

# Friend of the Earth Standard

## **FOE-Farming Criteria and indicators for the Certification of Sustainable Farming**

### REQUIREMENT CATEGORIES

- 1-- SOCIAL AND ENVIRONMENTAL MANAGEMENT SYSTEM
- 2-- LEGAL COMPLIANCE
- 3-- FACILITY STANDARDS
- 4-- USE OF HAZARDOUS SUBSTANCES
- 5-- INSECT HUSBANDRY
- 6-- FEED SPECIFICATIONS
- 7-- WATER RESOURCES
- 8-- AIR RESOURCES
- 9-- WASTE MANAGEMENT
- 10--ENERGY MANAGEMENT
- 11--SOCIAL ACCOUNTABILITY

<b>Organization Name</b>	
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This document may only be completed by the certification body and by the auditor responsible for the inspection. The form must be completed in the auditor's mother tongue or in English if fluent.

If the organisation is a farmers' cooperative, the checks are to be carried out every year on a sample, verified as representative, at least equal in size to the square root of the total number of farms belonging to the cooperative.

**a) ADDRESS OF THE ORGANIZATION:**

**b) IS THE ORGANIZATION TO BE AUDITED PART OF A GROUP OR ASSOCIATION?**

**c) FARM AND FIELDS:**

Farm name	Coordinates	Description

**d) FIELDS AND FARMS AUDITED ON SITE:** *(The auditor must list the fields and farms actually audited as a sample of the total)*

Farm name	Coordinates	Description

**e) FARM AREA / ADDRESS:**

*(e.g. coordinates, size, etc... Include a map when available)*

**f) COMMON AND SCIENTIFIC NAME OF SPECIES OF CROPS AND ANIMALS FARMED:**

Common name	Scientific name

**g) TOTAL NUMBER OF EMPLOYEES**

Family members	External	Total

**h) ENVIRONMENTAL CERTIFICATIONS AVAILABLE:**

**i) OTHER INFORMATION**

Composition of the livestock				
BREED	NUMBER OF ANIMALS			
	Larvae	Pre-pupae/ Pupae	Adults	Eggs
<i>House flies, meal worms, moth, black soldier fly, silkworm, etc.</i>				

Black soldie fly				
<i>Crickets, grasshoppers, etc.</i>	<b>Nymphs</b>		<b>Adults</b>	<b>Eggs</b>
<b>TOTAL ESTIMATION OF ANIMAL POPULATIONS</b>				

	Purchased feedstuffs:	Suppliers	Indicative average amount kg		
<b>Agriculturally/industrially produced (specifically for feed purpose)</b>					
<b>From alternative uses/waste streams</b>					

Feedstuffs produced on farm:	Indicative average amount per head (Kg)		
	?	?	?

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**The Friend of the Earth project has already been presented**  
(If not, the auditor should provide a short description)

**The audited enterprise has been informed that in case of approval confirmation, it can use the Friend of the Earth logo on its certified products**

**The enterprise is in possession of a copy of the organisation chart that identifies the roles of the staff involved in the audit**

**The length of the audit has been agreed upon.**

**The data in the Preliminary Information Form have been confirmed:** (In case of different information, please give details)

<b>CERTIFICATION BODY</b>	<b>AUDIT TEAM:</b>	<b>AUDIT START AND END DATE:</b>
<b>SIGNATURE OF AUDITOR:</b>	<b>NAME OF THE RESPONSIBLE PERSON FROM THE ORGANISATION ACCOMPANYING THE AUDITOR DURING THE AUDIT:</b>	<b>AUDIT CODE:</b>

**NOTES FOR THE AUDITOR**

- 1) *The auditor must complete all fields of the checklist*
- 2) *The auditor must read the notes in the blue boxes before filling in the fields*
- 3) *The auditor must provide an explanation when the qualification requirements are not applicable*
- 4) *The auditor must answer Yes (Y) when the organisation is compliant with the requirement and No (N) when it is not compliant*
- 5) *The auditor must provide comments and explanations for positive or negative responses. Yes, No or Not Applicable are not sufficient. Any significant documentation must be attached to the final audit report in a separate and numbered annex*

6) *Photographs added to the checklist and/or as an annex would be helpful*

As a first step of the audit, the producer must describe all aspects of the production system, including:

\*Map showing all areas where crops are produced, uncropped areas and wildlife habitat; surface water; roads and structures, as well as the sizes of fields and uncropped areas.

