

OCCP Standards for Organic Agriculture and Processing



**ORGANIC CERTIFICATION CENTER OF THE PHILIPPINES, Inc.
(OCCP)
SEC Registration No. A200209256**

**2nd Floor PDAP Office
78 B. Dr. Lascano Street
Laging Handa, Quezon City
Telefax: 374-8214**

Email: lani_limpin@yahoo.com or jingpacs@yahoo.com

The OCCP Standards for organic Agriculture and Processing revised version has been approved by the General Membership of the Organic Certification Center of the Philippines, Inc. during the Special Assembly held at PTTC in Pasay City last June 22,2003.

TABLE OF CONTENTS

Introduction	
The need for Organic Agriculture	4
What are Standards for Organic Agriculture	4
OCCP Standards	5
Layout	5
Relation to Legislation	6
Revision of the OCCP Standards	6
Definition of Terms	7
1. The Aims of Organic Agriculture and processing	10
2. The Bases of organic Agriculture and Processing	11
3. Conversion of Organic Agriculture	13
3.1. Conversion Requirements	13
3.2. Length of Conversion Period	14
4. Crop Production	17
4.1. Choice of Crops and Varieties	17
4.2. Crop Rotation and Soil Management	18
4.3. Fertilization Policy	19
4.4. Commercial Production of Organic Fertilizer	21
4.5. Pest, Diseases and Weed Management	22
4.6. Growth Regulators	23
4.7. Pollution Control	24
4.8. Soil and Water Conservation	25
4.9. Diversity in Crop Production	25
4.10. Collection and Non Cultivated Materials and Minor Forest Products	26
5. Animal Husbandry	27
5.1. Animal Husbandry Management	27
5.2. Breeds and Breeding	28
5.3. Mutilations	29
5.4. Animal Nutrition	29
5.5. Brought-in Animals	31
5.6. Veterinary Medicine	32
5.7. Draft Animals	34
5.8. Transport and Slaughter	34
5.9. Bee Keeping	35
5.10. Conversion	37
5.11. Livestock Manure	38
5.12. Pasture Areas and Livestock Housing	38
6. Processing	43

6.1. Post-Harvest Operations	43
6.2. Storage and Transport	43
6.3. Pest Control in Storage and Processing	44
6.4. Ingredients of Agricultural Origin	45
6.5. Other Ingredients and Processing Aids	45
6.6. Methods of Processing	46
6.7. Methods of Cleaning	47
6.8. Packing	48
7. Special Products	50
7.1 Mushroom	50
7.2. Wild Honey	50
7.3. Herbs	51
8. Labeling and Consumer Information	52
9. Social Justice	54
Appendix	
1.0. Recommended Soil Management Practices	56
2.0.Crop Production	
2.1.Organic Products Produced in the Farm	57
2.2. Organic Matter Produced on Conventional Farm	57
2.3. Other sources of Inputs	58
2.4. Mineral products	58
2.5. Products for the Control of Plant Pests and Diseases	59
2.6. indigenous Plants Recommended as Botanical Pesticides	60
3.0. Livestock Production	
3.1. Veterinary Medicine	62
3.2. Livestock Materials	63
3.3. Maximum Number of Animals Equivalent to 170 kg N/ha/year	66
3.4. Minimum Surface Area and Other Housing Characteristics	66
4.0. Food Processing	
4.1. Definition of Terms	68
4.2. Ingredients on Non Agricultural Origin	68
4.3. Ingredients and Additives of Processed Foods	69
4.4. Processing Aids	73
4.5. General Pasteurization Table	75

Introduction

The Need for Organic Agriculture

Over the last decades agriculture has changed character with the development of new knowledge, machinery and the chemical industry. This agriculture enabled the world to produce food that kept in pace with population growth but was not achieved without side effects. Since that 1970's, Philippine Agriculture began its extensive dependence on modern or high-yielding crops, livestock and poultry as well as on modern agrochemicals to improve and sustain farm productivity.

Meanwhile, traditional agriculture based on indigenous knowledge has been looked down upon as backward and mere subsistence farming, whereas the new agriculture was seen as scientific and progressive. This new agriculture, which has come to be known as conventional agriculture, did not recognize the ecological wisdom of the people's culture in farming. Fortunately however, there were also forward looking farmers who developed agricultural methods and processes that were considered ecologically sound and sustainable. Such farming systems are based on the dynamic interaction between the soil, plants, animals, humans, and the environment. It relies largely on locally available resources.

These farmers, today called organic farmers, have proven to the world that their farming system is distinguishable from other agricultural systems, and above all, is competitive and able to provide agricultural products of good quality. Crop-livestock diversity and integration in organic farming also serve as a broad based source of food and income. Organic agriculture can contribute to an ecologically sound future for humanity. This booklet describes the principles, ideals, and guidelines off organic farming and the processing of products from organic agriculture.

What are Standards for organic Agriculture

The extent and progress of organic agriculture in many countries have been enhanced substantially by the development of a set of principles, requirements and guidelines for organic farming and processing commonly referred to as Basic Standards. This eventually evolved into the International Federation of Organic Agriculture Movements (IFOAM) basic Standards. It reflects the collective knowledge and practices of IFOAM members who in 1972, came from five countries of Europe and now from 115 countries worldwide. It is widely recognized as a "living" document, it is continuously evaluated and constantly improved through a democratic process every two years when IFOAM holds its General Assembly.

The IFOAM Basic Standards seek to clarify the practices and procedures approved in organic agriculture, those that may be accepted, and those that are to be prohibited.

The IFOAM Basic Standards cannot be used for certification on their own. They provide a framework for certification programs world wide to develop their own national or

regional standards. These will take into account local conditions and may well be stricter than the IFOAM Basic Standards.

When products are sold on the market using an “organic” label, the farm and processors must work within and be certified by a recognized certification program according to the respective label standards. This requires a program of regular inspection and certification as well as fulfilling any contractual regulations of processing. Such programs will help to build consumer trust.

The IFOAM Basic Standards also forms the basis from which the IFOAM Accreditation program operates. The majority of certification programs used worldwide are accredited by IFOAM.

OCCP Standards

The organic sector (farmers, processors, traders and consumers) in the Philippines needs agreement with OCCP standards. For an initial document, the Philippines can draw from the wealth of knowledge and experiences of IFOAM’s 25-year history. In doing so, the OCCP Standards (like other Asian standards) are drawn from the IFOAM Basic Standards.

The first draft of the OCCP standards was prepared by the Standards committee of FOODWEB, a broad coalition of NGO’s, church-based groups, academe and the private sector, who are involved in organic agriculture and processing. The core group of the committee was formed during the first national workshop of FOODWEB in March 1997. The standards committee later enlarged its membership as more help came in from the private sector in regional consultation workshops held in Luzon, Visayas and Mindanao wherein necessary modifications were made. The revised draft was presented to a national workshop for further improvement and eventual occurrence by FOODWEB constituents and participating members of the organic sector.

The OCCP Standards primarily serves the welfare of local producers, processors, traders and consumers; it also seeks to conform to requirements of the international market.

Layout

The Standards are presented in two columns. The left one contains the general principles that constitute the goals of organic agriculture and processing. It also advises on how to reach these goals and fulfill the minimum requirements. The right column contains the minimum requirements, which must be fulfilled if products are to be labeled as organic.

Relation to Legislation

All products and production conditions must comply with existing Philippine law as related to safe food production and processing.

Revision of the OCCP Standards

This edition of the OCCP Standards will be revised regularly through a national meeting of the members of OCCP. Guidelines to the process of making revisions are agreed upon by the body before implementation.

Definition of Terms

Accreditation – a procedure by which an authoritative body gives a formal recognition that a body or person is competent to carry out specific task.

Biodiversity – the variety of life forms and ecosystem types on Earth, which includes genetic diversity, (diversity within species), species diversity (the number and variety of species) and ecosystem diversity (number of ecosystem types).

Breeding – selection of plants or animals to reproduce and/or to further develop desired characteristics in succeeding generations.

Buffer zone - a clearly defined identifiable boundary area bordering an organic production site that is established to limit application or contact with prohibited substances from an adjacent area.

Certification – the procedure by which a third party gives written assurance that a clearly defined process has been methodically assessed, such that adequate confidence is provided that the specified product/s conforms with specific requirements.

Certification mark – a certification body's sign, symbol or logo, that identifies product(s) as being certified according to the rules of program operated by that certification body.

Clean – to remove dirt, soil, food residue, mineral deposits, grease or other objectionable matter.

Component — any substance found in a product, be it an Ingredient, Additive, Processing Aid, etc.

Conventional Agriculture — Farming systems dependent on the input of artificial fertilizers and/or pesticides, or failing to conform to the Basic Standards in any other way.

Contamination – pollution of organic product or land , in contact with any material that would render the product impure.

Conversion — The process of changing an agricultural system from conventional to organic. This covers what is sometimes known as transition.

Conversion period — The time between the provable start of organic management, and the certification of crops and/or animal husbandry as organic.

Crop rotation – the practice of alternating the species or families of annual and/or biennial crops grown on a specific field in a planned pattern or sequence so as to break weeds, pest and disease cycles and to improve soil fertility and organic matter content.

Disinfect – to reduce by physical or chemical means, the number of microorganism in the environment, to a level that does not compromise food safety or suitability.

Exception – permission granted to an operator by the certifying body , to be excluded from the need to comply with normal requirements of the standards. They are granted on the basis of clear criteria, with clear justification and for a limited time period.

Farm unit – an agricultural area or production managed organically, which a farmer or a group owns or in any way responsible for.

Food Additives – enrichment, supplement or any other optional components added to a product, which affects its keeping quality, consistency, color, smell, taste or other organoleptic properties.

Genetic diversity – the variability among living organisms from agricultural, forest, and aquatic ecosystems, which includes within and among species.

Genetic engineering – is a set of techniques from molecular biology (such as recombinant DNA) by which the genetic material of plants, animals, microorganisms, cells and other biological units maybe altered in a way or with result that could not be obtained by a method of natural mating and reproduction or natural recombination. Techniques of genetic modification include, but are not limited to, recombinant DNA, cell fusion, micro and macro injection, encapsulation, gene deletion and doubling. Genetically engineered organisms will not include organisms from techniques such as conjugation, transduction hybridization.

Genetically Modified Organisms (GMO) are plants or animals or microbes that is transformed by genetic engineering.

Green manure – a crop that is incorporated into the soil for the purpose of soil improvement.

Habitat – the area over which a plant or animal species naturally exist, the area where a species occurs. e.g. . seashore, riverbank, woodland, grassland, etc.

Ingredient – any substance, including a food additive, used in the manufacture or preparation of a food or present in the final product, although in a modified form.

Labeling – any written, printed or graphic presentation that is present on the label of a product accompanies the product or displayed near the product.

Operator – an individual or business enterprise, responsible for ensuring that the product(s) meet and , if applicable, continue to meet the requirements on which the certification is or will be based.

Organic — In this text the word refers to the particular farming and processing systems described in these standards and not in the classical Chemical sense (the latter shall be clearly marked with a † for ease of identification). The term Organic is nearly synonymous in other languages to “biological” or “ecological.”

Parallel Production — Simultaneous production of conventional, in conversion and/or organic crops or animal products, which cannot be distinguished from each other.

Processing — the cooking, baking, heating, drying, mixing, grinding, churning, separating, extracting, cutting, freezing or otherwise manufacturing of a food or food product. It also includes changing the physical characteristics of a food, and the packaging, canning or otherwise enclosing such food in a container. It does not include sorting or cleaning if such is done with water only. {OTCO III-17.2}

Processing Aid — substances or materials not including apparatus or utensils and not consumed as a food ingredient by itself, intentionally used in the processing of raw materials, food or food ingredients to fulfill 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. (e.g., grease, cooking oil, etc.)

Raw materials — All ingredients other than additives.

Restricted inputs — Inputs for which there are conditions for use imposed by the certification program.

Roughage — That part of an animal's diet composed of fibers.

Split production – where only part of the farm or processing unit is certified organic. The remainder of the property may be (a) non – organic, (b) in – conversion or (c) organic but not certified.

Split production – where only part of the farm or processing unit is certified organic. The remainder of the property may be (a) non-organic; (b) in-conversion or (c) organic but not certified.

Synthetic- any substances manufactured by chemical and industrial processes, which include products not found in nature or simulation of products from natural sources (but not extracted from natural raw materials.)

