



ProTerra Standard

Social Responsibility and Environmental Sustainability



Version 5.0

September 14, 2023



ProTerra Foundation is a non-for-profit organisation that envisages a world where all businesses contribute to the protection of biodiversity by switching to sustainable production, conserving natural resources and ensuring that workers and local communities are treated with dignity and respect. The ProTerra Foundation owns the ProTerra Certification Standard and related documents and audit methodology.

More information www.proterrafoundation.org

For any questions with regard to the ProTerra Standard, please contact info@proterrafoundation.org.

This document was approved by the ProTerra Board of Directors on 14/09/2023.

The official language of this Standard is English. In the case of inconsistency between translated versions, the official language version shall prevail.

ProTerra Standard shall be reviewed at least every five years taking comments from stakeholders into account.

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The ProTerra Foundation Mission and Vision Statement

The ProTerra Foundation's mission is to be a global network of businesses supporting more sustainable agricultural practices, in the food and feed supply chains, where relevant the conversion to non-GMOs and full respect of workers and communities' dignity.

We envisage a world where all businesses contribute to the protection of biodiversity by switching to sustainable production, conserving natural resources and ensuring that local communities are treated with dignity and respect.

Businesses enterprises that support the ProTerra Foundation mission and vision must sign a membership declaration to commit to:

- **Support the credibility of the ProTerra Certification Standards.**
- **Raising awareness about impact on biodiversity and climate change.**
- **Empowering and supporting farms and businesses throughout the food and feed supply chain, to become vectors of environmentally and socially responsible business practices.**

The ProTerra Standard

The ProTerra Standard is based on the Basel Criteria on Responsible Soy, published in 2004. It has four core aims:

- **Foster good agricultural practices;**
- **Secure the supply of sustainably produced, fully traceable, non-GMO ingredients for food and feed;**
- **Protect the environment, and**
- **Promote that workers and communities are treated with dignity and respect.**

Version 5.0 of the ProTerra Standard has gone through a transparent and public stakeholder consultation process that took place from 30/11/2022 to 28/02/2023. During and after the consultation process, the ProTerra Foundation Standard and Certification Committee discussed all the comments received and made recommendations to the ProTerra Board of Directors on the aspects to be incorporated in this revision of the Standard.

The ProTerra Foundation acknowledges the feedback and suggestions received from all stakeholders that have supported the strengthening of the ProTerra Standard version 5.0.

The summary of changes and stakeholders' comments are made available on the ProTerra Foundation website.

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The ProTerra Standard is a voluntary standard, and it does not assume responsibility or liability for legal compliance.

ProTerra Standard Principles

The ProTerra Certification Standard is organised in principles, criteria, and indicators. These are the ProTerra Standard ten principles:

PRINCIPLE 1: Management system, compliance with laws, international conventions and the ProTerra Standard

PRINCIPLE 2: Human rights and responsible labour policies and practices

PRINCIPLE 3: Responsible relations with workers and community

PRINCIPLE 4: Biodiversity conservation, effective environmental management and environmental services

PRINCIPLE 5: No use of Genetically Modified Organisms (GMOs)

PRINCIPLE 6: Pollution and waste management

PRINCIPLE 7: Water management

PRINCIPLE 8: Greenhouse gases and energy management

PRINCIPLE 9: Adoption of good agricultural practices

PRINCIPLE 10: Traceability and Chain of Custody

Organisations become ProTerra certified by demonstrating compliance with each of the Standard's principles, criteria and indicators applicable to their business.

The organisations that only act as chain of custody economic operators (do not transform the material and therefore only trade, store and/or transport) are audited against those indicators that relate to Level II operations.

The ProTerra Labelling

The ProTerra product packaging label is a means by which brands can communicate the non-GMO and sustainability commitment directly to consumers and stakeholders. Final consumers can be assured that all products featuring the ProTerra label have been produced in a sustainable and traceable manner and meet the non-GMO requirements of the standard.

Please refer to the Guidelines and Requirements for the Use of the ProTerra Logos and Seals.

SECTION I: Scope of Certification

1.1 Levels of Certification

The ProTerra Certification is applicable to distinct levels of operation across the food and feed production chain:

- **Level I – Agricultural production**
- **Level II – Transport, Storage, Traders and Dealers**
- **Level III – Industrial Processing**

Agricultural production is the growing of crops and seeds. The unit of certification includes the entire farm, both nongrowing activities and non-cultivated areas, including all activities ongoing on site at the time of certification (the unit of certification, therefore, includes the entire farm).

Industrial processing refers to any operation that physically and chemically transforms the agricultural production output, such as a cleaning or drying facility; a crushing plant; or a food product manufacturer.

When farm areas are verified as part of the supply chain of a Level III operator, they will be assessed against the requirements that are valid for ProTerra Level I. For these farms, a verification statement can be issued by the Certification Body indicating their participation in the ProTerra programme. Such statement will be valid for one year.

The ProTerra Foundation shall receive a list of all verified suppliers during an audit cycle and this list must be included in the audit report with a summary of eventual non-compliance identified.

1.2 Raw materials, ingredients or multi-ingredient products

The ProTerra Certification can apply to raw materials, ingredients or multi-ingredient products. This may be accomplished using two basic approaches:

- Each actor in the food and feed supply chain can be certified in its own right against the relevant set of ProTerra Standard indicators; or
- Certified organisations that use inputs from actors that are not ProTerra certified shall implement a management system to control, support and monitor its supply chain(s) to ensure that the applicable ProTerra Standard indicators are met. In this case, the verification of this management system will be considered as part of the organisation's certification process by the Certification Body, involving visits to selected core suppliers.

1.3 Principles, criteria and indicators

The ProTerra Certification Standard is organised in principles, criteria and indicators. Because of its broad scope and distinct levels of operations, not all the indicators are applicable to all types of operations.

The standard indicates the applicability of each indicator to each of the three levels of operations.

The ProTerra Standard distinguishes between core indicators and non-core indicators. To be ProTerra certified, organisations shall meet 80% of all indicators, in which all core indicators are included.

For smallholder farmers, all Level I indicators are applicable, except if explicitly indicated otherwise in the guidance. For smallholders that are suppliers to larger certified organisations, specific guidance will be provided in each indicator on how the larger organisations are expected to provide support to these smallholder suppliers, if applicable.

PRINCIPLE 1:

Management system, compliance with laws, international conventions and the ProTerra Standard

International, national and local laws are in place to protect human rights, ecosystems and promote sustainable business practices. This Principle relates to all other ProTerra Principles and the topics they cover. It also includes the need for compliance with Food Safety regulations, as applicable, depending on the level of the organisation and the activity they are engaged with. Principle 1 determines that organisations shall comply with whatever provides the highest level of protection, the ProTerra Standard requirements or laws and regulations.

Disclaimer: ProTerra is a voluntary standard and is not intended to substitute or be equivalent to a legal inspection conducted by regulatory authorities. Therefore, a ProTerra Certification cannot be understood as an attestation of compliance with legal requirements of a given economic operator.

1.1

Compliance with all applicable national and local laws, regulations, and applicable international conventions.

1.1.1

Levels I, II and III

CORE - Certified organisations shall be consistently in compliance with all applicable national and local laws, regulations, and applicable international conventions. This includes having all the necessary valid permits, authorisations and registers associated with its operations. The legal requirements of raw material production and sourcing of the countries into which the economic operator exports raw materials and/or related products must also be complied with.

Guidance: The requirement for legal compliance applies to all topics covered by the ProTerra Principles and their respective Criteria and Indicators. Organisations shall comply with anti-corruption regulations, international laws and standards on the rights of indigenous people and the tenure rights of the local community.

Compliance with Food Safety regulations is mandatory as applicable (depending on the level of the organisation and the activity they are engaged with, typically level III). Implementing operational procedures aligned with the regulation may be a way to reach compliance. It is up to each organisation to provide evidence of legal compliance.

