# International Standards
**for**
# Organic Aquaculture

part
# Production of Shrimp

by

sippo
swiss import promotion programme

Naturland

IMO control

Version 01/2002

## *Copyright*

# I. General principles of farm management and animal husbandry

### 1. Selection of site location, interactive reaction with surrounding eco-systems

1.1. Since the site location and the method of management of the farm shall not affect adversely the surrounding ecosystems, any negative impact caused by effluents as well as by escape of animals, in particular, should be prevented by adopting suitable preventive measures. In the case of installation of new farms or amplification of already existing ones, natural vegetation should not be severely damaged. This has to be respected, in particular, if the type of vegetation may be classified at regional or international level as rare or endangered (reed areas in Middle Europe; rain forests, mangrove areas, etc.).

1.2. Through appropriate design and management of the farming operation it shall be ensured that the waters within the operation retain their ecological functions depending on the respective geographical conditions (breeding ground for amphibians and insects, resting place for migratory birds, migration routes for fish, etc.). For this purpose, in particular, adequately sized areas showing natural vegetation (water reeds, higher aquatic plants or helophytes, etc.) shall be selected, protected or re-planted.

1.3. While protecting the farm areas from predatory birds and other animal species, measures shall be preferred that do not physically harm the predators (nets, warning shots, etc.).

### 2. Species and origin of stock

2.1. For stock for organic production, native (autochthone) species shall be preferred. In particular, co-operation with possible regional breeding/conservation programs should be actively supported. The risk of escaping of non-indigenous species in open waters shall be prevented and their introduction (e.g. by marketing as live-stocks) is prohibited.

2.2. Where suitable, polyculture shall be preferred. Polyculture shall either lead to direct benefit for the cultivated species (e.g. wrasse for elimination of ecto-parasites in salmon cages) or to more effective utilisation of the available resources (by building up of food chains, etc.).

2.3. The stocks (eggs, hatchlings, fries etc.) shall originate from enterprises run organically. Insofar as this is not possible and, therefore, stock has to be purchased from conventional suppliers, the following conditions shall apply:
All transgenic organisms (genetically manipulated) or breeds obtained by means of polyploidization or gynogenesis are excluded from being stocked.
The organisms must have been kept and fed at least for 2/3 of their lifetime in accordance with these standards before marketing with reference to organic (Naturland) is allowed.

## 3. Breeding

Natural reproduction or spawn recovery is requested. The use of hormones, even of the same species, is not permitted.
If, due to extreme climatic and weather conditions, no natural spawn recovery can be expected, conventional measures can be resorted to following the submission of an application to the certification body. The stock obtained by such measures, is not allowed to be labelled as organic.

## 4. Design of holding systems, water quality, stocking density

4.1. The holding conditions (stocking density, soil, shelter, shade, water flow, etc.) must be designed to ensure the sustenance of species-specific behavioural patterns; this refers, in particular, to behavioural needs regarding movement, resting and feeding as well as social and reproduction habits.
The water quality (e.g. temperature, pH, salinity, oxygen, ammonium and nitrate concentrations) must conform to the natural requirements of the species in question.
If artificial illumination is inevitable (proof necessary), then the day length simulated shall not exceed 16 hours.

4.2. For construction and management measures only materials and substances shall be used that do not have injurious effects on the organisms or the environment.

## 5. Health and hygiene

5.1. Health of the species is to be primarily ensured by adopting preventive measures (optimised husbandry, rearing, feeding, etc.). Natural curative methods (see also 5.2.) shall preferably be used in case of a disease.
Use of conventional medicine is only permitted in vertebrates and after detailed diagnosis and remedial prescription by a veterinarian. In this case, at least twice the officially prescribed waiting period must be observed. Use of conventional medicine is not permitted in invertebrate organisms (e.g. molluscs, crustaceans).
Routine and prophylactic treatment with chemico-synthetic drugs as well as hormones is not permitted. All regulatory and statutory regulations shall be fulfilled.
The stock shall be regularly inspected with respect to its status of health. Dead organisms shall be immediately removed from the holding system.