Standards — are norms, sets of guidelines, requirements and principles that are used as in organic agriculture and processing. The term “standards,” as used here refers to both the IFOAM Basic Standards upon which the Philippine Basic Standards is based, and certain Philippine Basic Standards relevant to local agroecosystems production. Standards are actually norms or guidelines by which a product or process can be labeled “organic”. These sets of norms determine the conditions by which the producers follows.

1. The Aims of Organic Agriculture and Processing

Organic agriculture and processing is based on a number of principles and ideas, which are all equally important. These are:

- To produce food of high nutritional quality in sufficient quantity;
- To interact in a constructive and life-enhancing way with natural systems and cycles;
- To encourage and enhance biological cycles within the farming system, involving micro organisms, soil flora and fauna, plants and animals;
- To promote the healthy use and proper care of water, water resources and all life therein;
- To enhance the conservation of soil and water, improve soil quality and increase soil fertility;
- To use organic matter and nutrient elements, as far as possible, within a closed system;
- To work, as far as possible, with materials and substances which can be reused or recycled, either on the farm or elsewhere;
- To give all livestock (including poultry, fishes, bees and other farm animals) conditions of life which allow them to perform the basic aspects of their innate behavior;
- To maintain the genetic diversity of the agricultural system and its surroundings, including the protection of plant and wildlife habitats;
- To minimize all forms of pollution that may result from farming practices and progress towards an entire production chain that is ecologically sound, economically rewarding and socially just;
- To allow everyone involved in organic production and processing a quality of life conforming to the UN Human Rights Charter, to cover their basic needs and obtain an adequate return and satisfaction from their work, including a safe working environment; and,
- To foster indigenous and ecological production systems that can produce adequate, safe and nutritious food for local communities.

2. The Bases of Organic Agriculture and Processing

To achieve its aims, the organic agriculture movement follows certain techniques and practices that promote sound environment and respect natural ecological balances. In doing so, it avoids products and methods, which are contrary to its principles.

The basis of crop production in gardening, farming, orchard growing, and agroforestry is the maintenance of desirable soil quality, build up of balanced soil fertility, and the promotion of biodiversity and sound ecosystem. This is achieved by appropriate combinations of:

- versatile crop production
- recycling of organic residues with inclusion of symbiotic N-fixing plants (legumes and azolla) and other forms of nutrient-plant symbiosis that help to avoid the use of synthetic fertilizers.
- wide ranges of methods for the control of pests, diseases and weeds, which avoid the use of synthetic pesticides, herbicides, fungicides, molluscicides.

A list of recommended techniques and practices for organic crop production is given in Appendix 1.1.

The basis for animal husbandry is the respect for the physiological and ecological needs of the animals. This is achieved by:

- providing sufficient amount of good quality fodder
- providing shed systems and allowing sufficient run according to their behavioral needs
- proper animal health care by preventive measures, management practices and veterinary treatment based on natural medicine if suitable

Animals are an important part of organic farming systems because:

- they contribute to closing the nutrient cycles by providing manure
- animals can convert organic matter which can not be used by humans, thus allowing to utilize land which cannot otherwise be used
- growing forage crops improves the crop rotations, the diversification and balance of the farming system
- they are used for draft purposes;
- they can utilize by-products from agricultural production
- they can contribute to higher yields.

The basis for an ecological balance is a mutually beneficial and harmonious integration of various species of crops, trees and animals. The farm is carefully designed to achieve the desired diversity and integration. The farmer's ecological aims include

prevention of soil erosion and self-sufficiency of biomass, manure and animal feed on the farm. An ecological farm, when properly managed, cannot be but a good provider of food, nutrition and income for the family.

The basis of processing organic products is that its vital qualities are maintained throughout each step of the process. This is achieved by a combination of developing methods which are adequate to the specifics of the ingredients and developing standards which emphasize careful processing methods, limited refining, energy saving technologies, minimal use of additives and processing aids, and others.

The production and handling of organic products should seek to minimize the environmental degradation. This is achieved by developing standards, which encompass waste management, packaging systems and energy saving systems in processing and transport.

In the Philippine context, most farmers are small holders (less than 1 to 3 hectares), poor and have less access to formal schooling. On the other hand, the aims (technical, ecological, economic, and social) of organic agriculture indicate a holistic and knowledge-intensive nature of the organic production system. Promotion of organic agriculture therefore, rests on innovative education and training, comprehensive support services and supportive policies. The challenge is great but the organic sector looks forward to a vigorous industry in the country.

As a mark of good intent fro public health and environmental protection, the OCCP puts forward the Standards as a basis of guarantee fro the soundness of the organic production system.

3. Conversion to Organic Agriculture

General Principles

Minimum Requirements

3.1. Conversion Requirements

Organic agriculture means a process of developing a viable and sustainable agro-ecosystem. The time between the provable start of organic management and certification of crops and/or animal husbandry as fully organic is known as the **conversion period**.

The whole farm, including livestock, should be converted according to the standards over a period of five years.

The responsible farmer shall have a clear plan of how to proceed with the conversion. This plan shall be updated as necessary.

The conversion plan shall cover all aspects relevant to these standards.

If a farm is not converted all at once, it should be done on a field-by-field basis, whereby full standards are followed from the start of conversion on a relevant field. The areas of land being managed to the full standards will therefore progressively increase.

The composition of a farm unit can vary widely according to geographical conditions, ownership structure, time span, etc.

3.1.1. The standard's minimum requirements must be met from the beginning of the conversion period onward.

3.1.2. Before products from a farm can be certified as organic, inspection shall have been carried out during the conversion period.

3.1.3. The conversion plan shall at least include:

- Field and farm history and present situation (crops, pest management, fertilizing, animal husbandry)
- A schedule for the progression of conversion
- Aspects which shall be improved during the conversion period (e.g. crop rotations, manure management, soil conversion, water management, livestock management, fodder plan, pest management, environmental conditions, including time limits).

3.1.4. If the whole farm does not get converted at once (see 3.1.5) or if a field is decertified, the responsible farmers have to ensure:

- Fixed demarcation between the conventionally and organically farmed parts
- That the organically farmed parts are inspectable
- That all farm records and accounting are identifiable for both farming systems
- That no parallel production takes place

The entire operation should be seen as a whole. It is not recommended to separate the conversion of individual fields or individual livestock productions, unless this is on the basis of imposed public restrictions or can be justified according to local conditions.

When the organic farmland and remote areas are operated under the same management, the remote areas in general should be included in the conversion plan as well. If a farmer or farming community operates two or more farms within a local area, all the farms should be converted according to the OCCP standards

Where de facto full standard requirements have been met for several years (e.g. in traditional management or when claiming idle land) and where this can be reliably proved, no full conversion period is required.

Primary and secondary forests are discouraged from conversion.

(see definition)

- Those converted areas do not get switched back and forth between organic and conventional management.

3.1.5. Farmland which

- Requires disproportionately long transportation of farm yard manure;
- Has very different agro-ecosystems; and
- In any way has difficult access in relation to other operations may, with approval of the certification body, be operated conventionally, provided that the associated prohibited production aids are not kept within the operation area for which certification is applied.

3.1.5. The certification program can reduce the conversion period in case of:

- Uncultivated land is claimed for organic agriculture;
- traditional agriculture, which has already been fulfilling the full standards for several years where this can be verified by reliable means and sources. In such cases, inspection shall be carried out at least six months before the first harvest.

3.2. Length of Conversion Period

The establishment of an organic management system and building of soil fertility requires an interim period, the conversion period.

The general rule indicates that the first two complete years of cultivation under control will be considered in **TRANSITION or IN CONVERSION**, the third one and the following ones

3.2.1. Plant products can be certified organic when the full requirements of these Standards have been met:

- for annual crops: at least twelve months before the start of the production cycle,
- for perennials: at least eighteen months of management according to the full standards requirements before the first harvest .

will be called **organic**.

The length of the conversion period should be based on:

- the past use of the-land
- the ecological situation

The whole area that will be used to the ecological production will be included in a conversion plan that will formally bind the producer to gradually incorporate lots or areas, completing the conversion of the last lots within a five (5) year period.

The conversion period can be extended by the certification program taking into account past use of the land.

- 3.2.2 If the whole farm is not converted or if certification is withdrawn from a field, the responsible farmer should guarantee:
- a. clear boundary between the organic and the conventional sectors;
 - b. that the same varieties or races not produced in both sectors: organic and conventional.
 - c. That the quantitative records be identifiable for each type of production, allowing the certification body to audit both productions.
 - d. The converted areas do not get switched back and forth between organic and conventional management
 - e. Same requirement must exist in case of parallel production
 - f. The whole area that will be use to the ecological production will be included in a conversion plan that will formally bind the producer to gradually incorporate lots or areas, completing the conversion of the last lots within a five (5) year period.

3.2.3. A 3-year conversion period (before the start of the production cycle) is required on lands heavily treated with synthetic chemicals over several years. The certification program decides whether this rule applies on a specific site.

3.2.4. Products may be sold with an indication referring to the conversion to organic farming, when the full requirements of the Standards have been met for at least one year.

3.2.5. No conversion period is required in the case of; clearing new land or virgin land for organic agriculture

- a. By virgin land, it is understood those that have not suffered the incidence of cultural activities, or those in which no tilling or alterations of it's natural or original characteristic could be proved for it's whole history. It implies that, the land has not been

- tilled and that it is in equilibrium, under forest, natural grasslands (grazed or not).
- b. Inspection and follow up of virgin new lands will be done by direct inspection, identifying the natural equilibrium of the different flora, the biodiversity and the soil characteristic, comparing them with the surrounding or neighboring natural zones.
 - c. Traditional agriculture which has been fulfilling the full standards for several years

3.2.6 Exceptions:

More prolonged transition:

- a. Presence of pesticides in the soil. Applicant should wait until the traits decrease to an acceptable level, e. g. organophosphates, organochlorides, etc.
- b. Any particular problem, identified by the certification committee,
- c. Communication problems with the owner, manager or advisor.

Shorter Transition:

- a. Starting on virgin or permanent prairie: zero year
- b. Proof that the two preceding years were in Organic Agriculture.
- c. Proof that there was no purchase of fertilizers or pesticides.
- d. Written evidences from two neighbors

4. Crop Production

General Principles

Minimum Requirements

4.1. Choice of Crops and Varieties

Species and varieties cultivated should, as far as possible, be adapted to the soil and climatic conditions and should be resistant to pests and diseases.

4.1.1. Seeds and plant materials shall be from certified organic production when available.

4.1.2. A wide range of crops and varieties should be grown to enhance the sustainability, self-reliance and biodiversity value of organic farms.

All seeds and plant materials used should be from certified organic produce or from the same farm.

4.1.3. When certified organic seed and plant materials are not available, chemically untreated conventional materials may be used, provided that they have not been treated with pesticides not otherwise permitted by these standards.

4.1.4. When untreated conventional seeds and planting materials are not available, chemically treated seeds and plant materials may be used. The certification body shall establish time limits and conditions for exemptions for acceptable use of any chemically treated seeds and plant materials.

Organically produced seeds and planting stocks including bulbs, tubers and plant materials derived from tissue culture shall be used, however:

4.1.5. Non-organically produced but untreated seeds, bulbs, tubers and plant materials derived from tissue culture may be used to produce organic crops, only if, an equivalent organically produced variety is commercially unavailable, with the exceptions of the seeds used for sprouts, which must be organic.

Untreated seeds, bulbs, tubers, tissue culture plants, shoots and crowns are required, except that;

4.1.6. Where treatments are limited to

materials on permitted substances as prescribed in the OCCP list;

4.1.7. Where the use of treated seeds is required by government authorities or phytosanitary regulations, necessary to prevent the spread of endemic diseases, or;

4.1.8. Where natural disaster like floods, drought, earthquake or other unanticipated circumstances has occurred, causing the destruction of organic seed production, then treated seeds maybe used.

Local seed and crop production and development programs should be encouraged.

4.1.9. The use of genetically engineered seeds, transgenic plants or plant material is not allowed.

4.1.10. Plant varieties should be bred to retain natural reproduction method.

Annual seeds and transplant must be organically produced except:

4.1.11. In cases where organic seedlings or planting stock have been destroyed by floods, drought or any natural disaster, conventional sources maybe used as emergency measure, but subject to the approval of OCCP.