\*All crops to be produced in the following year.

\*Rotation plan and/or perennial crop production plan.

\*Practices and inputs used to maintain soil health and crop productivity.

\*Practices and inputs used to prevent and control crop pests, weeds and diseases.

\*Varieties of seeds, planting stock, and other plant material used to propagate crops.

\*Any other on-farm enterprises that either use crops produced on farm as an input (i.e. value-added) or that provide inputs to the cropping system (e.g. livestock, aquaculture or composting).

**Essential Requirements** 100% conformity to essential requirements is necessary in order for the certification body to recommend the enterprise for certification. Any shortfall with regard to these requirements is considered as a Major Nonconformity and corrective actions are necessary, to be carried out within a maximum term of three months from the date of the nonconformity finding. The enterprise must provide the certification body with satisfactory evidence of corrective actions for all Major Nonconformities. For requirements 2.1 and 2.2 only, in consideration of the complexity of the information to be covered, the period allowed for assessing the nonconformity is extended to 6 months.

**Important Requirements** 100% conformity to important requirements is necessary in order for the certification body to recommend the enterprise for certification. Any shortfall with regard to these requirements is considered as a Minor Nonconformity and corrective actions (declaration of intent and plan of action) must be proposed to the assessing body, to be submitted within a maximum period of four months from the date of the nonconformity finding. The enterprise must include in their proposal a timeline for the achievement of each corrective action. The maximum period for the complete implementation of each corrective action is one year.

**Recommendations** Conformity to recommendations is not a strict requirement in order to be recommended for certification. However, as part of the assessment, all aspects relating to such requirements will be inspected and each shortfall will be indicated in the audit report under the form of a Recommendation. The enterprise must assess any possible corrective action and, no later than the subsequent inspection, must inform the certification body of decisions taken and corrective actions carried out.

Where a requirement is not applicable to the organisation assessed, this requirement should be marked N/A.

## 1- SOCIAL AND ENVIRONMENTAL MANAGEMENT SYSTEM

N°	Requirement	Level	Y/N	Comments
1.1	The organisation has a social and environmental management system that contains the necessary policies, programs, procedures and records that prove compliance with this standard.	Essential		
1.2	The organisation has identified a person responsible for verifying compliance with the social and environmental management system	Essential		
1.3	All documentation related to the social and environmental management system has been filed for at least three years.	Important		
1.4	The organisation has carried out an LCA on its production system, including all inputs	Recommen dation		
The auditor must be able to examine the documentary evidence in support of the above requirements.				
<b>1.5</b>	<b>Human Resources</b>			
1.5.1	The organisation has defined practices that prevent access by unauthorised persons to the work establishments.	Important		
1.5.2	There is training of internal personnel and of personnel external to the organisation (if it is necessary to use them). There is a record of training activities that have been carried out, which indicates whether they included subjects related to the protection of the environment and prevention of dangerous practices in this regard.	Important		
<b>1.6</b>	<b>Emergency procedures</b>			
1.6.1	In the enterprise there are procedures for dealing with an emergency. They contain at least the following elements: map or address of the agricultural enterprise, contact person/s, list of phone numbers for emergencies, location of the nearest telephone, location of fire extinguishers, main electricity switches and valves for shutting off water and gas.	Important		
1.6.2	There are procedures to implement appropriate corrective actions in case of accidents related to waste management (e.g. leakage of organic materials).	Important		
<b>1.7</b>	<b>Machinery and equipment</b> All machines and equipment are maintained in such a way that breakages and faults that can pollute the surrounding environment are prevented.	Important		