5.2. Permitted treatments, also prophylactic or as routine (within the frame of statutory regulations) are:

- use of natural physical methods (in particular drying out, freezing out)
- use of non-toxic, inorganic compounds (e.g. hydrogen peroxide, common salt, lime, quicklime, sodium hypo chloride)
- use of naturally occurring, non-toxic organic compounds (e.g. peracetic acid, citric acid, formic acid, alcohol)
- use of naturally occurring vegetable substances (in particular Labiatae and *Allium* species; further *Ryania speciosa*, *Derris eliptica*, Neem/*Azadirachta indica*, oil emulsions on the basis of paraffin oils and/or vegetable oils, *Bacillus thuringensis*). For using pyrethrins (no synthetic pyrethroids) as well as *Quassia amare* an application shall be submitted to the certification body
- use homeopathic products
- use of stone meals.

## 6. Oxygen supply

The basis for aquaculture operation shall form the natural, physical conditions of the water supply. Permanent artificial aeration/oxygenation is not permitted.

## 7. Organic fertilising

7.1. The actual production capacity of the cultivation system may be augmented by supplementing organic material as fertiliser in specific quantities and compositions (see supplementary standards on specific culture systems and species).
The fertilisers used must originate, as much as available, from certified organic farm operations. In case the fertilisers cannot be obtained in organic quality (proof to be provided), the use of conventionally produced organic fertilisers (by way of solid manure, hay or compost, preferably from extensive farming operations) must be approved by the certification body.

7.2. Farming methods are recommended which, in a suitable way, allow to combine aquaculture with other forms of animal keeping (e.g. water fowl, pigs) or crop plantations (e.g. rice, water hyacinths *Eichhornia*).

## 8. Feeding

8.1. For certain production systems an upper limit for the application of feed/area can be determined (see supplementary regulations for specific farming systems and animal species).

8.2. Type, quantity and composition of feed must take into account the natural feeding habits of the animal species concerned. The activity level and the general condition of the animals provide main indications in this respect (e.g. corpulence factor, fat tissue).

8.3. All the feed stuff must be produced in accordance with Naturland standards, or organic standards at least in accordance with the IFOAM-Basic Standards. If the feed cannot be obtained from a certified organic farm operation (proof to be submitted), then the use of conventionally produced feed may be permitted by the certification body for up to a maximum of 20 % of total feed quantity (depending on the animal species concerned, see supplementary standards on specific culture systems and species).

8.4. Feeds produced by or from genetically altered organisms or their products are prohibited.

8.5. If for raising of carnivorous species feed with increased protein requirements of animal origin (e.g. fish meal, fish oil) is required, the following basic principles shall be observed:

- the percentage of animal components in feed shall, as far as possible, be decreased or replaced by vegetable products (provisional maximum values are set in the supplementary regulations for specific farming systems and animal species)
- feed shall not be obtained from conventionally reared terrestrial animals (mammals, birds)
- in order to achieve a responsible utilisation of wild stocks and habitats, special standard requirements are set on the origin of fish meal and fish oil (see supplementary regulations).

8.6. In order to cover the special needs of certain species of animals, addition of vitamins and minerals to the feed is permitted. Similarly, addition of natural pigments (e.g. shrimp shells or *Phaffia* yeast) is permissible.

8.7. Synthetic antibiotic and growth promoting substances as well as other synthetic feed additives (e.g. synthetic amino acids, colouring agents) are prohibited.

**9. Transport, slaughtering and processing**

9.1. Transport and slaughtering must be done as considerate as possible in order to avoid any unnecessary suffering of the animals. The methods, procedures and materials hvae to be in any case oriented towards the sensitivity of the respective animal species (e.g. to temperature or to stress).
Slaughtering of fishes shall be carried out by means of incision of gills or immediate evisceration. Prior to this, they shall be anaesthetised by means of concussion, electrocution, carbon dioxide and, if need be, by natural vegetable anaesthetics).

9.2. The cold chain from the point of slaughtering up to the points of sale must be strictly implemented, in order to prevent any deterioration in the product quality.