4.1.12. For perennial crops, non-organically produced planting stocks maybe used to produce a crop which maybe sold, labeled or represented as “organically produced” only after the planting stocks has been maintained under a system of organic management on a certified organic farm for a period of no less than 18 months.

4.2. Crop Rotations and Soil Management Practices

Rotations and cropping patterns should be as varied as possible and should aim at:

- maintaining soil fertility

4.2.1 In lowland rice cultivation, green manuring or rotation with legumes or other nitrogen fixing plants has to be applied at least once a year.

- reducing leaching of nutrients
- minimizing soil erosion
- preventing weed, pest and disease problems

Recommended soil and crop management practices are provided in Appendix 1.2. Rotations including legumes are generally encouraged.

4.2.2 In intensive vegetable cultivation, there shall be at least one legume crop in rotation within three years. Crop rotation patterns must be documented.

4.2.3 In perennial crops, intercropping, cover crops or mulching must ensure that the soil is sufficiently covered throughout the year.

4.3. Fertilization Policy

The fertilization program should aim at maintaining and increasing the fertility of the soil and biological activity within it.

Sufficient quantities of organic material should be returned to the soil to increase or at least maintain its humus content on a long-term basis.

Biodegradable materials of non-organic origin should undergo a process of composting, fermentation or other treatment prior to application.

Care must be exercised to prevent over application of animal manure and plant materials.

Animal manure is considered a valuable source of nutrients that must be handled. Composting of manure is recommended to stabilize nutrients, prevent environmental degradation

4.3.1. Biodegradable materials of microbial, plant or animal origin produced on organic farms should be the basis of the fertilization program.

4.3.2 If biodegradable materials from organic farms are not available in sufficient amounts, materials from conventional farms may be used, but should not exceed 50% of the applied materials. The proportions of these materials should be reduced with time and such stopgap measures should not exceed 5 years.

4.3.3 When supplementary applications of fertilizer are needed, the materials must be certified as organic fertilizer or correspond with the requirements of Appendix 2.1 to 2.4.

4.3.4. In order to prevent over application of biodegradable material, a maximum application of material containing 170 kg Nitrogen per hectare and year shall not be exceeded on a specific plot. *(Principles and Minimum Standards for livestock Manure is discussed in Section 5.11)*

Farms shall keep suitable records on the application of manure.

a. Runoff diversions or other means must be implemented to prevent contamination of

and prevent spread of pathogens. Raw or composted manure applications shall not exceed soil or crop needs.

Raw manure is a regulated material and must be composted unless it is applied:

Management, handling, and storage of manure and compost shall minimize losses of nutrients and biological content.

Soil pH values, which are appropriate to the soil type and the crops cultivated, shall be maintained.

Use of human feces is restricted. Consideration should be paid to the absence of pollutants and accumulation of heavy metals. Steps should be taken to prevent the spreading of pests, parasites and other infectious agents.

Non-synthetic mineral fertilizers and brought-in fertilizers of biological

crops production areas with animal wastes from adjacent livestock holding facilities, fields or waste storage areas.

b. Raw (uncomposted) manure shall be applied in a manner that prevents or minimizes contamination of crops, soil or water, by nitrates or bacteria, pathogenic microbes, heavy metals and residues of prohibited substances.

- Raw manure may be applied no less than 90 days prior to harvest of a crop for human consumption whose edible portion does not come in contact with the soil surface or soil particles
- Products likely to be eaten raw, (nitrate accumulators) leafy greens, or crops exposed to contact with soil such as root crops, shall require 120 days between application of raw materials and harvest

4.3.5. Organic and mineral fertilizers, and particularly those rich in nitrogen (e.g. blood meal, farmyard slurry) should be applied in such a way as to have minimum adverse effect on the quality of crops (nutritive quality, nitrate content, taste, keeping quality, and plant resistance) and the environment (e.g. on ground and surface water). Storage places of manure and compost sites should be covered or sheltered in order to prevent leaching of nutrients and pollution of water.

4.3.6. Untreated sewage and manure containing human feces shall not be used on vegetable production for human consumption, unless it has undergone a process of anaerobic fermentation (e.g. biogas process) or high-temperature composting.

4.3.7. Mineral fertilizers conforming with Appendix 2.4 shall only be applied in

origin should be regarded as supplements to, and not replacement for nutrient recycling.

combination with a fertilization program based on biodegradable material and in case of obvious nutrient deficiency.

Accumulation of heavy metals and other pollutants by brought in materials should be avoided.

4.3.8 Mineral fertilizers shall be applied in their natural composition and shall not be rendered more soluble by chemical treatment.

4.3.9. Mineral inputs, which may have a considerable content of heavy metals and/or other toxic substances, shall not be used. (Refer to Appendix 2.4)

4.3.10. All synthetic nitrogenous fertilizers including urea are prohibited.

4.4. Commercial Production of Organic Fertilizer

Organic fertilizer production is preferably based on a natural composting or fermentation process.

4.4.1. Raw materials for organic fertilizer production must be in accordance with Appendix 2.1 to 2.3. However, preference should be given to materials indigenous in the area.

Raw materials coming from conventional farms may be allowed in areas where organic agriculture is still in the early stage of development or where it is not been introduced until such time that the required volume of natters from organic sources are already available.

Other macro elements may be used for enrichment provided they come from materials indicated in Appendix 2.4

Organic fertilizer production is preferably based on a natural composting or fermentation process.

4.4.2. For compost activation, appropriate plant-based preparations or preparations of microorganisms, not genetically modified, may be used to hasten decomposition of organic residues. The introduction of worms for vermicomposting is allowed.

Synthetic nitrogenous additives are prohibited.

4.4.3. The organic fertilizer produced should be such that the original materials are no longer recognizable, free from plant and animal pathogens, soil-like in texture, contain not less than 20% organic matter (o.m.) over dry basis and can supply nutrients to plants.

The processing method should not have hazardous effects to both human health and the environment.

4.4.4. Care must be exercised to prevent contamination of ground and surface water due to leaching of nutrients from composted materials.

Safety precautionary measures for production workers such as wearing masks, gloves, and boots should be undertaken.

The packaging of organic fertilizers should also consider ecological principles.

4.4.5. Packaging shall be "environmentally friendly", simple and not deceptive

4.5. Pest, Disease and Weed Management

Organic farming systems should be carried out in a way, which ensures that losses from pests, diseases, and weeds are prevented. Considerable efforts should be made to select varieties well adapted to the environment, to achieve a balanced fertilization program, fertile soils of high biological activity, diverse rotations, companion planting, green manure, etc.

4.5.1. The use of synthetic pesticides (herbicides, fungicides, insecticides, molluscicides, nematocides etc.) are prohibited.

The natural enemies of pests and diseases should be protected through proper habitat management while encouraging hedges, nesting sites, etc.

Weeds are controlled by a number of preventive cultural techniques limiting their development, e.g. suitable rotations, green manure, a balanced fertilization program, early seedbed preparations and pre-drilling, mulching, and by mechanical control.

4.5.2. Products used for pest, disease and weed management prepared at the farm from local plants, animals and microorganisms are allowed.

4.5.3 Products that may be used in the control of pests and diseases are indicated in Appendix 2.5. Recommended plants for the control of some pests/diseases are described in Appendix 2.6.

4.5.4. Thermic weed control and physical methods for pest, disease and weed management are permitted. Thermic sterilization of soils to combat pests and diseases can be allowed by the certification body in circumstances where a proper rotation or renewal of soil cannot take place. Permission shall be given on a case-to-case basis but is not recommended.

4.5.5. All equipment used for pesticides and fertilizers application on unconverted areas of the farm shall be properly cleaned and free from residues when used for applying permitted substances on organically managed areas. However, the spraying equipment in particular should be exclusively used in organic farms.

4.5.6. The use of genetically engineered organisms or products thereof is not permitted.

4.6. Growth Regulators

Growth and development should take place in a natural way.

Off-farm products that may be used for growth regulation are seaweed.

4.6.1. All synthetic products like growth regulators and dyes (e.g. for cosmetic alterations of organic products) are prohibited.

4.6.2. Products used for regulating growth and development of plants prepared on the

farm itself from local plants, animals and microorganisms are allowed.

4.7. Pollution Control

All relevant measures should be taken to minimize *synthetic* pesticide and fertilizer contamination, from outside and within the farm by wind drift, drainage and irrigation. Where drift of agrochemical or other pollutants is likely, a buffer zone between conventionally and organically farmed fields must be kept. Accumulation of heavy metals and other pollutants should be avoided.

4.7.1. The buffer zone could be a dike, which is planted with multi-purpose tree species of sufficient density. Products of the buffer zone shall not be sold as organic but can be used as fodder for livestock.

4.7.2. In case of reasonable suspicion of pollution, an analysis of the relevant products, crops and/or soil quality should be done. The certification body decides whether the respective crops can still be sold as organic.

4.7.3. In case of risk or reasonable suspicion of pollution, specific limits shall be set for the maximum yearly addition of heavy metals and other pollutants.

4.7.4. In case of risk or considerable suspicion of pollution, specific limits shall be set for the maximum yearly addition of heavy metals and other pollutants

4.7.5. For protected structure coverings, plastic mulches, fleeces, insect netting and silage wrapping, only products based on polyethelene and polypropolyne or other polycarbonates are allowed provided that safe disposal is ensured. These shall be removed from the soil after use and recycled if possible. Use of polycchloride based products is prohibited.

It is sometimes necessary for a grower to use a material that is prohibited by the certification body. In this case, an operator may voluntarily withdraw the land/animals from the certification program without jeopardizing the status of the rest of the operation.

4.7.6. The grower must notify the certification body on the voluntary withdrawal in writing within one week or before the crop is harvested, whichever comes first. Failure to give timely notice of the use of prohibited materials can be grounds for de-certification and/or expulsion from the certifying body. The remaining acreage or animals in the certification program must meet the boundary

and buffer zone requirement. Land that is voluntarily withdrawn from the program may re-enter the program only after the grower has submitted a withdrawal form and a new map will be submitted. Chemical residue testing may be required.

4.7. Soil and Water Conservation

Organic farming systems should be designed and managed to include control measures against soil erosion and against depletion of water resources.

4.8.1. Clearing of land through the means of burning organic matter, shall be restricted to the absolute minimum. The use of burning for pH correction needs approval of the certification body.

4.8.2. Relevant measures shall be taken to prevent soil erosion and ensure water conservation.

4.8.3. Relevant measures shall be taken to prevent excess and improper use of water and the pollution of ground and surface water.

4.8.4. Relevant measures shall be taken to prevent salinization.

4.8.5. The number of livestock must be closely related to the area available in order to prevent over grazing, erosion and pollution of ground and surface water. Maximum stocking rates shall correspond with the maximum application of manure containing 170kg Nitrogen per hectare per year as described in Article 4.3.4.

4.9. Diversity in Crop Production

The farm should have sufficient crop diversity in time and/or space that takes into account pressures from insects, weeds, diseases and other pests while maintaining or increasing soil organic matter, soil fertility,

The diversity of crops and cropping systems on organic farms shall endeavor to achieve the following objectives:

4.9.1. To maintain and promote biodiversity that is suited to local agro-ecosystem.

microbial activity and general soil health.

4.9.2. To promote and encourage the use of local flora and fauna around the fields suited to the ecosystem.

4.9.3. To promote fruit-bearing trees and medicinal plants in forest areas.

4.9.4. To develop repellants (plants that repel pests) and attractants (plants that attract beneficial insects).

4.9.6. Crop diversification systems include crop rotation, intercropping, alley cropping, relay cropping, and multi-storey cropping (see Appendix 1.1.)

4.10. Collection of Non Cultivated Materials and Minor Forest Products

The act of collection should positively contribute to the maintenance of natural areas. Interests of tribal and forest communities should be protected.

4.10.1. Collected products shall only be certified organic if derived from a stable-growing environment. Harvesting or gathering the product shall not exceed the sustainable yield of the ecosystem, or threaten the existence of plant or animal species.

4.10.2. Produce can only be certified if derived from a clearly defined collecting area not exposed to prohibited substances at least one year prior to the first harvest and if subject to regular inspection.

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

4.10. 4. The collection or harvest area shall be at an appropriate distance from conventional farming, pollution and contamination.

5. Animal Husbandry

General Principles

Minimum Requirements

5.1. Animal Husbandry Management

Management techniques in animal husbandry should be governed by the physiological and basic ethnological needs of the farm animals in question. This includes:

- That animals should be allowed to conduct their basic behavioral needs
- That all management techniques, especially where production levels and speed of growth are concerned, should be directed at good health and welfare of the animals.