Permits, authorisations and registers associated with an organisation's operations vary depending on its location and type of activity. These typically include, tax identification numbers, environmental operation permits, water abstraction authorisations and rural registers, such as the CAR that is applicable in Brazil.

In the case of smallholders that are part of the supply chain of industrial processors seeking certification, support on compliance issues should be provided by the processors.

A list of relevant international treaties and conventions that shall be complied with can be found in Appendix B. The most stringent rule shall always apply and if the ProTerra Standard exceeds national or local regulatory requirements, certified organisations shall adhere to the Standard.

1.1.2
Levels I, II
and III

Certified organisations shall document and retain records of compliance for at least 5 years or longer if required by local law.

Guidance: Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors seeking certification, support should be provided by the processors, as applicable.

1.1.3
Levels I, II
and III

CORE - Certified organisations shall be aware of and understand the legal requirements that apply to them.

Guidance: Keeping copies of up-to-date national and local legislation or having online access to updated regulations are good practices to help meet this requirement.

In the case of smallholders that are part of the supply chain of industrial processors seeking certification, support in understanding regulations should be provided by the processors, as applicable.

1.1.4
Levels I, II
and III

Certified organisations shall make a written commitment not to offer or receive bribes or engage in any other form of corruption. Additionally, certified organisations are required to take measures against unauthorised or illegal activities that may occur within their property or associated with its supply chain.

Guidance: Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors seeking certification, support should be provided by the processors, as applicable.

1.1.5
Levels I
and III

CORE - Certified organisations shall demonstrate clear title to land in accordance with national practice and law.

Guidance: Examples of land titles are ownership deeds, leases, or other appropriate legal agreements.

1.1.6
Levels I, II
and III

CORE - Certified organisations shall ensure that suppliers of core inputs and services are compliant with the ProTerra Standard.

Guidance: This is not applicable to smallholders.

1.1.7
Levels I, II
and III

Certified organisations must obtain from non-core suppliers a formal and signed commitment that they comply with legal requirements, including those regulations associated with human rights, labour laws and environmental regulations.

Guidance: This is not applicable to smallholders.

1.2

Continuous improvement

1.2.1

Levels I, II
and III

CORE - Certified organisations shall demonstrate continuous improvement regarding the ProTerra Standard requirements and/or the topics covered by it and in relation to compliance with ProTerra requirements.

Guidance: Improvement Indicator(s) shall be freely selected by the organisation to demonstrate compliance with this requirement. A baseline is established at the first certification under ProTerra Standard. Once an organisation is fully in compliance with the ProTerra Standard, it is expected to define improvement plans that exceed and go beyond the Standard.

In the case of smallholders that are part of the supply chain of industrial processors seeking certification, support should be provided by the processors.

1.3

Use of ProTerra logos, seals, trustmark and certificates

1.3.1

Levels I, II
and III

CORE - ProTerra-certified materials and products shall be identified using correct claims, ProTerra logos, seals, trustmark and certificates, according to the Guidelines and Requirements for the Use of the ProTerra Logos and Seals.

1.4

Management system

1.4.1

Levels II
and III

Certified organisations must implement and maintain a Management System for its supply chain that includes risk assessment and mitigation approaches and measures.

PRINCIPLE 2:

Human rights and responsible labour policies, and practices.

All workers should be treated with dignity and respect. Responsible business practices help ensure the rights and general well-being of workers. This Principle aims to ensure that certified organisations provide safe working environments and do not engage in forced labour, irresponsible recruitment practices or discriminatory behaviour.

2.1

Absence of slave and forced labour, child labour, and coercive disciplinary or control methods.

2.1.1

Levels I, II
and III

CORE - Certified organisations shall not use slave or trafficked labour, forced labour, indentured servants, and their equivalents.

Guidance: This applies also to all workers supplied by third parties and subcontracted labour, including migrant and seasonal workers. No recruitment fees shall apply to workers.

2.1.2

Levels I
and II

CORE - No worker shall be required to lodge their identity documents with their employer or any third party. Worker's wages, benefits or other property shall, likewise, not be retained.

2.1.3

Levels I, II
and III

Accompanying family members (e.g., children and spouses) shall not be required to work on the premises of the certified organisation. Organisations shall ensure that children and youngsters living on the site's premises attend school or receive schooling at home.

2.1.4

Levels I, II
and III

CORE - Child and youngster labour, except in contexts permitted within national law and the ILO, shall not be used in certified organisations.

Guidance: Refer to ILO Convention 138 definition including light work and special protection for young workers. In family agriculture, children and youngsters can be allowed to work provided that it is not abusive or dangerous, and does not interfere with their health, education and school attendance. Where young workers and children are present on a farm, producers shall be able to demonstrate knowledge of their work-related issues. Farmers shall ensure that children and youngsters working on the site attend school or receive schooling at home.

2.1.5
Levels I, II
and III

CORE - Coercive disciplinary or control methods shall not be permitted. This includes corporal or mental coercion, confinement, threats of violence or other forms of physical, sexual, psychological, or verbal abuse/harassment.

2.2

Weekly working hours and overtime

2.2.1
Levels I
and III

CORE - The workweek shall be set according to local and national laws, shall be consistent with local industry standards, and shall, at maximum, not routinely exceed 48 hours per week (excluding overtime). Where agreement with Worker Unions exists related to weekly working hours and overtime, these will be respected.

2.2.2
Levels I
and III

CORE - Overtime shall be limited as specified in local and national law and shall not routinely exceed 12 hours per week.

2.2.3
Levels I
and III

CORE - Overtime in excess of 12 hours shall only be permitted during exceptional, limited periods, when there are constraints or risk of economic loss and when conditions regarding overtime in excess of 12 hours have been previously agreed upon between workers and management. Where agreement with Worker Unions exists related to excess overtime, these will be respected.

Guidance: The work time limits are flexible in that it is recognised that there may exist certain unavoidable periods during the year, during which employees will be expected to work substantially longer hours for a restricted period of time. The extraordinary time pressure of harvest season is an example of such a situation. The indicator set down in 2.2.5 shall be respected during such periods.

2.2.4

Levels I
and III

CORE - Overtime shall be compensated as required by law or according to collective agreement or agreement with the Labour Union or, in the lack of those, at a premium rate.

Guidance: Legal dispositions which allow the exchange of overtime hours for extra days off shall be taken into consideration.

2.2.5

Levels I
and III

CORE - All overtime work shall be voluntary.

2.2.6

Levels I
and III

In all cases, workers are entitled to at least one day off after 6 consecutive days of work. Where agreement with Worker Unions exists related to days off/rest, these will be respected.

2.2.7

Levels I, II
and III

CORE - Certified organisations shall have a system in place to monitor working hours and overtime.

2.3

Personnel Management Programme

2.3.1

Levels I
and III

Certified organisations shall develop, implement, and maintain a human resources management programme for its employees consistent with and proportional to the needs of the organisation.

Guidance: This indicator is not applicable to smallholders.

2.3.2
Levels I
and III

The certified organisation shall assign a staff member to implement and manage the human resources management programme.

Guidance: This indicator is not applicable to smallholders.

2.4

Equal opportunities and treatment for workers

2.4.1
Levels I, II
and III

CORE - All workers and applicants shall have equal employment opportunities, equal opportunities at work, including promotion and access to training, equal remuneration for work of equal value, equal benefits and equal treatment on the job. No discrimination shall be tolerated including: any distinction, exclusion or preference made on the basis of race, colour, age, gender, sexual orientation, religion, political opinion, nationality or social origin.

Guidance: Any distinction, exclusion or preference in respect of a particular job based on the inherent requirements thereof shall be justified and shall not be deemed to be discrimination. (Ref: ILO Convention 111, Articles 1 and 2). There shall be no differences in the working conditions of any workers due to employment status (e.g., permanent, temporary or subcontracted workers). However, “equal opportunities” and/or “equal treatment” shall not necessarily prevent certain workers from receiving rewards based on merit or performance, such as pay bonuses or other enhancements that are above and beyond the basic compensation due to all workers in the operation.