9.3. In the case of processed products, only products and additives in accordance with organic standards may be used. If applicable, specific manufacturing standards must be followed.

9.4. Cleaning of production rooms, machines and tools must ensure a perfect hygiene along with a maximum environmental protection. Physical procedures shall be preferred to chemical processes. Regarding the use of cleaning and disinfecting agents, daily records must be kept.
The wastewater from the slaughtering and processing plants must be subject to an appropriate purification process before release into the environment.

**10. Devices used for smoking**

Customary smoking devices are permitted, however, only hardwood and spices shall be used. The glowing temperature shall not exceed, on an average, 500°C (max. 650°C). The smoke conduction shall be such that a cooling of the smoke takes place, and any seepage of organic matter from the products to be smoked (fat, protein, drip fluid) into the glowing zone must be avoided.
"Black smoking" procedure is prohibited, the use of so-called "Katenrauch", the use of chemically treated wood, resin-rich wood, toxic wood and liquid smoke preparations as well as the technique of salting by injection are prohibited.

# II. Supplementary regulations for specific farming systems and animal species

## A. Production of shrimp in ponds

***The general standards as given in Part I shall be complied with. For the production of organic shrimp in ponds, the following standards are additionally to be implemented***

### 1. Site selection, protection of mangrove

1.1. Mangrove plant communities have to be considered as extremely important ecosystems (being e.g. a nursery ground of many marine species). Nevertheless they are destroyed world-wide at an alarming rate by human impacts. Therefore, it is not permitted to remove or damage mangrove forest for purposes of construction or expansion of shrimp farms.
Any measure carried out by the farm or on behalf of farms likely to influence adjacent mangrove forests (construction of ponds, pathways, channels, etc.) needs prior approval by the certification body.

1.2. Farming units, which in part occupy former mangrove areas, can be converted to organic aquaculture if the former mangrove area does not exceed 50% of total farm area (this under condition, that the removal of mangrove had taken place before any official law defined its protected status).
The former mangrove area on the farm shall be reforested to at least 50% during a period of maximum 5 years after conversion. The harvest of this area is not permitted to be labelled and marketed as organic product, until the certification body has confirmed the successful completion of reforestation. Furthermore, the yearly progress in reforestation activities as laid down in the conversion plan shall be confirmed by the certification body.

1.3. The distance between organic and non-organic production areas or other potential sources of pollution must be sufficient to make sure that the risk of contamination is minimised.

## 2. Protection of ecosystems – farm area and surrounding

2.1. Effluent water quality (ammonia, biological oxygen demand, dissolved oxygen, phosphate, suspended solids) has to be monitored and documented on a monthly base by the farm.

2.2. Adequate measures must be taken to minimise the outflow of nutrients and/or suspended solids, especially during harvesting. Organic sediments shall be removed from the channels on a regular base and be brought to appropriate utilisation (such as fertiliser in agricultural units).

2.3. Adjacent agricultural areas shall not be negatively influenced by saline water filtering from the ponds. If there are indications for adverse effects on agricultural areas adequate preventive measures (e.g. construction of drainage channels, plantation of salt-resistant, high-growing grasses, e.g. *Setifer zizanoides*) must be taken.

2.4. In order to stabilise and enhance the ecological system and the natural dynamics on the farm area, slopes and tops of dykes shall, as far as technically possible, be covered by vegetation. The extension of such vegetative cover shall be at least 50% of total dyke surface. This minimum shall be reached during a period of maximum 3 years after conversion.
Species recommended for soil coverage are Leguminosae-trees (e.g. *Algorrobo*), aloe and others for the tops of the dykes, mangrove species, semi-aquatic herbs and floating grasses for the lower parts of the slopes. Farms situated in areas originally free from vegetation (e.g. desert, dunes) are excluded from this requirement.

2.5. In order to find an ecologically adequate and economically efficient anti-predator management, documentation on foraging predators, estimated harvest losses and type of preventive measures shall be kept (e.g. trials to raise ducks in the ponds to chase intruding birds are recommended).
Native animals (ant-eaters, iguanas, migrating water birds, wild cats, etc.) living permanently or temporarily on the farm area shall be protected as indicators for a healthy environment.