The conversion periods are described under Section 5.9.

5.1.1 Management of the environment of the animals shall take into account the behavioral needs of the animals and provide for:

- Sufficient free movement
- Sufficient fresh air and natural daylight according to the needs of the animals;
- Protection against excessive sunlight, temperatures, rain, and wind according to the needs of the animals;
- Enough lying and/or resting area according to the needs of the animals. For all animals requiring bedding, natural materials shall be provided;
- Ample access to fresh water and feed according to the needs of the animals.

5.1.2. All animals shall have access to open air and grazing as applicable to the type of animal and season.

Conventionally confined animal husbandry systems are not allowed

The certification program may allow exceptions in individual cases where:

- permanent housing is the traditional practice and is not effecting the welfare of the animals
- the specific farm structure prevents access to grazing sites.

A time limit shall be set for each individual

exception.

5.1.3 When artificial lighting prolongs natural daylight, the Certification Program shall prescribe maximum hours respective to species, geographical considerations and general health of animals. For poultry, a maximum light phase of 16 hours shall not be exceeded.

Certain compounds in building materials can detrimentally affect the health of housed stock. Therefore, the use of construction materials with potentially toxic effects should be avoided as much as possible.

5.1.4. Herd animals shall not be kept individually. Sick animals and those about to give birth can be kept separately for a limited period. The Certification program may allow further exceptions in specific cases.

For welfare reasons, the herd or flock size shall not adversely affect the behavioral patterns of the animals.

5.1.5. Nomadic modes of livestock management are allowed.

5.2. Breeds and Breeding

It is necessary to choose breeds, which are adapted to local conditions.

5.2.1. The certification program shall ensure that breeding goals are such that livestock diversity is maintained. Indigenous breeds should be preserved and promoted. Breeding activities shall be in line with the following principles:

Breeding goals should interfere with animal behavior as little as possible. They should not include methods, which make the farming system dependent on high technological and capital-intensive methods.

- a reasonable production level on a low input level
- adaptation to local circumstances
- longevity,
- good health,
- quality of animal products,
- to have breeds which can give birth naturally.

Reproduction techniques should be natural.

5.2.2. Embryo transfer techniques and cloning are not allowed. Nevertheless artificial insemination are permitted.

5.2.3. The use of genetically engineered species or breeds is not allowed.

5.3. Mutilations

The animals' distinctive characteristics should be respected.

5.3.1. Mutilations are not allowed. The Certification Program may allow the following exceptions in specific cases if they are improving the welfare, health or hygiene of the animals or for safety reasons:

- tail cutting
- trimming of beaks
- Dehorning
- Cutting of teeth
- Ringing
- Tattooing
- Ear notching
- Branding

These practices shall not cause suffering. Physical castration is allowed in order to maintain the quality of products, if qualified personnel carry them out at the most appropriate age and any suffering to the animals is reduced to a minimum.

Keeping the animals tethered are forbidden. However the inspection body can authorize this practice for individuals upon justification by the producer, that this is necessary for safety or welfare reasons, and that such tethering is for a limited time only.

5.4. Animal Nutrition

The goal for livestock is to be fed 100% organically grown feed of good quality.

5.4.1. Considering the low availability of organic fodder in the Philippines, the following maximum percentages (dry matter) of conventional fodder in the average diet of each animal are tolerated:

Year 1 --- 40%

Year 2 --- 20%

until year 3 : 10% for ruminants,
15% for others.

These maximum percentages shall be followed the whole year round. They can be calculated using average dry matter

requirements of farm animal varieties.

5.4.2. In specific cases, the certification program may allow exceptions to these percentages, with specific time limits and conditions in the following cases:

- Unforeseen severe natural or man-made events
- Extreme climatic conditions

5.4.3. For the calculation of feeding allowances, food produced within the same farm during the first year of organic management may be classed as fully organic.

The diet shall be balanced according to the nutritional needs of the animals, taking into account a reasonable production level and/or normal growth rate and good health.

5.4.4 The diet shall be offered to the animals in a form allowing them to execute their natural feeding behavior.

5.4.5. Each animal must have daily access to roughage.

Whenever possible, all food should come from the farm itself or be produced within the region.

5.4.6. The prevailing part (more than 50%) of the feed shall come from the farm unit itself or be produced in co-operation with other organic farms or processors in the region.

Use should be made of by-products from the organic food processing industry.

The use of coloring agents is not desirable in organic livestock production. Synthetic growth promoters or stimulants (implanted, ingested or injected) are prohibited.

5.4.7. The following products shall not be included in, nor added to the feed or in any other way be given to farm animals:

- Synthetic growth promoters or stimulants
- Synthetic appetizers
- Preservatives, except when used as a processing aid
- Artificial coloring agents
- Urea
- Farm animal by-products (e.g. abattoir waste) to ruminants
- Droppings, dung or other manure;
- Feed subjected to solvent extraction

The certification program can demand residue analysis for feeds.

(e.g. with hexane) or the addition of other chemical agents (e.g. soy and rapeseed meal).

- Pure amino acids
- Genetically engineered organisms or products thereof.

5.4.8. The following feed ingredient groups shall not generally be used from synthesized or unnatural sources:

- Concentrated vitamins
- trace element supplements

Exceptions may be made in case of specific deficiencies.

5.4.9. Generally, no synthetic chemical fodder preservatives are allowed. The following products may be used alternatively: bacteria, fungi, and enzymes (unless genetically engineered)

- by-products of food industry (e.g. molasses)
- plant based products

5.4.10. Young stock from mammals shall generally be raised using systems, which rely on organic whole milk. In emergencies, the certification program may allow the use of milk from non-organic farming system or dairy based milk substitutes, which do not contain antibiotics or synthetic additives.

5.4.11. A minimum weaning time of 10 weeks shall be kept for calves.

5.5 Brought-in Animals

Animals born on organic holdings should preferably be sold to organic holdings. Organic animal husbandry should not be dependent on conventional raising systems

5.5.1. When organic livestock is not available, conventional livestock may be brought in according to the following age limits and conditions:

- calves up to four weeks which have received colostrums and are fed

with a diet mainly consisting of full milk.

- Sheep, goat and piglets until weaned
- One or two day old poultry

This derogation ends by 31/12/2003

Animals born on organic holdings should preferably be sold to organic holdings

5.5.2. Breeding stock may be brought in from conventional farms with a yearly maximum of 10% of the adult animals on the farm.

Livestock maybe brought in as, female animals from non-organic production for supplementing natural growth or for the renewal of the herd or flock.

If more than 10% of conventional breeding stock is brought in (maximum of 40 %), this needs prior approval by OCCP. Exceptions can be granted with specific time limits in the following cases:

Males for breeding maybe brought in from non-organic production stockfarm provided that the animals are subsequently reared and always fed in accordance with the rules laid down in this regulation.

- unforeseen severe natural or man made events
- considerable enlargement of the farm
- establishment of a new type of animal production on the farm or a new livestock specialization is developed.
- for small holdings or when a major extension to the farm is undertaken.

5.5.3. Where livestock is obtained from units not complying with this regulation, special attention must be paid to the animal health measures. The inspection body, may apply, depending on the local circumstances, special measures such; screening test and quarantine periods.

5.6. Veterinary Medicine

All management practices should be directed at achieving maximum resistance against disease and preventing infections. Natural medicines and methods, including homeopathy and acupuncture, should be emphasized.

5.6.1. The well being of the animals is superior in the choice of illness treatment. The use of synthetic drugs is allowed when no other justifiable alternatives are available.

5.6.2. Where synthetic medicines are used, the withholding period shall be at least double the legal period and at least one week if not specified.

When illness does occur, the aim should be to find the cause and prevent future outbreaks by changing management practices.

5.6.3. Prophylactic use of allopathic medicines is not allowed.

5.6.4. Permitted veterinary treatments are indicated in Appendix 3. Use of the following substances is forbidden:

- all steroids and other synthetic growth promoters;
- substances of synthetic origin for production stimulation and suppression of natural growth;
- hormones for heat induction and heat synchronization unless used for individual animals against reproductive disorders, justified by veterinary indications.

5.6.5. Vaccinations shall be used only when diseases are known to exist in the region of the farm and cannot be controlled by other management techniques. This always requires the approval of the certification program. Legally required vaccinations are however allowed. Genetically engineered live viral vaccines shall not be used.

5.6.6. Records of all sick animals treated allopathically shall be kept, clearly identifying the animals concerned. All allopathic veterinary treatment with synthetic drugs, including details of the treatment and its duration, as well as all brand names of drugs used, shall be included.

5.6.7. On the basis of these records, the certification program shall set conditions for each individual farm to minimize the need for the application of allopathic medicines.

5.7. Draft Animals

Care of draft animals shall take into consideration the following:

- minimum and maximum age
- healthy condition
- no overworking/overloading
- improved draught technology
- improved yokes and pneumatic tires
- hemp in place of nylon rope

5.7.1. Draft animals shall be well cared for and must be used in a humane manner that causes the least possible stress and suffering.

5.8 Transport and Slaughter

Transport and slaughter should minimize any stress to the animal. Animals should be observed regularly during transport.

Animals should be watered and fed during transport depending on climatic conditions and duration of the transport.

Appropriate load factors should be set, depending on the type of animal and duration of the transport.

The person in charge should accompany his/her animals during transport.

The sanitation of slaughterhouses should be maintained and subject to inspection.

The transport medium should be cleaned before loading.

The transport medium should be appropriate for each animal, taking into account the time of transport.

Physical condition and peculiarities

5.8.1 Throughout the entire process, there shall be a person who is responsible for the well being of the animals.

5.8.2 The handling shall be calm and gentle. The use of electric sticks and such instruments shall be restricted according to the type of animal.

5.8.3. The transport shall be well organized and appropriate to the needs of the animals, taking into consideration:

- stress caused to the animal and person in charge
- fitness of the animal
- loading and unloading;
- mixing different groups of animals or animals of different sex
- the grip of the feet on floors and ramps
- equipment shall be of good quality and in good order
- extreme temperatures and relative humidity;
- hunger and thirst;

(such as meat quality) should be recorded for each animal or group of animals at the slaughterhouse.

- circumstances and events during transport or slaughter, which are different to what, the animal was used to on the farm (e.g. bedding material, social ties).
- Specific needs of each animal

Stress to the animal should be minimized, especially taking into consideration: contact (by eye, ear or smell) of each animal with dead animals or animals in the killing process; existing group ties; resting time to release stress.

5.8.4. No chemically synthesized tranquilizers or stimulants shall be given prior to or during transport.

Transport distance and frequency should be minimized.

5.8.5. Each animal or group of animals shall be identifiable during all steps.

Each animal should be stunned before being bled to death. Exceptions can be made according to cultural habits. Where animals are bled without prior stunning, this should take place in a calm environment.

5.8.6. In case of transport by axle, transport time to the slaughterhouse shall not exceed 8 hours.

The time between stunning and starting the bleeding to death should be minimized, depending on the type of animal (guideline: maximum 30-45 seconds).

5.8.7 The equipment used for stunning should be in good working order and should affect the deep laying parts of the brain in one (quick) act. It's proper functioning should be inspected regularly.

Equipment relying on gas or electricity should be monitored in such a way that it can be monitored continuously.

5.9 Bee Keeping

Bee keeping is considered to be part of animal husbandry. The general principles thereof also apply to bee keeping.

5.9.1 Wing clipping is not allowed.

Bees should be allowed to build or find their own housing.

5.9.2. Each beehive shall consist of natural materials. The inside of the hives, except for the bottom, shall not be treated with paints or

The foundation of the comb shall be made from organic wax.

The collection area should be organic and/or wild and should be as varied as possible to fulfill all nutritional needs of the colony and contribute to good health.

The feeding of colonies should be seen as an exception to overcome temporary feed shortages due to climatic conditions.

The feed supplied should be fully organic.

such materials. The bottom outside of the hives shall not be treated with pesticides containing paints or other prohibited materials.

5.9.3. The collection area shall allow bees to preferably forage on organically managed fields and/or wild natural areas.

The beekeeper should have enough honey in the hive to enable the bees to survive the rainy season.

Sugar cannot be fed to the bees except during dearth period (lean availability of nectar).

Supplemental feeding should be stopped a month before the expected nectar flow so as to minimize contamination of honey.