2.5

Workers' working and living conditions

2.5.1

Levels I, II
and III

CORE - All workers, regardless of age, gender, or other personal characteristic, shall enjoy appropriate, legally compliant working conditions, including a safe and healthy workplace, access to safe drinking water, basic sanitary facilities and protective equipment.

2.5.2

Levels I, II
and III

CORE - All workers living on site shall have appropriate, fairly priced: safe food, good and sufficient water and housing.

Guidance: "Appropriate" includes at least the following: shelter from the elements; exclusion of pests; easy access to facilities for maintaining hygiene; easy access to water, facilities for food preparation and eating; clean sleeping and sitting quarters (including some form of bed), and open space where workers are able to move around freely during non-working hours.

2.6

Clear and comprehensive labour contracts and legal rights

2.6.1

Levels I, II
and III

CORE - All workers shall have an employment contract or an equivalent document that is understandable by the worker and signed by the employer and employee or the employees' labour representatives. Contracts shall have at least the following information: pay rate/salary, working hours, deductions, overtime conditions, vacation time, conditions for sick and parental leave, grounds for dismissal, and period of notice for work termination. Should the cultural context, in a relevant and unquestionably manner, not consider a written contract this should be taken into consideration and is applicable only to smallholders.

2.6.2
Levels I, II
and III

CORE - There shall be a signed labour agreement between the certified organisation and the subcontracted companies, that include clauses requiring compliance with the labour and legal rights of the employees. In those countries where there are no requirements for formal labour agreements between workers and employers, alternative documented evidence of a labour relationship must be present.

Guidance: This is not applicable to smallholders.

2.6.3
Levels I, II
and III

CORE - Certified organisations shall communicate legal rights, contracts and agreements details to their employees in simple language and style so that workers can easily understand and comply with them.

Guidance: This indicator is not applicable to smallholders.

2.6.4
Levels I, II
and III

Certified organisations shall maintain personnel records for each employee for at least 5 years, or longer if required by local law.

Guidance: Personnel records will include for each employee their contract, their current status and history, job title, salary, training, hours worked, vacation time and sick or parental leave accrued.

This indicator is not applicable to smallholders.

2.7

Qualification, working experience and training of workers

2.7.1

Levels I
and III

Worker job descriptions, including necessary skills, legal requirements, and salary range shall be set in written form.

Guidance: All workers shall have the necessary qualifications, experience and meet legal requirements to perform their job (e.g., an electrician may be required to have legally mandatory training or academic background).

This indicator is not applicable to smallholders.

2.7.2

Levels I, II
and III

CORE - An ongoing programme of job-related training, including regular refresher training, shall be provided to all workers to ensure that they are competent to conduct their work efficiently, effectively and safely. Additionally, certified organisations shall provide all employees with training regarding (a) sustainability; (b) GMOs, where applicable; (c) good agricultural practices, where applicable and (d) their specific tasks, roles and responsibilities, related to these matters.

Guidance: Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors seeking certification, training should be provided by the processors, as applicable.

2.7.3

Levels I, II
and III

Certified organisations shall maintain records of all training for a minimum of 5 years, or longer if specified by local regulations.

Guidance: These records shall include the following information: date, time, attendees, trainer, and content material used during the training. During the initial years of ProTerra certification, records are to be considered proportional to the time the facility holds its certification up to the fifth year of certification.

Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors seeking certification, training records should be provided by the processors, as applicable.

2.8

Salaries, payments and benefits

2.8.1 Levels I, II and III

CORE - All workers, regardless of age or gender, shall be paid a fair, locally representative wage or salary, which shall meet or exceed the Legal Minimum Wage established for the region and sector agreement. If no Legal Minimum Wage exists, compensation shall at least meet the typical salaries usually paid in that region for the equivalent function or job.

2.8.2 Levels I and III

CORE - Piece work shall be paid at a rate that assures workers will be capable of earning at least a Legal Minimum Wage established for the region and/or sector. If no Legal Minimum Wage exists, compensation shall at least meet the typical salaries usually paid in that region for the equivalent function or job.

2.8.3 Levels I and III

CORE - Wages or salaries and hours worked shall be regularly and legally paid in the national currency, documented and recorded.

Guidance: Payment shall be made at least monthly unless workers or their representatives expressly agree that it can be less frequent.

2.8.4 Levels I, II and III

CORE - Employers shall not make deductions from wages for disciplinary purposes.

Guidance: Deductions for social security or other legally mandated programmes are acceptable.

2.8.5

Levels I, II
and III

A social security plan shall be established for the workers in regions where such a plan is not required by law or regulation.

Guidance: The plan shall clearly inform age and other conditions/requirements for receiving benefits. The impact of such a social security plan on regular workers' pay shall be specified in the plan description.

This indicator is not applicable to smallholders.

2.9

Safety and health of workers

2.9.1

Levels I, II
and III

CORE - Certified organisations shall conduct a risk assessment of their operation and use the results of this assessment to guide the mitigation of the risks and the development of a health and safety programme. Additionally, it should develop and implement procedures and have the resources to deal with accident and emergency situations. Certified organisations and their employees demonstrate an awareness and understanding of health and safety matters.

Guidance: The scope and complexity of the programme shall be proportional to the scope and complexity of the organisation.

Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor, where applicable.

For Level II, this is specifically applicable to storage facilities and transporters.

2.9.2

Levels I, II
and III

CORE - First aid shall be readily and quickly available if and when accidents or other emergencies occur at the worksite. The presence on site of emergency first aid kits should be considered where legally accepted.

Guidance: This indicator is not applicable to smallholders.

For Level II, this is specifically applicable to storage facilities and transporters.

2.9.3

Levels I, II
and III

Certified organisations shall monitor and ensure compliance with its worker safety and health programme and keep records of health and safety performance, including accident statistics for the operation.

Guidance: Accident statistics shall include at least: accidents per number of hours worked and accidents per employee.

Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

2.9.4

Levels I, II
and III

CORE - Hazardous tasks, including the application or handling of pesticides and chemical products, shall only be conducted by qualified, and properly trained workers, taking into consideration the worker's health condition and particularities. Workers who have been injured or are ill, shall not perform activities that are detrimental to their health and safety and that can affect other workers.

Guidance: The organisation shall maintain documentation identifying workers excluded from these activities and require subcontractors to do the same.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

2.9.5
Levels I, II
and III

CORE - Certified organisations shall provide, and substitute when needed, all adequate and appropriate personal protective equipment (PPE) and clothing to workers. No fees shall be charged for PPEs.

Guidance: Training on the importance and correct usage of PPE is to be considered as part of this indicator.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

2.9.6
Levels I, II
and III

CORE - Wearing appropriate personal protective equipment (PPE) and adequate clothing is mandatory during the handling and application of toxic substances or when conducting other hazardous tasks. There is a system of warnings followed by legally permitted sanctions for workers that do not apply safety requirements or do not use the required PPE.

2.10

Training in health and safety

2.10.1
Levels I, II
and III

CORE - Workers shall be trained in the health and safety aspects of their job, particularly those workers handling pesticides and other toxic substances or operating hazardous equipment. These workers shall be trained in how to adequately store, apply, and dispose of pesticides and other toxic substances and how to safely operate hazardous equipment, taking into account the manufacturer's instructions and the legal requirements.

Guidance: In addition to conducting all aspects of their work safely, workers shall handle all pesticides used or disposed of in a manner that protects co-workers, others in the vicinity, and the environment. An example of additional measures is the marking of areas where pesticides are stored, handled, or used.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

2.10.2
Levels I, II
and III

Certified organisations shall maintain records of all health and safety training for a minimum of 5 years, or longer if specified by local regulations.