2.6. Unwanted fish in the ponds shall only be regulated by mechanical means or by application of natural, herbal ichtyocides (*Barbasco*, saponine, etc.). The use of synthetic herbicides and pesticides on the farm area is not allowed.

2.7. Release of toxic or otherwise harmful substances into the ponds, the channels or the banks is prohibited and all necessary preventive measures must be taken. This refers especially to installation and management of pumping stations (oil spoilage), harvesting as well as the overall hygienic conditions on the farm.

### 3. Species and origin of stock

3.1. For marine or brackish-water culture only native species shall be stocked.
Diversification in the species cultivated is recommended. This can be achieved either by polyculture systems (e.g. shrimp–tilapia–ducks) or by separate production of different species (e.g. *Macrobrachium* prawn – *Litopenaeus* shrimp). Culture of the freshwater species (such as *Macrobrachium rosenbergi*) outside their natural geographical distribution must be approved by the certification body.

3.2. It is the declared objective, to get fully independent from wild-caught post-larvae (PL) or brood stock, and to use only stocks obtained through controlled reproduction ("domestication"). From the date of conversion, the following schedule shall be applied:

- stocking with wild caught PL possible for 1 year
- stocking with PL from wild caught egg-bearing female shrimp possible for 2 years
- stocking with PL from wild caught brood stock possible for 3 years

As soon as available, stocks from certified organic origin shall be used. In any case, a time schedule for the above mentioned program must be set ba the management and approved by the certification body.

### 4. Breeding (laboratory and nursery)

4.1. Reproduction shall take place in a mostly natural way. Therefore, mild, non-mutilating measures for obtaining larvae shall be preferred (e.g. enhancing the reproductive maturity by a special feeding regime; replacement of artificial insemination by natural mating).
These alternative measures shall be carried out on a trial base with at least 10 % of the individuals kept on site for breeding purposes.

4.2. Measures for enrichment of the larval environment (e.g. by providing special substrates) and for increase in the productivity of the rearing tanks/nursery ponds (culture of feed organisms) are recommended.

4.3. Health of larvae shall be safeguarded by preventive measures. For a limited period of time (provisional deadline two years after conversion) treatment of larvae kept under laboratory conditions with conventional medicine is permitted (but only following an adequate diagnosis and prescription by a veterinary institution).
Routine or prophylactic application of conventional medicine is not permitted.

**5. Design, water quality, stocking density of grow-out ponds**

5.1. Efforts shall be made to support the natural foraging behaviour of shrimp by an adequate pond design (e.g. by providing substrates suitably enlarging the surface for growth of benthic algae/diatoms as dominant sources of shrimp feed).

5.2. It is not allowed to heat, oxygenate or aerate the ponds permanently. Back-up systems for temporary use under extreme weather conditions are permitted.

5.3. Efforts shall be made towards the lowest possible water exchange rate.
Pumping periods shall be limited to high tide and unnecessarily protruding (in altitude) pipes shall be avoided in order to minimise energy consumption.
Data regarding energy consumption/area shall carefully be recorded and kept for annual inspection.

5.4. As provisional maximum for stock density shall be set at 20 animals/$m^2$ (at time of harvest).

**6. Safeguarding health and hygiene in grow-out ponds**

6.1. Emphasis shall be put on preventive measures (e.g. controlled origin of larvae, monitoring of water quality and ecological conditions in the ponds).
Application/culture of (non-genetically modified) probiotic micro organisms in the ponds is permitted.

6.2. Health status of animals shall be monitored and documented on a regular base. Special efforts shall be made to detect correlation between management measures, manifestation of viral diseases, reasons for mortalities, individual growth and yields/biomass development.

6.3. Treatment of shrimp with antibiotics, chemo-therapeutics and similar substances in the grow-out ponds is not permitted.