5.9.4. Harvesting of honey should be done only during the nectar flow season.

5.9.5. chemical fungicides, pesticides and antibiotics cannot be used in raising the bees except in extreme cases where pests and parasites infestation have reached beyond tolerable limits.

5.9.6. Only caustic soda, lactic and/or acetic acid or biological materials shall be used for hive disinfection.

When working with the bees (e.g. at harvest) no repellent consisting of prohibited products shall be used.

5.9.7. When processing honey, the temperature shall never exceed 35 degrees centigrade in order to preserve enzyme activity.

5.10 Conversion

When a production unit is converted, the whole area of the unit used for animal feed must comply with the rules on organic farming, using the conversion period to plant and plants products.

5.10.1 The conversion period maybe reduced to one year for pasture land, open air runs and exercise areas, used by non-herbivorous species. The period maybe reduced to six months where the land concerned has not, in the recent past, received treatments with the products other than those referred to in the annex for prohibited materials.

5.10.2. If livestock are to be sold organic products, the livestock must be reared according to the rules laid down in this standards for at least:

- a. Twelve months in the case of horses and cattle including buffalo for meat production and in any case three quarters of their lifetime.
- b. Six months in the case of animals for milk production.

5.10.3. Calves and small ruminants for meat production can be sold as organically reared during a transitional period of two years provided that:

- a. They come from extensive husbandry;
- b. They are reared in the organic production unit until the time of sale or slaughter for a minimum period of six months for calves and two months for small ruminants.
- c. The origin of the animals complies with the conditions expressed in the section brought in animals.

5.10.4. If there is simultaneous conversion of the complete production unit, including livestock, pasture areas or any land used for animal feed, the total combined conversion period for both livestock and pasture areas and any land used for animal feed, shall be reduced to 24 months, subject to the following conditions:

- a. The animals are fed mainly with products from the production units;
- b. The existing animals and their offspring and at the same time also to the land used for pastures or animal feeding

5.11 Livestock Manure

The total amount of manure applied to holding may not exceed 170 kilograms Nitrogen per year, per hectare of agricultural area used. The detail specified in the annex 4.

Organic production holdings may establish cooperation with other holdings, which comply with the provision of the regulation with the intention of spreading surplus manure from organic production

5.11.1 Where necessary, the total stocking density shall be reduced to avoid exceeding the limit mentioned.

To determine the appropriate density of the livestock referred, the livestock units equivalent to 170 kilograms Nitrogen per hectare per year of agricultural areas used for the various categories of the animals shall be set by the inspection body.

5.11.2 The maximum limit of 170 kilograms nitrogen per hectare per year of agricultural area used will be calculated on the basis of organic production units involved in such a cooperation.

5.11.3 The inspection body may establish lower limits than those specified, taking into accounts, the characteristics of the area concerned, the application of nitrogen fertilizers to the land and the soil nitrogen available to the plants.

5.12 Pasture Areas and Livestock Housing

Housing conditions for livestock must meet the livestock biological and behavioral needs, as regards to freedom of movement and comfort.

Housing for livestock will not be mandatory in areas with appropriate climatic conditions to enable animals to

5.12.1 The livestock must have access to feeding and watering stations. Insulation, heating and ventilation of the buildings must ensure that air circulation, dust level, temperature, relative humidity and gas concentration are kept within limits which are not harmful to the animals. The building must permit plentiful ventilation and light to enter.

live outdoors.

The stocking density in buildings shall provide for the comfort and well-being of the animals, in particular shall depend on the species, the breed and the age of the animals.

5.12.2. Free range, open – air exercises areas, or open-air runs must, if necessary, provide sufficient protection against rain, wind, sun and extreme temperature, depending on the local weather conditions and the breed concerned.

5.12.3. The stocking density shall take into account the behavioral needs of the animals, which depend in particular on the size and sex of the group. The optimum density will seek to ensure the animals welfare by providing them with sufficient space to stand naturally, lie down easily, turn around, groom themselves, assumes all natural postures and make all natural movement such as stretching and wing flapping.

5.12.4. All mammals must have access to pasturage or open-air exercise areas or an open-air run, which maybe partially covered. They must be able to use those areas whenever the physiological condition of the animals, the weather conditions and the state of the ground permit, unless there are national requirements relating to specific animal health problems that prevent this. Herbivorous must have access to pasturage whenever conditions allow.

- a. Bulls over one year old must have access to pasturage or open-air exercise areas or open-air run.
- b. The final fattening phase of cattle, pigs and sheep for meat purposes may take place indoors, provided that this indoor period does not exceed one fifth of their lifetime and in any case for a maximum period of three months
- c. Livestock housing must have a smooth, but not slippery floors. At least half of the total floor area must be solid, that is, not of slatted or of grid construction.

- d. The housing must provide with a comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction, which is not slatted. Ample dry bedding strewn with litter materials must be provided in the rest area. The liter must comprise straw or other suitable natural materials. The litter maybe improved and enriched with any mineral product authorized for use as fertilizer in organic farming.
- e. As regards to the rearing of calves, the housing of calves in individual boxes are prohibited after the age of one week
- f. As regards to the rearing of pigs, piglets should not be kept in flat decks or in piglet cages, whether they are for breeding or for meat purposes. Extensive areas must permit dunging and rooting by the animals. For the purpose of rooting, different substrate can be used

5.12.5. Poultry must be reared in open range conditions and cannot be kept in cages.

- a. Poultry must be reared in open range conditions and cannot be kept in cages
- b. Waterfowl must have access to stream, pod or lake whenever the weather conditions permit, in order to respect animal welfare requirements or hygienic conditions
 - at least one third should be solid, that is, not slatted, nor of grid construction and covered with a litter materials such as straw, wood shavings, sand or turf.
 - In poultry houses for laying hens, a sufficiently large part of the

floor area available to the hens must be available for the collection of droppings.

- They must have perches of a size and number commensurate with the size of the groups and of the birds
 - They must have exit/entry pop-holes of a size adequate for the birds and these pop-holes must have a combined length of at least 4 meters per 100-meter square area of the house available to the birds.
 - Each poultry house must not contain more than:
 - ❖ 4,800 chickens,
 - ❖ 3,000 laying hens
 - ❖ 5,200 guinea fowls
 - ❖ 4,000 female Muscovy ducks or Peking ducks
 - ❖ 3,200 male Muscovy or Peking ducks or other ducks
 - ❖ 2,500 capons, geese or turkeys
 - ❖ The total usable areas of the poultry houses for meat production on any single production unit must not exceed 1,600 square meter. The housing areas should accommodate three chickens per one meter square
- c. In the case of laying hens, natural light maybe supplemented by artificial means, to provide a maximum of 16 hours light per day with a continuous nocturnal rest period without artificial light of a t least eight (8) hours
- d. Poultry must have access to open – air whenever the weather conditions permit and whenever possible must

have such access for at one third of their life. These open-air runs must be mainly covered with vegetation, be provided with protective facilities and permit animals to have easy access to adequate numbers of drinking and feeding stations

- e. For health reasons, buildings must be emptied of livestock between each batch of poultry reared. The buildings and fittings are to be cleaned and disinfected during this time. In addition, when the rearing of each batch of poultry has been completed, runs must be left empty to allow vegetation to grow back and for health reasons. The inspection body must establish the period in which runs must be empty. This requirement shall not apply to small numbers of poultry which are not kept in runs and which are free to roam, throughout the day

6. Processing

General Principles

Minimum Requirements

6.1. Post-harvest Operations

The consumer must always be able to rely on the organic integrity of a product when this product is labeled as organic. Organic processing and handling should provide consumers with nutritious, high quality supplies of organic product

6.1.1. Organic produce shall neither be mixed nor switched with non-organic produce. Handlers and processors shall not co-mingle organic products with non-organic products.

6.1.2 Processing and handling shall be done separately in time or place from processing of non-organic products.

When equipment is not exclusively used for organic products, the machineries should be properly cleaned before processing organic products.

6.1.3 All products shall be adequately identified through the whole process, until final labeling.

6.1.4. Genetically modified organisms and product thereof are not allowed.

There should be no sources of pollution of organic products.

6.1.5. Pollution sources shall be identified and contamination avoided.

6.2. Storage and Transportation

The storage should be free from pests and insects and appropriate to the organic products

6.2.1 Organic and non-organic products shall not be stored and transported together except when physically separated and labelled.

Storage areas should be thoroughly cleaned by methods appropriate to the organic products.

6.2.2 For cleaning or disinfections of storage facilities, environmental friendly measures and products shall be used. The application of synthetic substances, which are harmful to human health, must be

Storage conditions should be optimized to

keep the quality of the organic product and should be directed towards minimizing the development of pests and diseases.

The transportation should be appropriate to the certified organic product. Rough treatment should be avoided.

avoided.

6.2.3 Besides storage at ambient temperature, the following special conditions of storage are permitted:

- cooling or freezing in refrigerated containers equipped with temperature measurement devices
- pure ice made from water which fulfill the WHO standards for drinking water
- controlled atmosphere (with gasses like CO₂, O₂ NO₂) is allowed

The OCCP may approve exceptions of this rule if measures are corresponding to the principle of maintaining the quality and integrity of the products.

6.2.4 Only natural ripening agents are allowed

6.3. Pest Control in Storage and Processing

Pest should be avoided by good manufacturing practices. Treatments with pest regulating agents must thus be regarded as the last resort. If pest control is necessary, a plan for pest prevention (based on non-chemical methods) should be developed.

Recommended treatments are physical barriers, sound, ultrasound, light and UV-light. Permitted treatments are traps (including Pheromone traps and static bait traps), temperature control, controlled atmosphere (CO₂, O₂, N₂, Ar) and diatomaceous earth.

6.3.1. Fumigation with pesticides and other chemical treatment of plant and storage facilities shall be avoided. If no alternative solution can be found, certification bodies may approve exceptional application.

6.3.2. There shall never be direct or indirect contact between organic products and prohibited substances (e.g., pesticides). When any doubt arises, it shall be ensured that no residues are present in the organic product.

6.3.3. It is not allowed to use irradiation of products for pest and disease control.

6.3.4. In case there is suspicion of traces of

pesticides in the storage facilities, these have to be cleaned by suitable means..

6.4. Ingredients of Agricultural Origin

100% of the ingredients of agricultural origin should be certified organic. Enzymes, fermentation organisms, dairy cultures and other microbiological products should be produced organically from a medium composed of organic ingredients without the use of preservatives.

6.4.1 In cases where an ingredient of Agricultural origin, which is listed in Appendix 4.6, is not available in sufficient quantity or quality from organic origin, non-organic raw materials can be used to a limited extent (see 8.1.3). These raw materials shall not be genetically engineered. On request of processors, further ingredients can be added to the list of Appendix 4.6.

6.4.2 The same ingredient in one product shall not be derived both from an organic and non-organic origin.

6.4.3 Minerals (including trace elements) vitamins and similar isolated ingredients shall not be used, unless their use is legally required or where severe dietary or nutritional deficiency can be demonstrated.

6.5. Other Ingredients and Processing Aids

The formulation of a product should take into consideration the maintenance of nutritional value and the possibilities of producing similar products, etc.

6.5.1 The use of additives and processing aids is restricted. A list of components and restrictions is provided in Appendix 4.

6.5.2 Additives and processing aids shall only be used under the following conditions:

- a) If the purpose is to maintain the nutritional value of a product;
- b) If the purpose is to enhance the keeping quality or stability of the product,

- c) If the purpose is to provide the product with an acceptable composition, consistency, and appearance,
- d) There is no possibility of producing a similar product without the use of the additive or processing aid,
- e) It is not included in amounts greater than the minimum required to achieve its function,
- f) It does not in any major way detrimentally affect the environment,
- g) It shall not deceive the consumer, concerning the nature, substance, and quality of the food.

6.5.3 Salt and water may be used in organic products provided that specifications made in Appendix 4 are met.

Multiplication of microorganisms shall take place on media composed of organic ingredients.

6.5.4 Preparations of microorganisms and enzymes normally used in food processing may be used, except for genetically engineered microorganisms and their products.

6.6. Methods of Processing

The process shall include only approved methods that result in no damage to the food or the environment.

6.6.1 The following kinds of processes are approved:

- mechanical & physical processes
- biological processes (e.g. fermentation)
- smoking, drying
- extraction
- precipitation
- filtration

Removal of the whole food shall be restricted. It should be carried out by the restriction of permitted techniques and materials (e.g. certain ion exchange resins and absorption techniques). Filtration equipment shall not contain asbestos or substances that may negatively affect the

product.