## 2- LEGAL COMPLIANCE

N°	Requirement	Level	Y/N	Comments
2.1	The organisation provides evidence that production and farm operations comply with all local, federal, state and international environmental laws and regulations.	Essential		
2.2	<b>Health authorisation</b> The organisation has its own identification number. (Record the Public Veterinary Service identification number)	Essential		

The auditor must be allowed to review the documentary evidence from the official authorities in support of 2.1

## 3- FACILITY STANDARDS

N°	Requirement	Level	Y/N	Comments
3.1	<b>Facility Enclosure/Biosecurity</b>	Essential		
3.1.1	All openings to a laboratory insectary are sealed or filtered to prevent insects from entering or leaving, particularly in quarantine facilities.	Essential		
3.1.2	Insects and supplies are carefully screened for contaminants before they are admitted, and human access and exposure are limited.	Essential		
3.1.3	There are safety measures implemented to ensure all humans handling insects do so safely. Particular precautions must be taken for workers hypersensitive to insect proteins, who handle stinging/biting insects, and/or who may be exposed to toxic substances used in facility operations.	Essential		
3.2	<b>Environmental Conditions</b>			
3.2.1	Species-specific requirements for temperature, humidity, amounts of space, light characteristics, photoperiod, population size, food, oviposition stimulants and substrates, and other environmental conditions all must be understood and provided.	Essential		
3.3	<b>Environmental conservation</b>			
3.3.1	Production areas must not be located in places that could provoke negative effects on critical natural habitats or designated conservation areas,	Essential		

	including national parks, wildlife refuges, biological corridors, forestry reserves, buffer zones or other public or private biological conservation areas.			
<b>3.3.2</b>	If any natural ecosystem has been destroyed or altered due to facility construction, the organization must implement an ecosystem conservation plan	recommendation		

#### **4- USE OF HAZARDOUS SUBSTANCES**

<b>N°</b>	<b>Requirement</b>	<b>Level</b>	<b>Y/N</b>	<b>Comments</b>
<b>4.1</b>	Using toxic and persistent chemical compounds (e.g. TBT, Malachite Green, DDT) is forbidden. The use of forbidden substances must occur in compliance with the safety regulations.	Essential		
<b>4.2</b>	Chemicals, fuels, oils and other substances that are potentially dangerous to humans and the environment, are treated in such a way as to avoid contamination of food or the environment, or causing danger to human health.	Essential		
<b>4.3</b>	<b>Monitoring</b> Monitoring of hazardous substances must cover the main steps from production chain up to consumption: 1) Production (farming of insects): production process including substrates (feedstock) for the insects 2) Processing: manufacturing of insects to insect products 3) Consumption of the products by pets, food producing animals and humans considering the composition of the products and potential microbial and chemical contamination	Essential		
<b>4.4</b>	<b>Substrate specifications</b>			
<b>4.4.1</b>	The chosen substrate is traceable and monitored for toxins, pathogens, chemical residues, and allergens that pose threat to the environmental health of the facility and surrounding areas	E		
<b>4.4.2</b>	If the substrate contains any of the substances listed in 5.1.1 items, then the appropriate removal and disinfection methods or labeling	Essential		
The auditor must be able to examine the documentary evidence in support of the above requirements.				



## 5- INSECT HUSBANDRY, GENERAL

N°	Requirement	Level	Y/N	Comments
5.1	<b>GMOs</b> The animals raised cannot be GMOs.	Essential		
5.2	<b>Animal welfare</b> The organisation keeps and where applicable transports its animals in spaces and conditions in conformity with national and international regulations.	Essential		
5.2.1	<b>Freedom of hunger</b> Provide reared insects with ample quantity and quality nutrition and implement other necessary efforts to prevent cannibalism	Essential		
5.2.2	<b>Freedom to express natural behavior &amp; freedom from discomfort</b> Have the breeding environment imitate the natural condition as close as possible	Essential		
5.2.3	<b>Freedom from pain, injury, and disease, fear, and distress</b> Use killing techniques that ensure instant death, do not subject the insects to unnecessary stressors and (in the case of scientific experiments) sedate insects before experimentation.	Important Essential		
<b>5.3</b>	<b>Livestock identification system:</b>			
5.3.1	There is a facility inventory of species and population estimates	Essential		
5.3.2	All the animals are kept in secure areas with proper identification	Essential		
<b>5.4</b>	<b>Veterinary</b> The organisation relies on the regular attention of a veterinarian for the care of the animals	Important		
<b>5.5</b>	<b>Drugs, conservation and use:</b>			
5.5.1	Only drugs officially approved by the national health authority are on the farm.	Essential		
5.5.2	There is a dedicated space for the storage of drugs (including refrigeration, if necessary).	Essential		
5.5.3	The registry of medical treatments is completed correctly.	Essential		