Guidance: The following information shall be included in these records: date, time, attendees, trainer, and content material used during training.

Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

2.10.3

Levels I, II
and III

Certified organisations shall ensure that instructors delivering health and safety training, in particular training in the safe handling, storage, and application of pesticides and other toxic materials and in the safe conduction of other hazardous tasks, have the necessary technical knowledge and legal qualifications.

Guidance: Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

2.11

Parental leave

2.11.1

Levels I, II
and III

Certified organisations shall comply at least with national and local regulations regarding maternity and paternity leave.

2.11.2

Levels I
and III

Workers taking maternity/paternity leave have the right to resume their work under the same conditions existing before taking the leave, without discrimination, deduction of wages or loss of seniority.

Guidance: This is not applicable to smallholders.

2.11.3

Levels I, II
and III

CORE - In locations where specific regulations do not cover maternity leave, certified organisations shall establish a reasonable leave period.

Guidance: As a reference, consider ILO Convention No. 183 provides for 14 weeks of paid maternity leave.

This indicator is not applicable to smallholders.

2.12

Freedom for workers to organise, join and form associations

2.12.1

Levels I, II
and III

CORE - All workers shall be allowed to form and join trade unions or other collective bargaining organisations of their choice and have the right to collective bargaining.

Guidance: Certified organisations must demonstrate that they respect the right of all workers to form and join trade unions or other collective bargaining organisations in accordance with the law.

Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

2.12.2

Levels I, II
and III

CORE - Certified organisations shall not impede the functions of collective bargaining organisations or workers' associations and their representatives shall have access to their members at the workplace.

Guidance: Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

2.12.3

Levels I, II
and III

CORE - There shall be no discrimination by management or workers between unrepresented workers and workers represented by labour trade unions or associations, and there shall be no discrimination to workers representatives.

Guidance: Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

PRINCIPLE 3:

Responsible relations with workers and community

Respecting workers and local communities means listening and considering, as applicable, what they have to say. Certified organisations must provide a mechanism for the communication of grievances that protects the grievant and ensures that their complaints are fairly assessed. This Principle also aims at extending such a mechanism to the local community.

3.1

Systems of Communication and Grievance Mechanism

3.1.1

Levels I
and III

CORE - Certified organisations shall deal with complaints and grievances from workers, neighbours, local communities and traditional land users in an appropriate manner. Complaints and grievances are effectively and timely investigated and responded to.

Guidance: This system shall function at the worksites and in the communities linked to certified organisations.

This indicator is not applicable to smallholders.

3.1.2

Levels I
and III

CORE - Complaints and grievances, responsive actions, and outcomes shall be documented, and records maintained for 5 years, or more if required by local law.

Guidance: The auditor will look into the complaint resolution processes and verify the number of effective resolutions achieved.

This indicator is not applicable to smallholders.

3.1.3

Levels I
and III

CORE - The communication and grievance system shall include a mechanism that allows workers and community members to make complaints anonymously (if they wish to do so), yet also allowing verification of the validity of the complaints. The organisation shall recognise the competence of local labour courts, if these are the mechanism chosen by workers or the community for dealing with grievances.

Guidance: One example of such a system would be to appoint an independent ombudsman who receives complaints, assesses validity and sets in motion appropriate processes for responding and addressing the issue. The procedures for electing/appointing the ombudsman must be transparent and must equitably include workers, community members or their representatives.

This indicator is not applicable to smallholders.

3.1.4

Levels I
and III

CORE - The complaint mechanism is transparent, has been made known and is available to all workers, local communities and traditional land users.

3.1.5

Levels I
and III

CORE - There are communication channels that enable communication between the certified organisations and the community. The communication channels have been made known to all.

3.2

Land use does not impair the rights of traditional users

3.2.1

Levels I
and III

CORE - In all cases, land use shall not interfere with the agricultural production systems of neighbours, and measures shall be in place to allow the coexistence of different production systems.

Guidance: This indicator is not applicable to smallholders.

3.2.2

Levels I
and III

CORE - Land rights disputes shall be resolved before certified status can be granted.

Guidance: In the case of disputed use rights, a comprehensive, participatory and documented community right assessment is carried out and the recommendations from the assessment are being followed.

This indicator is not applicable to smallholders.

3.2.3

Levels I
and III

CORE - Certified organisations shall ensure that, prior to any activity that may affect indigenous peoples' and local communities' rights, land, resources, territories, livelihoods, and food security, their Free, Prior and Informed Consent (FPIC) is secured for any activity that affects their ancestral lands, territories and natural resources.

3.3

Economic development and support to the local economy

3.3.1

Levels I
and III

Certified organisations shall demonstrate support for local community projects.

Guidance: This indicator is not applicable to smallholders.

3.3.2

Levels I
and III

Certified organisations shall contribute to the local economy by preferentially offering local businesses the opportunity to supply goods and services that meet the organisation's specifications.

Guidance: This indicator is not applicable to smallholders.

3.3.3

Levels I
and III

Job opportunities shall be offered first to qualified members of the local community.

Guidance: This indicator is not applicable to smallholders.

3.3.4

Levels I
and III

Certified organisations shall have a financial plan for their business to ensure its economic feasibility over time.

Guidance: Smallholders are expected to at least be able to verbally explain how the farm finances are organised and issues that are relevant to the economic feasibility of the family business and actions eventually taken to ensure sustainability over time.

PRINCIPLE 4:

Biodiversity conservation, effective environmental management and environmental services

Deforestation is a relevant cause of climate change and of the loss of natural habitats leading to biodiversity loss, and loss of ecosystem services. This Principle seeks to eradicate the clearing of high conservation values areas (HCV) for agriculture. Through implementing this Principle, businesses will protect ecosystems and adhere to governmental and international regulations.

4.1

Land use conversion and forest conservation

4.1.1

Levels I and III

CORE - For certification under this Standard, high conservation value areas (HCV 1 to 6 - please refer to the definition in Section III) must not have been cleared or converted into agricultural areas, or used for industrial or other commercial purposes, after 31 December 2008, in particular the following: a) natural forest; b) native grasslands; c) wetlands; d) swamps; e) peatlands; f) savannahs, g) steep slopes; h) floodplains; i) riparian vegetation.

Guidance: Satellite images and/or aerial photography shall be used to demonstrate compliance with this requirement. Satellite images used for the purpose of assessment of potential deforestation should have adequate resolution. Geolocation of the plot of land is necessary and geo-coordinates shall be provided for the areas under certification, if the commodity is exported to countries requiring such information. For plots of land larger than 4 hectares, the geographical location shall be provided using polygons, meaning sufficient latitude and longitude points to describe the perimeter of each plot of land, if the commodity is exported to countries requiring such information.

In the case of deforestation in disagreement with this indicator and that occurred between 1st January 2009 and 31 December 2020, an organisation must have taken effective action to restore the area and/or provide adequate compensation for the lost ecosystems and its values in order to be eventually certified. Prior to applying for certification, the organisation must submit to the ProTerra Secretariat detailed information on the actions taken and the results achieved. The ProTerra Foundation will evaluate the information provided and confirm or deny the organisation's eligibility to apply for ProTerra certification. Details of the ProTerra evaluation process can be found in the ProTerra Procedure for Compensation and Restoration.

Deforestation shall be avoided on the entire farm area and not just the area where agricultural activities take place.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

This indicator is not to be used to justify or offset new deforestation. Rather, it addresses situations where restoration or compensation is necessary to remedy past deforestation contributing, in this way, to sustainable development and to the reintegration of organisations into a sustainable food and feed supply chain.