6.6.2 Extraction shall only take place with water, ethanol, oil, CO₂, N₂, or acids provided that they are used in applications and qualities allowed in Appendix 4.

The processing methods shall affect the ingredients as little as possible.

6.6.3 No type of irradiation is allowed.

Smoking may be allowed depending on the quality and source of fuel used.

6.6.4. The wood (or other fuel) used for smoking must be free of treatments, pesticides, heavy metals, etc. Wood should preferably be culled or salvaged.

Aluminum containers for food processing should be avoided whenever possible. Care must be exercised in the use of ceramic containers since some glazes may contain heavy metals, and thus lead to contamination.

6.6.5. Processing containers should be 'Food-grade quality' Stainless Steel, Ceramic, or Glass.

6.7. Methods of Cleaning

Organic food is safe, of high quality, and free of substances use to clean, disinfect and sanitize food processing facilities.

6.7.1 Operators shall take all necessary precautions to protect organic food against contamination by substances prohibited in organic farming and handling pest, disease-causing organisms and foreign substances.

It cannot be assumed that because an item looks clean, or has been washed, it is clean enough for food contact.

Items in direct contact with food shall be rendered hygienic using approved methods. Processors should devise a plan layout; install equipment's and devise a cleaning, sanitizing and disinfecting systems that prevent the contamination of food and food contact surfaces by prohibited substances, non – organic ingredients, pest, disease-causing organisms and foreign materials.

6.7.2. Only substances that appear in the appendix and water may be used in direct contact with organic food. Any water used in organic processing must be potable.

6.7.3. Operations that use cleaners, sanitizers, and disinfectants on food contacts surfaces shall use them in a way that maintains the organic integrity of the food. Unless otherwise noted in the Appendix, the operator is required to perform an intervening event between the

Handlers and processors shall educate personnel's in hygiene, sanitation, safe food handling and organic standards.

Handlers and processors should physical and mechanical means such as dry heat, moist heat, exclusion and other non-chemical methods to prevent microbiological contamination

Operators should select cleaners, sanitizers and disinfectants based on avoidance of residual contamination, rapid biodegradability, low toxicity, worker safety and a life cycle impact of their manufacture, use and disposal. In particular, operators should avoid endocrine disrupting, ozone depletion and trihalomethane-forming compounds whenever possible.

The use of cleaning compounds should minimize the disposal of effluent and the use of disinfectants. Graywater recycling for uses other than handling or processing food is preferred over either re-circulation or disposal.

use of any cleaners, sanitizers or disinfectant and the contact of the organic food in that surface. Acceptable intervening events include a hot – water rinse, a sufficient flush of organic product that is not sold as organic product or adequate time for the substances to volatilize.

6.7.4. Operators shall prevent the residues of boiler water additives from direct contact with organic food by the use of entrained water, filters, traps or other means that prevent steam in contact with organic foods from carrying such compounds

6.7.5. Handlers and processors shall make a plan and maintain a report of cleaners, disinfectants and sanitizers used by certified organic handling and processing operations. This report should include a list of the cleaning, disinfecting and sanitizing agents currently used in certified organic facilities.

Approved methods of cleansing are:

- washing with clean water, abrasives, and organic soaps
- pasteurization

6.7.6. The cleanliness of the food processing premises shall be maintained at all times.

6.8. Packaging

The whole system of packaging (transportation, cleaning, etc.) should be taken into consideration. Organic product packaging should have minimal adverse environmental impacts.

Unnecessary packaging materials should be avoided. Recycling, and returnable systems should be used whenever

6.8.1 Packaging material shall not contaminate food and shall be able to maintain the aseptic condition of the product.

6.8.2 Packaging shall, whenever possible, be “Environmentally Friendly,” simple, and not deceptive.

possible.

Organic product shall be packaged in reusable, recycled, recyclable and biodegradable packaging materials whenever possible.

Packaging materials and storage containers or bins that contain a synthetic fungicide, preservative or fumigants are prohibited.

6.8.3. Organic products must not be packaged in reused bags or containers that have been in direct contact with any substances that would likely compromise the integrity of the product or ingredient placed in those containers, unless reusable bags or containers has been thoroughly cleaned and poses no risk of contamination.

6.8.4 Packaging materials shall be sterilized if appropriate.

7. Special Products

In the processing of special products, all applicable provisions found in Chapter 6 shall apply.

General Principles

Minimum Requirements

The principles and minimum requirements of crop production (section 4) shall apply. Additionally, the following minimum requirements must be considered.

7.1. Mushrooms

7.1.1 Substrate materials must be free of pollutants.

7.1.2 Substrates must not be contaminated with heavy metals.

7.1.3 Chemical pesticides, fungicides, herbicides, or fertilizers must not be used.

7.1.4 Clean, uncontaminated water, must be used

The principles and minimum requirements for minor forest products (Article 4.10) shall apply.

7.2. Wild Honey

7.2.1. The forage area of the bees should be free from chemical contamination and other pollutants.

7.2.2 Over-harvesting must be avoided to ensure the sustainability of the species concerned.

Care is needed in the selection of material for smoke production.

7.2.3. Smoke can be used to drive bees from harvest site

Simple washing is not sufficient to render the cloth clean.

7.2.4. Honey must be filtered through a sterilized cloth and sediment allowed to settle.

7.2.5. Label must specify source and moisture content.

7.2.6. Honey must be stored and distributed

in a hygienic fashion

7.2.7. Care should be taken to keep the moisture content low (preferably 16-20%)

7.3. Herbs

Special care is needed to ensure the unhampered production of wild herbs. The principles and minimum requirements of crop production and non-cultivated material (section 4) shall apply.

Care is needed to ensure the efficiency of herbal preparations.

7.3.1 Over-harvesting wild herbs must be avoided to ensure the sustainability of the species concerned.

7.3.2 Only herbs in their prime shall be harvested.

7.3.3 Herbs shall not be dried in direct sunlight to preserve their benefits; neither shall they be dried in locations prone to contamination.

7.3.4. Dehydrated herbs shall be packaged in dry containers to discourage bacterial infestation

7.3.5 The package shall be labeled with an expiration of *one year*, depending on the product and process.

8. Labeling and Consumer Information

General Principles	Minimum Requirements
<p>Product names, which refer to a specific geographical region or to a processing method, should only be used on products with this origin or on products produced according to local tradition.</p> <p>. When the full Standards requirements have been met, products may be sold as “produce of organic agriculture” or a similar description, indicating the name or code of the certification program.</p>	<h3 data-bbox="834 373 1029 407">8.1. Labeling</h3> <p data-bbox="834 430 1438 575">8.1.1 Only products that are produced, handled and processed according to these Standards may be labeled as “ produce of organic agriculture” or similar.</p> <p data-bbox="834 688 1430 940">8.1.2.Mixed products which contain conventional agricultural ingredients listed in Appendix 4.6 (see Article 6.1.1) may be labeled in the following ways (weight percentages shall refer to the state of an ingredient at the beginning of the processing):</p>
<p>The name and address of the person or company legally responsible for the production or processing of the product shall be identifiable.</p>	<ul style="list-style-type: none"><li data-bbox="850 984 1451 1192">a. Where a minimum of 95% of the ingredients are of certified organic origin, products may be labeled “certified organic” or similar and should carry the logo of the certification program.<li data-bbox="850 1201 1451 1671">b. Where less than 95% but not less than 70% of the ingredients are of certified organic origin, products may not be labeled “organic”. The word "organic" may be used on the principal display in statements like “made with organic ingredients” provided there is a clear statement of the proportion of the organic ingredients. An indication that the product is covered by the certification program may be used, close to the indication of the proportion of organic ingredients;<li data-bbox="850 1680 1451 1890">c. Where less than 70% of the ingredients are of certified organic origin, the indication that an ingredient is organic may appear in the ingredient list. Such product may not be called “organic”.

It is generally recommended to avoid the use of in-conversion labels.

If herb, and/or spices constitute less than 2% of the total weight of the products they may be listed as “spices” and /or” herbs” without stating the percentage

As a minimum, the product label should list such steps of processing, which influence the product properties in a way not immediately obvious.

If further information is requested than is shown on the product label, it should be provided by customer information sheets, which are regularly updated.

A circumvention of declaration by carry-through-effect (when listing ingredients or additives that are themselves composed of more than ingredients) may only be permitted as an exception.

8.1.3 In the calculations of percentage of organic ingredients, added water and salt shall not be included

8.1.4. When used, conversion labels should be clearly distinguishable from the full organic label

8.1.5. Products, which only consist of certified wild ingredients, shall be labeled “wild” or “natural”. A multi-ingredients product containing from both certified organic agricultural and certified wild/ natural origin may be labeled as organic.

8.1.6. All raw materials shall be listed on the product label in order of their weight percentage. It shall be apparent which raw materials are of organic origin and which are not.

8.1.7. Beside the raw materials, all additives shall be listed with their full name.

9. Social Justice

General Principles

Social justice and social rights are an integral part of organic agriculture and processing.

Recommendations

All ILO conventions relating to labor welfare and the UN Charter of Rights for Children should be compiled with.

All employees and their families should have access to potable water, food, housing, education, transportation, and health services.

Social security needs should be met including benefits such as maternity, sickness and retirement benefit.

All employees should have equal wages when doing the same job and they must have equal opportunities irrespective of color, creed, and gender.

Minimum Requirements

9.1.1. The certification program shall ensure the operators have a policy on social justice.

9.1.2. The certification program shall not certify production that is based on violation of basic human rights (in cases of clear and social justice).

9.1.3. Operators who hire fewer than ten (10) persons for labor and those who operate under a state system that enforces social laws may not be required to have such a policy.

9.1.4. In case where production is based on violation of basic human rights and clear case of social injustice, that product cannot be declared as organic.

9.1.5. Operators shall not use force or involuntary labor.

9.1.6. Employees and contractors of organic operations have the freedom to associate, the right to organize and the right to bargain collectively.

In all production and processing operations, labor conditions regarding noise, dust, light and exposure to chemicals should be within acceptable limits and workers should have adequate protection.

Rights of indigenous people shall be respected.

Appendix 1. Recommended Soil Management Practices

Lowland Rice

- Two cropping of rice per year should not be exceeded
- Plow in or mulching rice straw; if fed to animals, the dung should be returned to the field
- Planting more than one rice variety at a time or alternating with other varieties after 2-3 cropping

Upland Crops

Short- and medium term crops

- Fallow period or green manure crop of at least 3 months
- Crop rotation or green manuring with legumes should be done at least once a year
- Crop/animal residues should be recycled

Perennial crops

- Orchards shall include legume shrubs, legume tree species, or legume crops
- the soil shall be covered throughout the year, either by cover crops (e.g. legumes) or mulching
- the use of natural inducers is encouraged; application of synthetic inducers is prohibited

Appendix 2 - Crop Production

Materials not listed in the following lists can be approved by the certification program after screening according to the "IFOAM Criteria to Evaluate Additional Inputs to Organic Agriculture" (Appendix 3 of the IFOAM Basic Standards).

2.1 Organic Products produce in the farm

Inputs	Status	Notes/Limitations/Rationale
Farmyard manure, slurry, and urine	A	
Composted Poultry manure	A	
Vermi compost	A	
Compost produced from organic residues	A	
Green manure and green leaf manure	A	
Bio-dynamic preparations	A	
Azolla	A	
Crop residues (straw, groundnut haulms, etc.)	A	
Mulches from sugar cane trash, straw, etc.	A	
Kitchen waste from organically grown materials	A	
Coir pith, plantation by-products & wastes	A	
Organically produced mushroom beds	A	
Oil cakes, milled by-products, etc.	A	
Organically composted tea/coffee, etc.	A	
Human excrement	R	Risk of contamination, only after anaerobic fermentation or high-temperature composting
Sewage sludge	P	danger of contamination by heavy metals

2.2. Organic Matter Produced on Conventional Farms

Inputs	Status	Notes/Limitations/Rationale
Farm yard manure, slurry & urine	R	maximum 50 % of the applied manure and materials; not from factory farming origin
Straw, coir pith, plantation products, oil cakes, mulches & other crop residues	R	maximum 50 % of the applied manure and materials; plant

		materials must be composted prior to application
--	--	--

2.3. Other Sources of Inputs

Inputs	Status	Notes/Limitations/Rationale
Trichoderma, Rhizobium, Mycorrhizal bacterial preparations	R	concerns of over-addition, no GMO
Saw dust, bark, wood chips, wood ash	R	wood not chemically treated after felling
By-products of plant origin of food & textile industries	R	without synthetic additives and residues
Compost made from mushroom beds, from household wastes without contamination and from all materials listed under Appendix 2.1 to 2.4	R	proper composting prior to application
Blood, meat, bone, and other meal brought in from other sources and without preservatives	R	concerns of non-organic sources
Fish and fish products without preservatives	R	concerns of non-organic sources
Oil cakes	R	concerns of non-organic sources
Guano	R	concerns of non-organic sources
Calcified seaweed	R	concerns of non-organic sources
Bio-fertilizers of microbial origin	R	concerns of over-addition, no GMO
Biodynamic preparations	A	according to defined preparations

2.4. Mineral Products

Inputs	Status	Notes/Limitations/Rationale
Gypsum, Limestone, Magnesium rock	R	risk of contamination and depletion of natural resources
Pulverized rock	R	risk of depletion of natural resources and contamination with heavy metals.

