CONDITIONS AND USE
170	Calcium carbonates	All authorised functions except colouring.
270	Lactic acid	Fermented vegetable products.
290	Carbon dioxide	-
296	Malic acid	-
300	Ascorbic acid	If not available in natural form.
306	Tocopherols, mixed natural concentrates	Anti oxidant in fats and oils.
322	Lecithin	Obtained without the use of bleaches and organic solvents.
330	Citric acid	Fruit and vegetable products.
333	Calcium citrates	-
334	Tartaric acid	-
335	Sodium tartrate	Cakes/Confectionary.
336	Potassium tartrate	Cereals/Cakes/Confectionary.
341i	Mono calcium phosphate	Only for raising flour.
400	Alginic acid	-
401	Sodium alginate	-
402	Potassium alginate	-
406	Agar	-
407	Carageenan	-
410	Locust bean gum	-
412	Guar gum	-
413	Tragacanth gum	-
414	Arabic gum	Milk, fat and confectionary products.
415	Xanthan gum	Fat products, fruit and vegetables, cakes and biscuits, salads.
416	Karaya gum	-
422	Glycerol	Plant extracts.
440	Pectins (Unmodified)	-
500	Sodium carbonates	Cakes and biscuits, confectionary.
501	Potassium carbonates	Cereals, cakes, biscuits and confectionary.
503	Ammonium carbonates	-
504	Magnesium carbonates	-
516	Calcium sulphate	Carrier.
524	Sodium hydroxide	Cereal products.
551	Silicon dioxide	Anti-caking agent for herbs and spices.
938	Argon	-
941	Nitrogen	-
948	Oxygen	-

## Flavourings

Substances and products labelled as natural flavouring substances or natural flavouring preparations allowed under the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972), as applied by the Department of Health.

## Water and Salts

Drinking water (potable)

Salts (with sodium chloride or potassium chloride as basic components generally used in food processing).

**Preparations of Micro-organisms and Enzymes**

Any preparations of micro-organisms and enzymes normally used in food processing, with the exception of micro-organisms genetically modified or enzymes derived from genetic modification.

**Minerals and other substances**

Minerals (including trace elements), vitamins, essential fatty and amino acids, and other nitrogen compounds. Only approved in so far as their use is legally required in the food products in which they are incorporated.

## ANNEXURE VIII

## PROCESSING AIDS WHICH MAY BE USED FOR THE PREPARATION OF PRODUCTS

SUBSTANCE	SPECIFIC CONDITIONS
Water	-
Calcium chloride	Coagulation agent.
Calcium carbonate	-
Calcium hydroxide	-
Calcium sulphate	Coagulation agent.
Magnesium chloride (or Nigari)	Coagulation agent.
Potassium carbonate	Drying of grape raisins.
Carbon dioxide	-
Nitrogen	-
Ethanol	Solvent.
Tannic acid	Filtration aid.
Egg white albumin	-
Casein	-
Gelatin	-
Isinglass	-
Vegetable oils	Greasing, releasing and antifoaming agent.
Silicon dioxide	As gel or colloidal solution.
Activated carbon	-
Talc	-
Bentonite	-
Kaolin	-
Diatomaceous earth	-
Perlite	-
Hazelnut shells	-
Beeswax	Releasing agent.
Carnauba wax	Releasing agent.
Rice meal	-
Sulphuric acid	pH adjustment of extraction water in sugar production.
Isopropanol (propan-2-ol)	In the crystallisation process in sugar preparation.
Sodium hydroxide	pH adjustment in sugar production.
Sodium carbonate	Sugar production.
Citric Acid	pH adjustment.

**Preparations of micro-organisms and enzymes**

Any preparations of micro-organisms and enzymes normally used as processing aids in food processing, with the exception of genetically modified organisms and enzymes derived from genetically modified organisms.