4.1.2

Levels I
and III

CORE - Certified organisations shall adhere to governmental regulations and international conventions that pose additional restrictions, including stricter cut-off dates, on the conversion of land for agricultural or other commercial purposes. No agricultural commodity produced or used by a certified organisation shall be produced on land that has been illegally converted.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

4.2

Maintenance and enrichment of biodiversity

4.2.1

Levels I
and III

CORE - Certified organisations shall identify, maintain and protect with the involvement of external experts, valuable biodiversity areas, riparian vegetation, vegetation around flood plains, steep slopes, hills and wetlands as well as maintain any legally preserved areas within their perimeter. If necessary, certified organisations shall restore such areas. A biodiversity management plan shall be prepared.

Guidance: If restoration is not possible or feasible, legally approved compensatory measures should be implemented.

The width or area of vegetation shall be sufficient to maintain and foster the continued survival of the natural biodiversity of the area and to prevent erosion. As far as possible large agricultural developments (industrial level) shall support and encourage the identification and maintenance of valuable biodiversity outside its farmed areas.

Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

4.2.2

Level I

CORE - Certified organisations shall protect rare, threatened or endangered wildlife species on their land and shall not gather, hunt or fish wild species or products from their natural habitat. Gathering, hunting and fishing shall only occur when permitted by law and shall be done in a manner that assures those species will continue to flourish in their natural habitat, as well as other species that normally depend on the gathered/hunted or fished species.

4.2.3

Level I

CORE - The introduction of invasive species and new pests shall be avoided, and past introductions (prior to first certification), shall be controlled and monitored. Any relevant pest outbreak shall be reported to the authorities.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

4.3

Social and environmental impact assessment and management plan

4.3.1

Levels I
and III

Certified organisations shall perform a comprehensive Environmental and Social Impact Assessment (ESIA) of its activities to identify potentially harmful or damaging impacts and risks and establish a Management Plan to address these where necessary. Impacts and risks shall be reassessed in the case of expansions and relevance modification of activities. The Management Plan shall also include actions to maintain and maximise biodiversity within and surrounding the operation, which shall be monitored regularly and updated as necessary. External experts shall be involved. Certified organisations are required to make summaries of their management plans and ESIA publicly available on their website.

Guidance: The ESIA must be commensurate with the scale of the operation and infrastructure. It must take into account the sustainability of the environment, wildlife and endangered species, and the social impacts on the local population including indigenous people and traditional land users, where relevant. Guidance from government, academia or other recognised experts should be sought, as applicable, to complete the ESIA. Where existing, national regulations related to such assessment must be complied with. A definition of ESIA is provided under Terms and Definitions.

This indicator is not applicable to agricultural operations of smallholders independently certified. In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

4.3.2

Levels I
and III

CORE - Farms shall maintain and safeguard native vegetation existing on their land, in order to protect and provide habitat for wild species. A map of the farm shall be available, showing the native vegetation as well as a plan to protect and restore native vegetation where necessary.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

PRINCIPLE 5: No use of Genetically Modified Organisms (GMOs)

There is still a scientific debate about whether genetic engineering is harmless for animal and human health, as proponents of GMOs claim. However, the use of GMOs has led to changes in farming practices that have resulted in less crop diversity and to an increase in herbicide-resistant weeds, leading to increased use of pesticides, with all the associated side effects (pollution of aquifers, detrimental effects on workers' health, loss of micro-biodiversity). It has also increased costs for producers. Many consumers and producers are concerned about GMO ingredients and want to make informed choices about where their food comes from. This includes understanding the social and environmental footprint of their choices.

This Principle aims to ensure that GMOs are not present in certified organisations.

The applicability of this Principle is determined by assessing risks of GMO presence, contamination or use. The auditor should refer to Appendix A for risk assessment. If risk is non-existent this Principle is not applicable.

Organisations must also follow the ProTerra Guidance on GMO testing and sampling as part of this Principle.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of all indicators that are under Principle 5 must be supported by the processor.

5.1

GMOs and Genetically Engineered Organisms are excluded

5.1.1 Levels I, II and III

CORE - Genetically modified organisms (GMOs) and their by-products shall not be used in the production of ProTerra- certified products. This includes technologies that can be used to edit genes within organisms such as CRISPR/Cas9.

Guidance: This indicator applies to seeds and other agricultural inputs, as well as ingredients, processing aids, additives, and other inputs used in the processing of agricultural products and in manufacturing food, feed, fibre, derived products, and fuel products. Not applicable if there are no genetically modified varieties existing of the specific crop to which this Standard is being applied.

Where there is GMO risk, ProTerra determines that the certified organisation meets one of the non-GMO standards that have been benchmarked against the ProTerra Standard and made publicly available on the ProTerra Foundation website, which includes:

- FoodChain ID Non-GMO Global Standard;
- The German VLOG “ohne Gentechnik” Standard;
- The Guidelines on the definition of GMO-free production of Food and it’s labelling according to the Austrian Codex Alimentarius, respecting their scope of applicability.

If another Standard is used outside the positively benchmarked Standard, the organisation must document, justify and demonstrate equivalence of the Standard used to one of the references considered by ProTerra, including demonstrating how it complies with ProTerra’s Guidance on GMO testing and sampling. This equivalence must be confirmed during the ProTerra certification audit.

GMO risk shall be checked based on guidance provided under **APPENDIX A: IDENTIFICATION OF COMMERCIALISED GM CROPS AND THEIR DERIVATIVES.**

5.1.2
Levels I, II
and III

CORE - All certified organisations shall avoid contamination of certified products with GMOs from external sources and shall demonstrate that the non-GMO control system is set up to assure compliance with the non-GMO requirements of their target market(s), which includes defining (1) the Targeted Threshold Tolerance Level - i.e., the level of acceptable GM contamination found in a specified product for a specified region (country) - and (2) approved/ non-approved GMOs.

Where the Target Threshold is not defined, it will be considered 0.1% as “technically unavoidable” or “adventitious” up to 0.9% of approved GMOs per feed material/ingredient (feed/food). For claims on products, certified organisations shall refer to the document entitled Guidelines and Requirements for the Use of the ProTerra Logos and Seals.

5.1.3
Levels I, II
and III

CORE - Certified organisations may use certain substances, which are produced by GMOs, or which are from unknown genetic origin, if:

- The substances are not continuously available in non-GMO quality as defined in this Standard (based on origin, production process, quantity and analysis);
- The substances cannot be replaced by alternative products or methods;

- The substances are necessary for animal health and protection reasons;
- The substances are necessary for the production of food products; or
- The substances' use in food or animal feed is required by law or by regulation in the country or region where they are produced and/or consumed.

Guidance: Such exemptions shall be limited to a minimum and a time limit shall be imposed, if necessary. Substances that are exempted according to this guideline include food additives, processing aids, flavours, amino acids, other micro-nutrients, vitamins and animal feed additives. Exemptions are only possible, according to the Recommendations of the Expert Group to the Austrian “platform gmofree” or to the recommendations of the EU Commission based on the labelling of organic food and will be approved by the CB on a case-by-case basis. Such uses shall be documented by the organisation.

5.2

System of identity preservation and segregation

Certified organisations, shall have in place an adequate system of segregation of GMO material, achieved by one of the following methods:

5.2.1 Levels I, II and III

- Use of dedicated sites, facilities, equipment, conveyances, handling equipment and/or related infrastructure.
- By inspecting and/or cleaning and/or flushing facilities, equipment and conveyances between use in contact with GMO material and non-GMO material.
- A combination of the above methods.

5.2.2
Levels I, II
and III

Certified organisations shall have procedures and records in place to ensure and demonstrate that segregation of ProTerra certified material is maintained. Procedures shall be developed, implemented and maintained and shall include GMO testing, records of flushing or cleaning for product change in non-dedicated sites and inspection checklist of trucks and other conveyances.

Guidance: Applicability of the evidence demonstrating that segregation is maintained shall be proportional to the type and size of the operation, particularly in the case of smallholders. For example, at farm level in general, only a sampling plan and strip test procedures and records may be required. For elevators and industrial plants (Level III), additional PCR sampling and testing protocols and results will be required, linked to production periods and lots. Certified organisations shall justify, and document the approach used. Certified organisations must follow the ProTerra Guidance on GMO testing and sampling. Certified organisations are expected to be able to demonstrate compliance with such Guidance.