	P	high N content (e.g. Chilean Nitrate)
Natural phosphates such as rock phosphates, mineral potassium with a low chlorine content, Calcareous and Magnesium amendments	R	Risk of depletion of natural resources and contamination with heavy metals. Cadmium content must be less than 90 mg/kg.
Basic slag	R	
Trace elements	R	Need must be recognized by the certification body. Risk of contamination.

2.5. Products for the Control of Plant Pests and Diseases

Inputs	Status	Notes/Limitation/Rationale
Synthetic chemical pesticide	P	Strictly prohibited!
Pheromones, in traps and dispensers only	R	Risk of ecological imbalance
Mechanical traps	A	
Chromatic traps	A	
Plant-based repellents	A	
Silicates	A	
Propolis	A	
Plant and Animal oils	A	
Bentonite	R	Risk of non-selective effects
Soft soap	A	
Gelatin	A	
Bio-dynamic preparations	A	
Release of predators or parasites of insects pests	R	Risk of influencing local ecosystem
Biological controls such as viral, fungal and bacterial preparations, sterilized insects	R	Risk of influencing the local ecosystem irreversibly.
Sulfur & commercial Sulfur	R	Risk of non-selective effects
Copper salts and Copper-bases fungicide	R	Restricted to a maximum application of 8 kg/ha per year. Risk of non-selective effects and accumulation of the heavy metal.
Potassium permanganate	R	Risk of non-selective effects
Chloride of lime soda	R	Risk of physiological imbalances
Light mineral oils	R	Risk of non-selective effects
Diatomaceous earth	R	Risk of non-selective effects

Inputs	Status	Notes/Limitation/Rationale
Neem (<i>Azadirachta indica</i>)	R	Risk of non-selective effects
Deris Root (Rotenone)	R	Risk of non-selective effects
Pyrethrum (<i>Chrysanthemum cinerariaefolium</i>)	R	Risk of non-selective effects
Ryania (<i>Ryania speciosa</i>)	R	Risk of non-selective effects
Tobacco tea	R	Risk of non-selective effects
Quassia (<i>Quassia amara</i>)	R	Risk of non-selective effects
Nematicides from natural resources (e.g. <i>Tayestus</i> mulches from natural sources)	R	Risk of non-selective effects
Plastic Mulches	R	Risk of contamination

2.6. Indigenous Plants Recommended as Botanical Pesticides

Common Name	Scientific Name	Description	Pest Controlled
Akapulko / Palochina ringworm bush	<i>Cassia alata</i>	A shrub 1.5 to 6m high thrives in wasteland near water, pods rather straight dark brown and flowers with yellow.	Fungus disease, mixed for fungicide prep.
Hagonoy	<i>Chromolaena odorata</i>	All plant parts used as spray. Leaves are green in color. (Restriction: when ingested by cattle may cause diarrhea and in extreme cases death has been reported)	Aphids
Kayos/ Kubong	<i>Dioscorea hispida</i>	A climbing plant and tuber used as a decoction for spray, very itchy	Rice bugs
Luya/ ginger	<i>Zingiber officinali</i>	An erect, smooth plant raising from thickened way aromatic rootstock	General
Madre de Cacao	<i>Gliricidia sepium</i>	Aglabrous, deciduous tree, about 3 to 10 m high, Pink flowers, pods narrowly oblong about 10 to 14cm long and 6 to 8 sides.	Eradicate diseases, Broadcasted in rice-field for case-worm, repellent
Makabuhay, manungol	<i>Tinospora rumphii</i>	Climbing vine reaching 4 to 10 m. Stems about 1 cm thick, feary with scattered protuberances,	Rice green leafhopper
Marigold, Amarillo	<i>Tagetes erecta</i>	Course, erect, broached, rank smelling annual herb. Flowers pale to deep yellow-orange.	A repellent companion plant

Common Name	Scientific Name	Description	Pest Controlled
Paminta/ Black Pepper	<i>Piper nigrum</i>	A start climber with smooth branches. Fruits crowded, rounded about 4 mm in diameter.	General
Sanhemp/ Sunhemp	<i>Crotalaria</i> spp.	Seeds are planted that are black when mature.	Pest attractant
Sili/ red hot pepper	<i>Capsicum frutescens</i>	A shrub-like herb about 1 to 1.5 m high. Flowers solitary or several on each axil. Fruits in common red form with 1.5 to 2.5 cm long with very sharp taste.	General
Sitsirika	<i>Catharantus roseus</i>	Ornamental plant with crest smooth slightly hairy, slightly branched and 30 to 50 cm high, flowers with white and pink	Repellant on aphids and worms.
Tanglad/ lemon grass	<i>Cymbopogin citrates</i>	Frequently attributed for its fragrant leaves, which is use for flowing food. It has 5% volatile oil, has citral and small quality of methyl heptone and terpense, depentine. The oil has the characteristic to kill pests.	General repellant
Tawanak		Stems are used as sticking around rice field Tawanak leaves are like small Banana leaves.	General pest repellent
Tigdaw		Leaves are used as repellent, green in color.	
Tuba	<i>Croton tiglium</i>	A tree that grows tall. Seeds used as spray that, when mature, are round and brown in color.	General
Tubang bakod/ Physic nut	<i>Jatropha curcas</i>	Leaves and branches used for spray; leaves are green with plenty of sap	Control of weevil for stored grains like corn, rice, mungbean, control of golden snail in rice; wards off household pest such as cockroaches, rats and flies.
Tubli	<i>Derris elliptica</i>	A shrub like herb about 4 to 5 m long; brown stem and green leaves, roots which contains toxic known as rotenone. (restriction: known to be used traditionally as fish poison)	General: Diamond-back moth; plant lice, yellow aphids, flies, caterpillars and ticks; fleas; chicken fleas

Appendix 3: Livestock Production

3.1 Veterinary Medicines

Restricted Medications

Restricted medicines are defined as those whose use involves a withholding period before products can be sold as “produce of organic agriculture” (5.6.2) and of which record keeping is imposed (5.6.6).

Unrestricted Medicines

Herbs are generally permitted. Homeopathic and anthroposophic medication from natural sources are also permitted, as is acupuncture. Salves, tinctures and colored antiseptics from natural sources are permitted.

Mineral Preparations

Calcium borogluconate
Calcium gluconate
Calcium chloride
Calcium phosphate
Ca/ Mg mixes
Natural iron preparation, such as nettle

Purgatives

Herbs such as mustard leaves
Castor oil
Forage additives
Linseed

Vitamins

All non-synthetic

Anti-diarrhea medications

Medical charcoal
Oak bark and / or chalk

Electrolytes

All, such as Ringer’s solution, physiological NaCl (0.9% saline solution), etc.

3.2 Livestock Materials

Materials	Status	Notes/Limitations/Rationale
Acetic acid	A	
Alcohol	A	Ethly and isopropyl alcohol are allowed in medication and as disinfectants
Algae	A	Aquatic plant products
Anesthetics	R	Use of this materials require a withdrawal period of ninety (90) days in livestock intended for slaughter and seven (7) days in dairy animals.
Antibiotic	R	May be used to treat specific maladies in livestock
Aspirin	A	
Biotin	R	See vitamins
Bleach	R	Allowed for disinfecting livestock facilities
Brewer's Yeast	A	Cannot be used if produced by genetic engineering
Calcium hydroxide	R	See hydrated lime
Calcium hypochlorite	R	See bleach
Cleaning agents	A	Allowed includes alcohol, soap, water
	P	Synthetic cleaning agents are prohibited or not allowed
	R	Regulated materials include alkali carbonates, bleach, potassium permanganate, sodium hydroxide and caustic soda. May not be used in direct contact with animals of soil.
Chlorine	R	See bleach
Coal tar	P	
Cobalt	R	See minerals
Colostrum and colostrum whey	A	Cannot come from cows treated with bovine growth hormone
Copper sulfate	R	For topical use and as an essential element
Diatomaceous earth	A	
Dolomite	A	
Electrolytes	A	May not contains electrolytes
Epsom salts	A	See magnesium sulfate
Fish liver oil	A	
Folic acid	R	See vitamins

Materials	Status	Notes/Limitations/Rationale
Genetically Engineered Organisms	P	The use of genetically engineered organism and their products are prohibited in any form or at any stage in organic production, processing or handling including those made with techniques that alter the molecular or cell biology of an organism by means that are not possible under natural processes of conditions. Genetic engineering includes recombinant DNA, cell fusion, micro and macro cell encapsulation, gene deletion and doubling, introducing a foreign gene and changing the position of genes. It shall not include breeding, conjugation, fermentation, hybridization, in-vitro fertilization or tissue culture
Glucose	A	
Herbal preparation	A	Herbs and herbal preparations taken internally by livestock must be certified organically grown and prepared.
Homeopathic preparation	A	
Hormones	P	All hormones that are not explicitly allowed are prohibited for livestock production, may not be used as promoters
Hydrated lime	R	Not permitted for soil application of to cauterize mutilations of to deodorize animals waste
Hydrogen peroxide	A	
Iodine	A	Allowed as feed supplement and as a topical disinfectant
Lidocaine	R	Allowed as local anesthetic
Lime sulfur	A	
Magnesium sulfate	A	
Menthol	A	
Milk replacers	A	Must be free of prohibited medications and other prohibited substances and must not be from cows treated with the bovine growth hormones
Mineral oil	R	
Minerals, non-synthetic	A	Includes mined minerals
Minerals, synthetic	R	Limited to those approved by the bureau of Food and drugs, for animal use in cases of documented deficiency
Molasses	R	Non-organic molasses is allowed as a feed supplement provided no organic molasses are available.
Newspaper	A	Allowed for bedding, glossy paper are prohibited

Materials	Status	Notes/Limitations/Rationale
Oxytocin	R	No routine of long time use. May be used only when necessary to allow animal to let down milk during the first few days of lactation and also for approved veterinary use.
Parasiticides	R	May not be used routinely, may not be used in organic slaughter stock within ninety (90) days or twice the withdrawal time of slaughter of sale as organic. May be used in dairy, laying and fiber stock provided they are withheld from organic production within thirty (30) days.
Plastic feed pellets	P	For livestock
Potassium permanganate	R	For disinfecting livestock facilities only
Probiotics	A	
Procaine	R	Allowed as local anesthetic
Pyrethrum	R	External Parasiticides
Seaweed	A	See aquatic plant products
Selenium	R	May be fed or injected to livestock to treat for documented deficiencies
Soap	A	May be use as disinfectant for livestock and facilities
Sodium chloride	A	Allowed as feed supplement
Sodium hypochlorite	R	See bleach
Sodium sulfite	P	
Urea, synthetic	R	All uses prohibited including using in livestock feed
Vitamins, Natural	A	
Vitamins, synthetic	R	Limited to those approved by the Bureau of Animal Industry (BAI) for animal use in cases of documented deficiency
Water	A	
Water, reclaimed	P	Reclaimed water for animal drink are prohibited
Whey antibodies	A	Cannot be from cows treated with bovine growth hormones

ALLOWED (A), materials maybe used in animals in the OCCP certification program. RESTRICTED (R), materials are allowed by OCCP only with certain restriction and only if no alternatives are feasible. The use of these materials is discouraged. Efforts to reduce or eliminate the use of regulated materials are required. PROHIBITED (P), materials are not allowed or cannot be use in the livestock certification program.