6.4. After harvest, the bottom of the ponds shall be given enough time to dry. Waterfowls shall be allowed to forage on the drying bottom for remaining fish and invertebrates, fertilising at the same time with their excrements.
Additional measures (e.g. harrowing, ploughing, intermediate cultures of as e.g. *Salicornia*) shall be considered after several production cycles for recovery of the pond bottom.

**7. Fertilising of grow-out ponds**

Supplementary use of phosphate (as raw phosphate from natural sources) is permitted.
The limits for the overall use of fertilisers shall be primarily set by the effluent water quality.

**8. Feeding in grow-out ponds**

8.1. Efforts shall be made towards reducing the total amount of external feed used, respectively, towards increasing the importance of natural feed production (phyto-, zooplankton) in the ponds. Therefore, careful documentation shall be kept, allowing to calculate the feed conversion ratio (FCR).
Additionally, the content in fishmeal as well as the total protein content of compound feed shall be reduced as much as possible. As provisional maximum level is being set at 20% for fishmeal/-oil and 25% for total content of protein.

8.2. All feed ingredients shall come from certified organic sources. If (in case of non-availability) material has to be bought in from non-organic (conventional) sources, it shall be approved by the certification body and free from pesticide and other chemical residues as well as from genetically modified crops.
8.3. Feed intake shall be monitored and documented carefully in order to avoid accumulation of organic sediments by excess feed.
Feed application by feeding trays (*comederos*) is recommended.

## 9. Harvesting and processing

9.1. Feeding and fertilising shall be ceased for an adequate period of time before harvesting (a minimum of 3 days is provisionally requested).
Drainage of ponds shall be carried out as carefully and slowly as possible in order not to release uncontrolled quantities of organic sediment into the run-offs. A barrier in the draining channels shall be possibly used to retain the sludge.
The status of pond sediments (type, quantity) shall be analysed and carefully documented in order to optimise management measures accordingly.

9.2. The use of sodium-metabisulfite is not permitted. Treatments with natural, plant based additives for neutralisation of undesired aromas (e.g. caused by blue-green algae) are allowed.

9.3. Shrimp heads, trimmings and other manufacturing remains shall be brought to an adequate re-use. Direct feeding of untreated processing residues to the same species is not permitted due to hygienic reasons.

## 10. Social aspects

10.1. The staff shall be trained regarding the basic principles of organic aquaculture. The timetable for this measure shall be defined in the conversion plan. At least one person familiar with the contents of these standards shall permanently be in easy reach of the farm.

10.2. The operator of the farm has to take responsibility for the housing and living conditions of employees living permanently or temporarily on the farm area. As basic requirements the IFOAM Social Standards shall apply. The respective provisos of labour legislation shall be adhered to.

10.3. In accordance with the representatives of the neighbouring municipalities/regional authorities, the farm operator shall ensure free access for fishermen and other persons to open waters adjoining the farm area. The installation of fenced gateways or issuing of transit passes is, therefore, recommended. In any case the legal regulations shall be adhered to.

# B. Production in a mangrove-shrimp-system

***The general standards as given in Part I and the specific standards given in Part II shall be complied with. For the production of organic shrimp in ponds, the following standards are additionally to be implemented***

### 1. Site selection, protection of mangrove

1.1. It is not permitted to remove or damage mangrove forest for purposes of construction or expansion of shrimp farms. Management of mangroves (such as replanting and thinning) is, however, possible in agreement with current laws and decrees regulating the protection of mangroves. Any measures likely to influence adjacent mangrove forest areas shall be announced to and approved by the certification body.

1.2. The mangrove area in property of the farm shall be reforested to at least 70% following the schedule approved by the certification body but at least during a period of maximum 5 years. The harvest of this area is not permitted to be labelled and marketed as organic product, unless the inspection has confirmed the implementation of the reforestation activities.

1.3. The distance between organic and non-organic production areas or other potential sources of pollution must be sufficient to ensure that the risk of contamination is minimised.

### 2. Protection of ecosystems in the farm area and its surroundings

2.1. Effluent water quality (ammonia, biological oxygen demand, dissolved oxygen, phosphate, suspended solids) has to be monitored and documented on an annual base.