5.2.3
Level I

Certified farms shall take measures (e.g., staggered planting times, planting of distinguishable varieties, instituting physical barriers, creating buffer planting zones, etc.) to avoid cross-contamination associated with potential pollen drift from nearby GMO sources.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

PRINCIPLE 6: **Pollution and waste management**

Minimising the pollution of the environment should be a focal point of sustainable practices associated with the food and feed supply chain. This Principle aims to support certified organisations in using methods to store, handle and dispose of waste and hazardous materials that do not harm the natural environment or local communities.

6.1

Appropriate management of hazardous waste and pollutant materials

6.1.1

Levels I, II
and III

CORE - Certified organisations shall segregate, handle, store and dispose of hazardous waste properly. Management of hazardous waste shall at least comply with national laws relevant to the location of the certified operation, as stated in Principle 1 of this Standard. Measures are taken to reduce or recycle waste as much as possible. In countries where there are no local laws and/or regulations concerning pollution and waste management, organisations should consider applying World Bank and IFC guidelines.

Guidance: Hazardous waste include but are not limited to used batteries, fuel, fluorescent lamps, tyres, and lubricant oil. For pesticides residues refer to indicators 9.7.8.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

6.1.2

Levels I, II
and III

CORE - Certified organisations shall segregate, handle, store and dispose of pollutant materials properly, having appropriate facilities to prevent spills. Management of pollutant materials shall at least comply with national laws relevant to the location of the certified operation, as stated in Principle 1 of this Standard. Measures are taken to reduce or recycle waste as much as possible. In countries where there are no relevant local laws and/or regulations, organisations should apply World Bank and IFC guidelines.

Guidance: Pollutant materials include but are not limited to oil derivatives and fuels. Appropriate facilities include spill containment basins, oil-water separation systems, machinery filling stations and washing stations built to avoid soil and groundwater contamination.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicators shall be supported by the processor.

6.1.3
Levels I
and III

CORE - Certified organisations shall discharge sewage /effluents in a manner that does not cause water pollution and does not contaminate the soil or crops with chemicals, heavy metals, by-products, excess nutrients or pathogens. Raw sewage shall not be used to irrigate crops.

Guidance: If sewage is to be used or otherwise incorporated back into any production system, it must be treated to ensure that water that is released back into the environment is safe.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

6.1.4
Levels I
and III

CORE - Certified organisations shall ensure that there is no run-off of wastewater, oil and oil spills, chemical and chemical residues, minerals and organic substances.

6.2

Management and appropriate disposal of non-hazardous waste

6.2.1
Levels I
and III

CORE - Non-hazardous waste shall be segregated and, where appropriate, minimised, recycled or reused. If recycling or reuse is not possible, a legal means of treatment and final disposal shall be employed.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

6.2.2

Levels I
and III

CORE - Certified organisations shall manage biological waste such as manure, straw, crop residues, food scraps, and processing by-products, among others, in an appropriate way to avoid pollution and/or to prevent these from becoming a source of pathogenic contamination or pest harbouring. Management of these waste shall at least comply with national laws relevant to the location of the certified operation, as stated in Principle 1 of this standard. In countries where there are no relevant local laws and/or regulations, organisations should apply World Bank and IFC guidelines.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

6.2.3

Level I

In cases where residues are returned to the agricultural fields as either mulch or compost to build soil organic matter, or as fertiliser, these materials must be treated, where applicable, to assure the absence of chemical or biological contaminants.

Guidance: When using raw manure as fertiliser, composting is recommended before application to fields.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

6.2.4

Levels I
and III

CORE - Waste shall not be incinerated or burned, except when required for phytosanitary purposes, or in cases when it is burned for energy or heating or used for biogas/oil production.

Guidance: Burning for generation of biofuels, for energy production must comply with local and/or national regulations. In countries where there are no local laws and/or regulations, organisations should apply the World Bank and IFC guidelines.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

6.3

Control of atmospheric pollution

6.3.1

Level III

CORE - Certified organisations shall implement systems and procedures to ensure that concentrations of contaminants emitted through pipes, chimneys, boilers, ovens, incinerators, and electricity generators do not exceed established limits set by local, regional and national laws, or by individual authorisations delivered by competent national, regional or local authorities. In countries where there are no local laws and/or regulations, organisations should consider applying World Bank and IFC guidelines.

Guidance: Certified organisations shall document the performance of these control systems.

PRINCIPLE 7: Water management

Water is a scarce resource in many parts of the world. It is also a resource under constant threat of contamination and misuse. This Principle aims to ensure the responsible use of water by preserving the quality and quantity of local water resources and protecting them from contamination.

7.1

Conservation of natural water resources

7.1.1

Levels I
and III

CORE - Certified organisations shall conserve the quantity and quality of existing natural water resources, such as lakes, rivers, artificial lakes, dams, water tables and aquifers around their facilities, including creating or aggravating water scarcity situations.

Guidance: This indicator includes identifying water resources potentially affected by its operations, including outside the management unit, in order to contribute as much as possible to its conservation.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

7.1.2

Levels I
and III

CORE - Certified organisations shall not undertake new initiatives that reduce the availability of water for drinking, irrigation, or for traditional uses for neighbouring communities and businesses.

Guidance: Traditional uses of water by certified organisations shall also be demonstrated to remain viable and sustainable. Practices that were once considered sustainable may no longer be so due to increased population pressure or other recent ecosystem or climate changes. Certified organisations should engage with stakeholders and document measures taken to resolve eventual disputes related to water usage.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

7.1.3

Levels I
and III

In cases where activities carried out prior to the certification application have caused damage to water resources, certified organisations shall undertake mitigation actions based on a plan agreed with the local environmental authority.

Guidance: This indicator is not applicable to smallholders.

7.1.4

Levels I
and III

Certified organisations are required to ensure that management plans account for future water resource conditions (i.e., climate change, demographic shifts, projected use increases, etc.).

Guidance: This is not applicable to smallholders or small/family-owned food processing industries.

7.1.5

Levels I
and III

Certified organisations are required to participate in catchment governance mechanisms such as integrated river basin management plans where these exist.

Guidance: This is not applicable to smallholders or small/family-owned food processing industries.

7.2

Good practices in water management

7.2.1

Level I

CORE - Certified organisations shall implement best practices for water conservation and avoidance of contamination of surface and groundwater. When irrigation is used, effective measures shall be implemented to ensure efficient irrigation and compliance with relevant regulations. The use of irrigation water shall be controlled in order to avoid soil salinisation.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

7.2.2

Levels I
and III

CORE - Any evidence of contamination of ground or surface water shall be reported to the local environmental authority and mitigated based on a plan agreed with such authority if necessary.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

PRINCIPLE 8: Greenhouse gases and energy management

Global warming poses a major threat to the environment and to people's lives and also threatens the way the world conducts business. The management of greenhouse gas emissions and its reduction are key to reducing global warming. This Principle encourages organisations to incrementally minimise the use of non-renewable energy in favour of renewable sources.

8.1

Management of greenhouse gas emissions

8.1.1

Levels I, II
and III

Certified organisations shall develop an inventory of its greenhouse gas emissions and develop a programme to reduce or compensate emissions. Land use change, as applicable, shall be accounted for in the inventory.

Guidance: For Level I, this indicator is only applicable to industrial large-scale agriculture. Certified organisations are encouraged to make their GHG information publicly available on a voluntary basis.

8.1.2

Levels I
and III

Certified organisations are required to take measures to increase their resilience and reduce the negative impacts of severe climate events on their operations.