3.3 Maximum Number of Animals Equivalent to 170 kg N/ha/year

Class or Specie	Number of Animals
Equines, six months old	2
Calves for fattening	5
Other bovine animal, less than a year old	5
Male bovine animals from one to less than two year old	3
Female bovine animals from one to less than two year old	3
Male bovine animals two year old or over	2
Breeding heifers	3
Heifers for fattening	3
Dairy cows	2
Culled dairy cows	2
Other cows, other than those mentioned	2-5
Female breeding rabbits	100
Ewes	13
Goats	13
Piglets	74
Breeding sows	7
Pigs for fattening	14
Other pigs, other than those mentioned	14
Table chickens or broilers	580
Laying hens	230

3.4 Minimum surface area (indoor and outdoor) and other characteristics of housing in the different species and type of production (EC Regulations).

3.4.1. Bovines, ovine and pigs

Specie	Minimum live weight (kg)	Indoor area* (m/head)	Outdoor areas ** (m/head)
1. Breeding and fattening bovine and animals	Up to 100	1.5	1.1
	Up to 200	2.5	1.9
	Up to 350	4.0	3.0
	Over 350	5*	3.7*
2. Dairy cows		6	
3. Bulls (breeding)		10	
4. Sheep and goat	Sheep/ goat	1.5	2.5
	Lamb/kid	0.35	2.5
5. Farrowing sows with piglets up to 40 days old		8/sow	2.5

Specie	Minimum live weight (kg)	Indoor area* (m/head)	Outdoor areas ** (m/head)
6. Fattening pigs	Up to 50 Up to 85 Up to 110	0.8 1.1 1.3	0.6 0.8 1.0
7. Piglets	Over 40 days old and up to 30 kg	0.6	0.4
8. Brood pigs		2.5/ female 6.0 male	1.9 8.0

* net area available to animals

** exercise area, excluding pasture

3.4.2. POULTRY

Type	Indoor area (Heads/ m)	Indoor area cm perch/ head	Indoor area nest	Outdoor area** (heads/m)
Laying hens	6	18	8 laying hens per nest or in case of common nest 120 cm per bird	4sqm, provided that the limit of 170kg N/ha/yr is not exceeded
2. Farming poultry*** (in fixed housing)	10 with a minimum of 21 kg live weight per square meter	20 for guinea fowl only		4 for broilers and guinea fowl; 4.5 for ducks 10 turkeys 15 geese
3. Fattening poultry in mobile house	16* in mobile poultry house with maximum of 30 kg live weight per square meter			2.5 provided that the limit of 170 kg of N/ha/yr is not exceeded

* Only in the case on mobile house not exceeding 150 square meter per floor space which remain open at night

** Area available in rotation

*** In all the specie mentioned, the limit of 170 kg of N/ha/yr is not exceeded

Appendix 4: Food Processing

Approved Ingredients and Processing Aids of Non-agricultural Origin

Not every possible production group is included in the following lists, therefore they should be taken as a guideline offering additives or processing aids that could be allowed in food products. Materials not listed in the following lists can be approved by the certification program after screening according to the IFOAM guidelines on evaluation of additives and processing aids for organic food products.

In general the use of all substance (including enzymes, flavoring agents, preparation of microorganisms) should be limited.

Preliminary Statements

All components of food products shall be of “ Food-Grade” quality.

4.1 Definition of Terms

Restricted: Ingredients may hold the restricted status for at least one of the following reason:

They may be allowed on a case-to-case basis by the certifying body.
They are restricted in quantity.
They are restricted due to their source,
They may be allowed in cases of calamity

Group: food groups where the item may be used and for a definite purpose (if such is given); for all other groups or purpose, they are prohibited.

4.2. Ingredients of Non-Agricultural Origin

1. Drinking water
2. Sodium Chloride, with or without Calcium Carbonate as an anti-caking agent
3. Minerals (including trace elements) and Vitamins (only authorized as far as their use is legally required).
4. Food additives including carries as indicated in Appendix 4.3 (Definition: see Codex Alimentarius).

4.3. Ingredients and Additives of Processed Foods

Component	Group	Status	Notes/limitations/Rationale
Acetic Acid		A	Vinegar, must be from an organic source using micro-biological processes
Acetic Acid Bacteria		A	See Micro-biological Products
Agar		A	
Alginates		A	
Alginic Acid		A	
Ammonium Carbonates		A	Leavening agent
Ammonium Phosphate		P	
Ammonium Sulfate	W	R	0.3g/l maximum
Arabic gum	MI/F/CO	A	Must be water extracted
Argon		A	Must be derived from an oil-free source
Arsenic		P	Prohibited in all concentration, in all forms relative to food processing, where even potential contact with food is possible.
Ascorbic Acid	FV	A	Anti-oxidant, preferably from natural source
Baking Powder		A	Aluminum free
Bentonite		A	
Calcium Carbonate		A	
Calcium Chloride	MI/F/FV/ SO	A	
Calcium Citrate	ME	A	

Component	Group	Status	Notes/limitations/Rationale
Cornstarch		A	Natural
		P	Modified
Cultures, dairy		A	Not genetically engineered
Dolomite		R	Danger of Lead contamination
Enzymes		A	Natural Enzymes
		P	Products of genetically engineered organism
Ferrous Sulfate		A	See Minerals
Flavors, natural		R	May not have undergone chemical modification, not extracted by synthetic or prohibited solvent; since natural product flavors are preferred, the need for added flavor agents must be justifiable
Gelatin		A	
Genetically Engineered organisms		P	Organisms or products, in any form, at any stage resulting from Genetic Engineering or recombinant DNA techniques
Glycerides (1,2)		A	For use of drum drying of food only
Glycerin		A	Produced by the hydrolysis of fats and oils
Guar gum		A	Must be water extracted
Honey		R	Depends on forage area
Kaolin	GA	A	
Kelp		A	As a thickener and dietary supplement
Lactic Acid	FV	A	Juice concentrates and fermented vegetable products (including dairy)
Lecithin		A	Obtained without the use of bleaches and organic solvents
Lime		R	Depends on source and application
Locust Bean gum		A	Must be water extracted
Magnesium Carbonate	C/ CO/ C B	R	Depends on source and purity
Magnesium Chloride	SO	R	Depends on source (sea water or mine allowed), must be refined
Magnesium Stearate		A	
Magnesium Sulfate		A	
Malic Acid		A	

Component	Group	Status	Notes/limitations/Rationale
Micro-biological products		A	(Cultures & yeasts as well as enzymes and gums derived from them) are allowed if from a natural source
		P	See genetically Engineered organisms
Minerals		R	See vitamins
Monosodium Glutamate		P	
Nitrogen		A	Only oil-free grades from a non-oil source
Oxygen		A	Only oil-free grades from a non-oil source
Ozone		A	
Pectin		A	High-methoxyl, low-methoxyl, and amidated forms
pH adjusters		A	Must be from a natural source (e.g., Citric Acid & vinegar)
Potassium Carbonate	C/ CO/ C B	A	Only for application where sodium carbonate is not acceptable
Potassium Chloride	FV/ SA	A	Only for frozen fruit and vegetable and canned fruits and vegetables, vegetable sources, ketchup and mustard
Potassium Citrate	ME	R	
Potassium hydroxide		A	Only applications where sodium carbonate is not acceptable
	FV	P	Lye-peeling of fruits or vegetable
Potassium Iodide		A	Natural
Potassium Metabisulfite	W		
Potassium Tartarate	C/ CO/ C B	A	
Quaternary Ammonium sanitizers		P	
Saccharin		P	Carcinogenic
Sea salt		A	Purified
Sodium Bicarbonate		A	
Sodium Carbonate	CO/ CB	A	
Sodium Citrate	ME	R	
Sodium Chloride		A	With or without anti-caking agents
Sodium Hydroxide		A	Only in application where sodium carbonate is not acceptable
Sodium Phosphate	MI	A	
Sodium Tartarate	CO/ CB	R	

Component	Group	Status	Notes/limitations/Rationale
Steam		A	Needs to be filtered if boiler additives are used and steam is in contact with food (see water)
Sulfur Dioxide	W	A	< 100ppm; free sulfites in the final product must be less than 35ppm.
Sulfuric Acid	S	A	pH adjustment for extraction water
Tartaric Acid	W	A	Natural and synthetic forms are acceptable
Tocopherols	F	A	Must be derived from vegetable oils when rosemary extracts are not suitable substitute
Traganth gum		R	Must be water extracted
Vitamins		A	For enrichment or fortification when required by law of regulation, or recommended by an independent professional body. Exercise care to avoid potential toxicity.
Water		A	Water used in processing must be potable
Waxes		A	Acceptable source are: beeswax, carnauba wax, or wood extracted wax. Products that are coated with approved wax must be indicated as such on the shipping container.
		R	Must not contain any prohibited synthetic substances
		P	Petroleum derived paraffin waxes
Yeast, Baker's, Brewer's		A	
		P	See Micro-biological products
Yeast, nutritional		A	
		P	Grown on petrochemical substrates and sulfite waste liquor; also see Micro-biological products
Yeast Smoke		A	Must document that the yeast productin process does not include smoke flavoring produced by using synthetic processes, additives, or processing aids.
		P	Grown on petrochemicals substrates and sulfites waste liquor; also see micro-biological products
Xanthan gum	F/ FV/ CB /SA	R	

4.4. Processing Aids

Note: components that are allowed in 4.3 above may also be used as processing aids.

Component	Group	Status	Notes/limitations/Rationale
Acetic Acid		A	As a cleaner or sanitizer
Activated Carbon	GA	A	
Alcohol, Ethyl	GA	A	Disinfectant, for cleaning container
Alcohol, Isopropyl		A	Disinfectant, external germicide
Ammonium sanitizer products		P	Includes ammonium quaternary sanitizer
Ammonium soap		A	In waxes only, see wax
Bark component, preparations of	S	A	
Bentonite	FV/ W	A	
Bleach		R	Includes Calcium Hypochlorite, Sodium Hypochlorite, Chlorine Dioxide. Allowed as a sanitizer on food contact surfaces. Wash water treated with chlorine compounds as a disinfectant cannot exceed the Maximum residual disinfectant limit, currently 4mg/L as Cl . Documentation needed
Calcium Hypochlorite		R	See bleach
Calcium Sulfate	GA	A	Coagulation agent
Casein	W	A	
Charcoal		A	See Activated Carbon
Chlorine Dioxide		R	See bleach
Colloidal Silica		P	
Detergents		R	Equipment cleanser includes surfactants, emulsifiers, and wetting agents used as inert ingredients, must be evaluated on a case to case basis due to potential Boron toxicity.
Diatomaceous Earth	S/ FV	A	For food filtering only

--	--	--	--

Component	Group	Status	Notes/limitations/Rationale
Ethylene gas, synthetic		R	For use as a ripening agent for Banana only.
Filler Materials	GA	R	Asbestos free cellulose, activated Carbon, or Perlite.
Fumigants		A	Must be from a natural source
Fungicides, synthetic		P	
Hydrogen Peroxide		A	
Isinglass	W	A	
Lactic Acid	ME	A	
Lecithin	CO/ CB	A	Greasing Agents
Magnesium Chloride	SO	A	
Magnesium Silicate		P	
Methyl Bromide		P	
Perlite	GA	A	Filter-aid
Potassium Carbonate	FV/W	A	
	FV	P	Lye-peeling of fruits or vegetable
Potassium Permanganate		R	Allowed for post harvest handling as an ethylene absorbent, provided the materials is contained away from and not in direct contact with any produce, documentation needed, including provisions of preventing contact with the produce
Potassium Phosphate tribasic		A	Equipment cleanser
Quaternary Ammonium sanitizer		P	
Rice Hulls		A	Juice processing aid
Silicon Dioxide	W/ T/ FV	A	As gel or colloidal solution
Soap		A	
Sodium Carbonate	S	A	
Sodium Hydroxide	A	A	
	FV	P	Lye-peeling of fruits or vegetable
Sulfur Dioxide	W	A	
Talc	GA	A	
Tannin	W	A	
Tannic Acid	W	A	
Vegetable oil	GA	A	

4.5 General pasteurization Table

Temperature of packaged product (in C)	Temperature maintained for this duration (in minutes)
90	3
85	5

4.6. Ingredients of agricultural origin which have not been produced organically, as referred to in Article 6.4.1