## 6- FEED SPECIFICATIONS

N°	Requirement	Level	Y/N	Comments
6.1	<b>Feed log</b> The feed rations of the different groups of animals are recorded and updated.	Important		
6.2	<b>The feed is from origins that are in accordance with Friend of the Earth requirements</b> All feed used for the production being audited, throughout the life of the animals, originates from agricultural activities that comply with the requirements of Friend of the Earth Some of the sources may be the subject of the audit in progress.	Essential		
6.3	<b>Feed monitoring</b> The chosen feed substrate is traceable and regularly monitored for pathogens, bacteria, chemical residues, toxins, and other substances posing threat to insect, animal, human, or environmental health.	Essential		
6.4	<b>Optimizing conversion index</b> The organisation considers, within its organisational plan, the optimization of the relationship between the feed input and the protein & other nutritional content.	Essential		

## 7- WATER RESOURCES

N°	Requirement	Level	Y/N	Comments
7.1	<b>Water:</b>			
7.1.1	For water other than that from the mains network, an analysis is made at least a year.	Important		
The auditor must verify where the water used by the organization comes from (farm well, mains water, other sources ...)				
7.2	<b>Water Inputs</b>			
7.2.1	All the surface or underground water used by the farm for agricultural, domestic or processing purposes must have the respective concessions and permits from the corresponding legal or environmental authorities.	Essential		
7.2.2	If polluted, must undergo the appropriate purifying treatment, e.g.	Essential		

	reverse osmosis to eliminate heavy metals, which are harmful to insects			
<b>7.3</b>	<b>Water Outputs</b>			
<b>7.3.1</b>	The organization must not discharge or deposit industrial or domestic wastewater into natural water bodies without demonstrating that the discharged water complies with the respective legal requirements, and that the wastewater's physical and biochemical characteristics do not degrade the receiving water body.	Essential		
7.3.2	If legal requirements do not exist, the discharged wastewater must comply with the following minimum parameters:			
7.3.2.1	Biochemical Oxygen Demand (BOD <sub>5</sub> , 20) or Total Suspended Solids: Less than 50 mg/L	Essential		
7.3.2.2	pH: between 6.0 - 8.0	Essential		
7.3.2.3	Grease and oils: Less than 30 mg/L	Essential		
7.3.2.4	Faecal coliforms: Absent	Essential		
7.3.3	The organisation recovers and reuses (or passes onto a third party for reuse) all substances that can be recovered from wastewater with the appropriate treatment (e.g. the recovery of sericine from degumming agent residue used in silk protein production) in accordance with local regulations on waste stream reuse.	Recommended		
<b>7.4</b>	<b>Rainwater</b>			
7.4.1	Rainwater is collected for use in washing operations or other activities conducted by the organisation.	Recommendation		
7.4.2	The tanks are closed so as to avoid contamination	Recommendation		

The readings must be updated at least every three years

## 8- AIR RESOURCES

N°	Requirement	Level	Y/N	Comments
<b>8.1</b>	The organization has identified the on-facility sources of dust and particulate emissions. The organization has defined the reduction targets and strategies to achieve these.	Essential		
<b>8.2</b>	The organization does not use ozone--destructive products/substances.	Essential		

<b>8.3</b>	Laboratory insectaries must be well--insulated and have highly filtered, recirculated air.	Important		
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The readings must be updated at least every three years