Guidance: Not applicable to independently certified smallholders. In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

8.2

Energy management

8.2.1

Levels I, II
and III

CORE - Certified organisations shall monitor and adopt practices to minimise the use of energy from non-renewable sources (e.g., fossil fuels), and to obtain an increasing proportion of their energy from renewable sources such as, but not limited to, hydropower, solar and wind, or from biomass (crop residues) and local recycled materials.

Guidance: Reduction of the use of fossil fuels can be attained for instance by applying non-tillage, planting cover crops or applying intercropping practices.

This indicator is not applicable to smallholders.

8.2.2

Levels I, II
and III

Large organisations shall develop and implement programmes to ensure energy-efficient operations.

Guidance: This indicator is not applicable to smallholders.

PRINCIPLE 9: Adoption of good agricultural practices

Good agricultural practices are fundamental to maximise the benefits of agricultural activity while minimising negative impacts on the environment, workers and neighbouring communities. This Principle aims to support organisations to maximise soil health while reducing and optimising the use of agricultural inputs, especially the use of pesticides, and other toxic/polluting materials.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of the indicators associated with this Principle shall be supported by the processor.

9.1

Systems of good practices

9.1.1 Level I

CORE - Certified organisations shall adopt agricultural good practices and adopt conservation systems such as Integrated Pest Management (IPM), Integrated Crop Management (ICM). As much as possible, organisations should adopt organic agricultural practices and ensure adequate and continuous monitoring of crop health and the implementation of measures to improve crop resilience.

Guidance: Best practices include methods that build soil, protect water, reduce chemical usage, use regenerative and agroforestry agriculture practices and foster biodiversity.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.2

Control of burning

9.2.1
Level I

CORE - Certified organisations shall not clear areas for cultivation by burning vegetation, or use burning for harvesting purposes, e.g., sugarcane, unless this harvesting practice is allowed by local and national law.

Guidance: If allowed by local and national law, burning must be adequately documented. In these cases, workers shall be trained for this activity. Training records shall be available.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.2.2
Level I

Should burning vegetation be practised by an organisation considering the aspects of indicators 9.2.1, certified organisations shall develop alternative methods for future use.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.3

Soil and crop management

9.3.1
Level I

CORE - Certified organisations shall define a soil and crop management system to maintain and control soil quality (physical, chemical and biological), including monitoring soil quality and health, building soil, improving fertility and managing pests and diseases.

Guidance: Examples of useful practices include the use of cover crops, management of crop succession and rotation, precision farming, residue management, no-tillage, contour tillage, grass waterways, terraces, nitrogen-fixing plants, green manures and agro-forestry techniques.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.3.2 Level I

CORE - Certified organisations shall evaluate the suitability of the soil for the production of specific crops and establish a soil management system.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.3.3 Level I

Best practices in fertiliser use are followed, based on expert advice or at least the manufacturer's recommendations. Whenever possible, producers should reduce the use of chemical fertilisers. A nutrient management plan shall be implemented on large-scale agricultural fields.

Guidance: The plan should include provisions for periodic monitoring of relevant parameters such as N, P, K, soil organic matter (SOM) and soil organic carbon (SOC).

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.3.4

Level I

CORE - Certified organisations shall minimise desertification, soil erosion and damage to soil structure caused by wind, water, human activities and the presence of farm animals.

Guidance: Production practices should maintain vegetative cover for as long as possible throughout the year. Techniques such as deep-rooting of green crops; mulching; using low-pressure tyres, following contours in soil preparation operations, using terraces, minimising tillage and placing windbreaks for example, should be considered.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.3.5

Level I

CORE - Adequate monitoring shall be carried out to demonstrate that practices are in place to protect soil quality and prevent soil erosion.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.4

Documentation of agricultural production

9.4.1

Level I

All records referred to in the following indicators shall be kept for 5 years or longer if required by local regulations.

Guidance: If this indicator is first met during the initial year that ProTerra certification is achieved, and local regulations do not require it, the certification body will waive the retroactive aspect of it which shall be proportional to the years of certification. The absence of such records may jeopardise the ability of organisations to demonstrate compliance with ProTerra requirements and may impede certification.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.4.2

Level I

Certified organisations shall maintain all seed records used in each season for all crops used.

Guidance: Records shall include:

- Seed purchase invoices - If the seed invoice does not include the following: supplier's name, date of purchase, variety and/or brand name, quantity and lot number, then this information shall be recorded independently of the invoice;
- Seed certificates and seed bag labels;
- Records of seeds produced by the farm;
- Seed usage per land plot/field.
- Records for each season identifying the seed and its source used to plant each certified crop.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.4.3

Level I

Certified organisations shall maintain records of all agricultural production.

Guidance: Records shall include:

- a) crop sequence and rotation for each field;
- b) weight of crop harvested;
- c) yield;
- d) identification of the field from which the crop was harvested (including records of geographical coordinates or geolocation by latitude and longitude data) of all the plot(s);
- e) seed lots and variety used;
- f) harvest date;
- g) pests and diseases;
- h) other soil and crop information and management practices.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.4.4
Level I

CORE - Certified organisations shall maintain records of all fertilisers, pesticides, other agrochemicals and other inputs purchased, used, and disposed of, including biocontrol agents. Data on pests, diseases, weather conditions during spraying, and weeds shall also be recorded and retained.

Guidance: Records shall include:

- a) Fertiliser and pesticide applications;
 - Application procedures;
 - Dilution dosages and quantities used;
 - Crops and field locations to which they were applied;
 - Dates of application;
 - Relevant quarantine times before the crop was harvested;
 - Weather conditions during application;
 - Disposal records.
- b) Purchase invoices for all inputs used in agricultural production.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.4.5
Levels I, II
and III

The certified organisation shall collect, organise and retain the required information in relation to the legal requirements of the importing country or as requested by the buyer for a period of 5 years from the date of placing on the market.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.5

Management of propagation material

9.5.1
Level I

Seeds, seedlings, and propagation materials shall be selected for quality and performance for the region.

Guidance: Evidence for this indicator may consist of seed germination and vigour test reports. This evidence can be provided by suppliers or companies providing technical assistance and advisory services. The certification body may waive this indicator in cases where producers save their own seed or propagate from their own existing stocks, especially in the case of smallholders. Smallholders may report verbally on their own propagation materials.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.5.2

Level I

When seeds are saved and/or obtained by local breeding, the certified organisation shall have practices in place to ensure seed quality and performance.

Guidance: Evidence for this indicator may include: yield records from the past crop from those seeds and/or germination/vigour test records.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.5.3

Level I

Certified organisations shall retain archive seed samples for a minimum of 1 year.

Guidance: The certified organisation shall start archiving seeds in the first year of certification. In cases, where seeds deteriorate due to conservation conditions, this indicator shall be non-applicable.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.6

Reduction of toxic and polluting materials

9.6.1

Levels I, II
and III

CORE - Certified organisations shall avoid or reduce the use of toxic or polluting materials whenever possible and shall select inputs having the least possible toxicity and environmental impact for the required application. Agricultural practices are implemented to minimise diffuse and localised impacts on surface and groundwater quality from chemical residues, fertilisers and other potential sources.

Guidance: Level I operations that use agrochemicals for pests, diseases, and control of weeds shall employ Integrated Pest Management (IPM) and other strategies, such as the use of ecologically sound biological controls for the target pest or disease, where applicable, to minimise agrochemical use. In the case of biocontrol, relevant regulations shall be complied with. Agricultural practices that minimise impacts to water resources include maintaining a buffer zone around water bodies, treating wastewater and using precision farming.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

9.6.2

Levels I
and II

CORE - Pesticides listed on the WHO Classes Ia, Ib lists, Rotterdam Convention, Stockholm Convention, as well as pesticides forbidden by local, national, and regional law, shall not be used on crops.