2.2. Adequate measures must be taken to minimise the outflow of nutrients and/or suspended solids, especially during harvesting. Organic sediments shall be removed on a regular base from the ponds and brought to appropriate utilisation (e.g. as fertiliser in agricultural units).

2.3. In order to find an ecologically adequate and economically effective anti-predator management, native animals living permanently or temporarily on the farm area shall be protected as indicators for a sane environment. In case of specific problems, documentation on foraging predators, estimated harvest losses and type of preventive measures shall be kept.

2.4. Unwanted fish in the ponds shall only be regulated by mechanical means (e.g. seining) or by application of natural, herbal ichtyocides (e.g. tea seed cakes, saponine). The use of synthetic herbicides and pesticides on the farm area is not allowed.

2.5. Any release of toxic or otherwise harmful substances into the ponds, the rivers or the banks shall be prevented. This refers especially to oil spillage, batteries, harvest remains, household wastes as well as to the overall hygienic conditions on the farm.

**3. Species and origin of stock**

3.1. Only native species shall be stocked. Exotic species of shrimp or fish (e.g. Oreochromis niloticus and Oreochromis mossambicus) are fully prohibited in order to protect the natural biodiversity. Diversification in the species cultivated is recommended.

3.2. One of the purposes of the organic production is to preserve the natural stocks of the native species. All efforts must be done to master the breeding of the managed specie as to get fully independent from wild-caught post-larvae (PL) or brood and to use only stocks obtained through controlled reproduction ("domestication"). As soon as available, stocks from certified organic origin shall be used.
The passive seeding of ponds with larvae or fingerlings of native species entering naturally the pond with tidal flow is permitted.

**4. Design of ponds, water quality**

4.1. Efforts shall be made to support the natural foraging behaviour of shrimp by an adequate pond design.

4.2. It is not allowed to heat, oxygenate or aerate the ponds.

4.3. Tidal flow must be used for water exchange, ponds filling and ponds draining.

**5. Fertilising of grow-out ponds**

The use of organic wastes (e.g. from garden plots) as raw product or compost produced by the farm itself is authorised in organic production.

**6. Feeding in ponds**

The use of external feed (e.g. bought-in feed) is not allowed. Shrimps must be raised making use of the natural productivity of the ponds and of the surrounding mangrove forests.

**7. Stocking density of ponds**

In the '*mangrove-shrimp system*' the density and productivity is naturally regulated by the feed availability in the ponds. It is, therefore, not necessary to fix a limit of production per hectare and year because this limit is given by the natural carrying capacity of the ponds. However, the actual productivity of this system is considered to be approximately 100 – 500 kg/hectare/year.
The actual seeding density of additional post-larvae PL is ~2 per sqm and must be used as reference.

**8. Safeguarding health and hygiene in ponds**

8.1. Emphasis shall be put on preventive measures (e.g. controlled origin of larvae, monitoring of water quality and ecological conditions in the ponds).
Application/culture of (non-genetically modified) probiotic micro organisms in the ponds is permitted.

8.2. Health status of animals shall be monitored and documented on a regular base.

8.3. Treatment of shrimp with antibiotics, chemo-therapeutics and comparable substances in the ponds is not permitted.

## 9. Harvesting and processing

9.1. Drainage of ponds shall be carried out as carefully/slowly as possible in order not to release uncontrolled quantities of organic sediment into the channels.

9.2. The use of sodium-metabisulfite or any other chemical preservative is not permitted.

## 10. Social aspects

10.1. All farmers and staff shall be trained regarding the basic principles of organic aquaculture. The timetable for this measure shall be defined in the conversion plan.

10.2. The respective provisions set in the labour legislation shall be adhered to.

# III. General requirements for organic certification

### 1. Prerequisites for granting the producer contract

1.1. This operator is obliged to provide any information necessary to assess the conditions doe conversion to organic management. This includes particularly the method of farming that has been practised to date (use of mineral fertilisers, management of synthetic chemical pesticides, soil management etc.), the economic situation of the farm and the prevailing environmental conditions (information regarding the sources of water in the bordering areas and regarding the neighbouring ecosystems, sources of possible threats such as e.g. industrial plants). If possible causes of contamination with dubious or harmful substances are detected, analyses have to be carried out prior to the conclusion of a producer contract.