**ANNEXURE IX****PRODUCTS AUTHORISED FOR CLEANING AND DISINFECTION OF  
LIVESTOCK BUILDINGS AND INSTALLATIONS (E.G. EQUIPMENT AND UTENSILS)**

Potassium and sodium soap  
Water and steam  
Milk of lime  
Lime  
Quicklime  
Sodium hypochlorite (e.g. as liquid bleach)  
Caustic soda  
Caustic potash  
Hydrogen peroxide  
Natural essence of plants  
Citric, peracetic acid, formic, lactic, oxalic and acetic acid  
Alcohol  
Nitric acid (dairy equipment)  
Phosphoric acid (dairy equipment)  
Formaldehyde  
Cleaning and disinfection products for teats and milking facilities  
Sodium carbonate

## ANNEXURE X

## INGREDIENTS OF AGRICULTURAL ORIGIN WHICH HAVE NOT BEEN PRODUCED ORGANICALLY

1. Unprocessed plant products as well as products derived therefrom
  - 1.1 Edible fruits, nuts and seeds:
 

Acerola	<i>Malpighia puniceifolia</i>
Acorns	<i>Quercus</i> spp.
Cola nuts	<i>Cola acuminata</i>
Fenugreek	<i>Trigonella foenum-graecum</i>
Pine kernels	<i>Pinus pinea</i>
  - 1.2 Edible spices and herbs:
 

Allspice	<i>Pimenta dioica</i>
Cardamom	<i>Fructus cardamomi (minoris) (malabariensis)</i> <i>Elettaria cardamomum</i>
Cinnamon	<i>Cinnamomum zeylaicum</i>
Clove	<i>Syzygium aromaticum</i>
Nutmeg	<i>Myristica fragrans</i>
Pepper green	<i>Piper nigrum</i>
Pepper (Peruvian)	<i>Schinus molle</i> L.
Horseradish seeds	<i>Armoracia rusticana</i>
Lesser galangal	<i>Alpinia officinarum</i>
Safflower flowers	<i>Cartamus tinctorius</i>
  - 1.3 Miscellaneous:
 

Algae, including seaweed, permitted in conventional foodstuffs preparation.
2. Plant products, processed
  - 2.1 Fats and oils whether or not refined, but not chemically modified, derived from plants other than:
 

Cocoa	<i>Theobroma cocoa</i>
Coconut	<i>Cocos nucifera</i>
Olive	<i>Olea europeae</i>
Sunflower	<i>Helianthus annuus</i>
Palm	<i>Elaeis guineensis</i>
Rape	<i>Brassica napus, rapa</i>
Safflower	<i>Carthamus tinctorius</i>
Sesame	<i>Sesamum indicum</i>
Soya	<i>Glycine max</i>
  - 2.2 The following sugars, starches and other products from cereals and tubers:
 

Beet sugar  
Fructose  
Rice paper  
Unleavened bread paper  
Starch from rice and waxy maize, not chemically modified

## 2.3 Miscellaneous:

Curry composed of:

-	Coriander	<i>Coriandrum sativum</i>
-	Mustard	<i>Sinapis alba</i>
-	Fennel	<i>Foeniculum vulgare</i>
-	Ginger	<i>Zingiber officinale</i>

Coriander, smoked *Coriandrum sativum*

Pea protein *Pisum spp.*

Rum: only obtained from cane sugar juice.

Kirsch prepared on the basis of fruits and flavourings.

## 3. Animal products

Aquatic organisms, not originating from aquaculture, and permitted in conventional foodstuffs preparation.

Buttermilk powder

Gelatin

Lactose

Whey powder

Casings

---

The ingredients of agricultural origin listed in this Annexure may not have been --

- (i) subjected to treatments other than those listed in Annexures VII and VIII;
- (ii) subjected to treatments involving the use of ionising radiation; and
- (iii) produced with the use of genetically modified organisms or be genetically modified organisms.

Need for use of the ingredients must be motivated to the approved certifying organisation.