## 9- WASTE MANAGEMENT

N°	Requirement	Level	Y/N	Comments
9.1	There is evidence of proper disposal of all facility waste streams.	Essential		
9.2	All waste material is treated in the appropriate manner (removed, treated and removed, treated and reused, etc.) with appropriate frequency.	Essential		
9.3	The farm is equipped with facilities adequate to prevent pollution of the facilities and the surrounding areas.	Essential		
9.4	The appropriate third party companies are involved in disposal activities, if applicable.	Important		
<b>9.5</b>	<b>Composting/Reuse</b>			
9.5.1	The organization reuses or recycles all waste from inorganic materials that can be reused or recycled in accordance with local regulations on waste separation.	Essential		
9.5.2	Where applicable, organic material is composted and/or reused. There is a standard procedure for conserving materials that can be reused.	Important		
9.5.3	No residue substances or organic wastes that are contaminated from biological or agrochemical sources are composted, mulched or otherwise reused.	Essential		
9.5.4	There are procedures for segregating organic and non-organic wastes to facilitate recovery for reuse/recycling/ composting (e.g., pallets, wood, stakes, paper, cardboard, manure, food processing wastes).	Essential		

It is the task of the auditor to gather all the necessary documentation to verify the methods of disposal of the various wastes by the organisation and to attach a brief description.

## **10- ENERGY MANAGEMENT**

<b>N°</b>	<b>Requirement</b>	<b>Level</b>	<b>Y/N</b>	<b>Comments</b>
<b>10.1</b>	<p><b>Energy monitoring</b> The current net total energy consumption of the operations is calculated annually, including:</p> <ul style="list-style-type: none"> <li>1) direct consumption of energy generated offsite (both renewable and non-renewable),</li> <li>2) on--site renewable energy production and consumption,</li> <li>3) transportation and facility equipment operation fuels,</li> <li>4) embedded energy use and production</li> </ul>	Important		
<b>10.2</b>	Energy efficiency from electronic machines (e.g. used for heating, drying, grinding, nutrient extracting, and other insect production and processing activities) is optimized through the appropriate knowledge adjustment, and calibration of the equipment.	Essential		
<b>10.3</b>	<b>Energy resource</b> reduction goals have been defined, as well as strategies and evaluation methods <b>for</b> achieving these goals.	Important		
<b>10.4</b>	<p><b>Renewable Energy</b> The organization is committed to get the energy they need by using renewable energy systems. Although not all the energy that it needs to come from renewable sources, the organization engages in the acquisition of "green credits" on the market</p>	Important		

## **11- SOCIAL ACCOUNTABILITY**

<b>N°</b>	<b>Requirement</b>	<b>Level</b>	<b>Y/N</b>	<b>Comments</b>
<b>11.1</b>	<b>The organization must respect human rights by conforming to the following requirements:</b>			
	Compliance with international and ILO directives regarding child labour	Essential		
11.1.2	Remunerating workers with salaries conforming at least to the legal minimum	Essential		
11.1.3	Assuring workers' access to medical care	Essential		
11.1.4	Applying safety measures in accordance with legal requirements	Essential		
11.1.5	The organization should be SA8000 certified.	Recommendation		

The auditor must check conformity to requirements via documented evidence (examples of labour contracts) and on site observations.

**Additional Comments:**

**CONCLUSIONS:**

It is important that the auditor also completes the following fields

**The agricultural production CONFORMS to Friend of the Earth requirements.**

**The agricultural production DOES NOT CONFORM to Friend of the Earth requirements.**

The auditor has found the following nonconformities:

**MAJOR NONCONFORMITY (to conform within 3 months)**

Specify

No.	Requirement	Level	YES/NO	Comment

**MINOR NONCONFORMITY (proposal within 4 months and conformity within 1 year)**

Specify

No.	Requirement	Level	YES/NO	Comment

**RECOMMENDATIONS (notification before the subsequent inspection)**

Specify

No.	Requirement	Level	YES/NO	Comment