1.2. A comprehensive description of all the water bodies and of the production and storage sites has to be made.

### 2. Certification contract

2.1. On signing the certification contract with Naturland or another certification body, the operator commits himself to adhering to organic standards and to extending the conversion to all areas of the operation that are managed or farmed under his responsibility (whole farm conversion).

2.2. The signing of a producer contract does not yet entitle the operator to the use of the Naturland logo or the label organic for his products. This may only be done after certification of his production system and (in certain cases) after a separate license contract has been signed.

### 3. Conversion

3.1. During conversion to organic aquaculture, the manager introduces management practises throughout his entire operation in accordance with the principles as defined in the standards.

3.2. The conversion of the entire farm must occur under economically acceptable basic conditions. It can therefore take place gradually to cover increasing areas of the farmland cultivated in accordance with the standards. Where conversion is carried out gradually, it is imperative for the areas under various stages of conversion to be clearly and explicitly delineated and separated. Simultaneous production of products that cannot be clearly differentiated and belonging to different stages of certification is not permissible.

3.3. A conversion plan has to be worked out, including in particular, all constructional/design/structural changes, the type and numbers of stocking and the feeding schedule as well as the hygienic measures to be followed.

**4. Operational changes**

4.1. If new areas are introduced into an organic farming operation either by way of purchase or on lease, then the animals kept on that area have to comply with the usual conversion period.

4.2. If the same species of animal is cultivated on an area already converted as well as on other(s), still under conversion, then attention has to be paid to a physical separation and continuous identification of the production units. Any switching between organic and conventional farming method is not permitted.

**5. Documentation and inspection**

5.1. All details of the production system (i.e. type and size of the stock, large-scale transport of stock, e.g. to net cages located wide apart, etc.) shall be reported to the certification body. Regarding the movements of goods (e.g. purchases of feed as well as sales of farm products), likewise, complete records shall be kept and submitted to inspection by the certification body. Furthermore, a farm diary shall be kept (regarding the incidence of diseases, mortality rates, implementation of special hygienic measures such as dewatering, liming etc.).

5.2. An obligation to immediate reporting to the certification body exists in respect of all such factors that that do not comply with the standards or that can negatively affect the quality of the products (e.g. contamination of water sources, occurrence of toxic algae blooms or „red tides“).

5.3. At least once a year a physical inspection will be conducted to verify adherence to the standards. Such inspections may also take place unannounced.

5.4. The inspectors shall be provided with unrestricted access to the premises and documentation of all the relevant areas of the operation. Upon their request, all additional information relating to the managing of the operation and other relevant areas shall be made available.

## 6. Certification and sanctions

6.1. On the base of the inspection report and all other information available, the certification body will evaluate the situation and possibly confirm the adherence to the standards.

6.2. In case of deviations or infringements on the part of the operator, sanctions can be imposed in accordance with the catalogue of sanctions, which is part of the producer contract.

## 7. Labelling and marketing

7.1. Reference to organic quality may only be made after certification is completed and according to the conditions set in the decision.

7.2. The operator is only allowed to label products with reference to Naturland if a licence agreement has been concluded for the products in question.

7.3. All labels and advertisements with reference to organic practises may only be used after prior approval by the certification body.

7.4. For international sales to certain market places, specific transaction certificates will be needed. Respective information and support will be provided by the certification body.

**Additional standards and criteria may be obtained from Naturland on the following items:**

- **Pond Culture of carp (*Cyprinus carpio*) and its accompanying species (in particular tench *Tinca tinca* and other cyprinoids)**
- **Culture of trout, salmon and other salmonides in fresh- and sea-water**
- **Marine culture of mussels (Blue mussel *Mytilus edulis* and others)**
- **Naturland General Processing Standards**
- **Naturland Licence Agreement**
- **List of permitted feed prime material**