Guidance: Lists of all chemicals referenced in this indicator may be found on the websites listed in Appendix C of this Standard. The provisions of indicator 9.6.3. shall be observed.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

9.6.3

Levels I, II
and III

CORE - Certified organisations shall test products before commercialisation to ensure that residue levels of pesticides are negligible or are, at least, compliant with residue limits set in the country of import or use.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.6.4

Level I

Certified organisations shall use non-chemical weed control methods whenever possible, such as mechanical methods and management of crop rotation, crop succession and intercropping.

Guidance: Operations that use agrochemicals should make stepwise changes in their systems to significantly minimise or eliminate the need for pesticides. The substances and quantities applied and the number of applications per field should be monitored.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.6.5

Levels I
and II

CORE - Certified organisations shall only use pesticides on crops and for target species for which they are legally allowed, at the prescribed dosage, during the required timeframe and/or crop conditions, as defined by local laws, regulations, by manufacturers' recommendations or by professional advice. This will include a programme of pesticide rotation designed to minimise the development of pest resistance.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

9.7

Management of agrochemicals and chemical residues

9.7.1

Levels I
and II

CORE - Agrochemicals, including pesticides and fertilisers, shall be applied using methods that minimise harm to human health, wildlife, plant biodiversity, and water and air quality.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

9.7.2

Levels I
and II

CORE - Certified organisations shall not engage in pesticide spraying over bodies of water, or over preserved, protected or residential areas, in compliance with local, regional and national regulations. Pesticides shall be sprayed as per local regulations requirements in terms of distance from populated areas and bodies of water. In the absence of such regulations, pesticides shall not be sprayed within 30 meters of human populated areas, and bodies of water.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

9.7.3

Level I

CORE - In crop areas adjacent to roads or residential areas where human access is possible, recently sprayed areas shall be appropriately marked to warn people not to enter such areas.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.7.4

Level I

CORE - Aerial spraying shall be conducted only under weather conditions that minimise drift to adjacent areas, and must be in compliance with local, regional and national laws and should not have an impact on populated areas and water bodies.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.7.5
Level I

CORE - Residents within 500 meters (or more if required by national legislation) shall be informed at least one day in advance before aerial spraying is done.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.7.6
Level I

CORE - Aerial spraying shall not be carried out with pesticides listed in the WHO Classes Ia, Ib and II lists, Rotterdam Convention, Stockholm Convention.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.7.7
Levels I, II
and III

CORE - Certified organisations shall adhere to quarantine periods, avoiding harvest until applied pesticide hazard for consumers is reduced to acceptable levels.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

9.7.8
Levels I, II
and III

CORE - Pesticides shall be handled, stored, transported, and disposed of according to manufacturers' instructions, and legal requirements, or according to procedures documented to be superior. Pesticides shall be stored and transported in original containers or in other appropriate containers clearly labelled to identify contents. Certified organisations shall follow the manufacturer's recommendations and legal requirements for disposing of agrochemical waste and empty pesticide containers, and for cleaning all application equipment. Certified organisations shall triple rinse empty pesticide containers with water, then perforate to prevent reuse, and return containers to the supplier, or to facilities designed to handle such waste.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

For Level II, this is specifically applicable to storage facilities and transporters.

9.7.9
Levels I, II
and III

Certified organisations shall test products bound to commercialisation for tolerance thresholds of chemical residues (e.g., pesticides) as regulated by the target market and for harmful contaminants (e.g., mycotoxins) and maintain testing records. Tests should be designed to be as relevant as possible to the specific risks involved. The frequency of tests shall be determined on the basis of a risk analysis conducted by the operation and evaluated by the certification body.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

9.7.10
Level I

CORE - Certified organisations shall regularly maintain and calibrate crop protection product and fertiliser application equipment on a regular basis. All equipment and machinery used in the production or farming activities shall be regularly maintained to ensure their safe, proper and efficient functioning. Records shall be kept.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

PRINCIPLE 10: Traceability and Chain of Custody

Traceability enables the market to have a full view of a product's journey, from the farm to the supermarket. Chain of custody refers to a documented trail that records the sequence of custody, control and transfer of materials. It is evidence of ownership of the materials and permits tracing back their physical movement. This Principle aims at ensuring certified organisations maintain a trail of the product's journey.

10.1

Traceability and Chain of Custody System

10.1.1
Levels I, II
and III

CORE - Certified organisations must develop, implement and maintain a Chain of Custody System that enables traceability and clearly defines the model used (identity preserved, segregation or mass balance). ProTerra Logo, traceability system used by the organisation and lot number shall be present in all Chain of Custody documentation of ProTerra-certified materials or products. Clear and readily available information on the ProTerra contracted volumes shall be provided during the certification audit (refer to the ProTerra Certification Protocol in force). All records related to the Chain of Custody System shall be kept for 5 years or longer if required by local regulations.

Guidance: The certification body will waive the retroactive aspect of this indicator for the first years of certification, in case local regulations do not provide for this. The Traceability model will be clearly identified in the ProTerra certificate. Additionally, the certified organisation shall have sufficient documentation and records to demonstrate traceability and the veracity of its chain of custody. Examples of records shall include:

For warehouse operations: Reception records: crop type, weight, date, driver's name, number of vehicle license plates, farm name, as well as analytical results. Storage records: Volume, number of silo or warehouse. Shipment records: Carrier, date of departure, date of arrival.

Examples of production records for **processing plants:**

- Reception records: crop type, weight, date, driver's name, number of vehicle license plates, farm or warehouse of origin, as well as analytical results.
- Processing records: date of process, production line or facilities used, volume and identification of raw material, volume of product made, product lot number, as well as analytical results.
- Shipment records: carrier, date of departure, date of arrival.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

10.1.2

Levels I, II
and III

CORE - Certified organisations shall have clear rules to avoid double counting of certified material and shall be able to demonstrate the effectiveness of such rules.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

10.1.3

Levels I, II
and III

CORE - Certified organisations shall assign lot numbers to each received or shipped raw material or product consignment, as well as processing lots and final product lots, linked to the traceability information pertaining to the same. Lot numbers shall be present in the Chain of Custody document.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

10.1.4
Levels I, II
and III

CORE - Certified organisations shall make information available related to ProTerra certified contracted volumes: the volume of the purchased certified product and the output of certified sold product. Organisations shall provide evidence of data consistency during the certification process (refer to the ProTerra Certification Protocol in force). Carry over of certified volumes is only possible if the company's certified status is continuous. In contrary cases, the carry over is not possible and the corresponding amount must be excluded from this balance sheet and from the certified volumes.

Guidance: Certified organisations may wish the issuance of Traceability Certificate of Compliance (TCC), specific for individual transaction. Should that be the case, an agreement must be reached with the CB. TCCs must follow the ProTerra Certification Protocol in force and CB must control the volume of the consignments that are capped by the total ProTerra certified volume under a valid certificate.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

10.1.5
Levels I, II
and III

CORE - Certified organisations shall maintain a product balance for inputs and outputs, correlating the amounts of certified inputs with the amounts of certified outputs, taking into account conversion factors and losses.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

10.1.6

Levels I, II
and III

CORE - Conveyances used to transport ProTerra-certified material shall be inspected prior to loading to verify freedom from residues of materials that are not ProTerra compliant, and if residues are observed, the conveyance shall be cleaned prior to loading ProTerra-certified materials. Inspection and cleaning of conveyances shall be documented.

10.1.7

Levels I, II
and III

CORE - When ProTerra-certified material is transported as a part-load together with other material, systems and procedures shall be in place to prevent mixing during loading, transport and unloading. Correct ProTerra-certified product shall be clearly identified and delivered to the customer.

10.1.8

Levels I, II
and III

CORE - Certified organisations shall comply with Principle 5 to demonstrate that genetically modified organisms are not used.

10.1.9

Level II

CORE - Traders and dealers may merge or split received consignments of ProTerra-certified products. To each new merged or split consignment, a unique identification number shall be assigned, registered and clearly traceable in the Chain of Custody System used by the organisation.

Guidance: This may consist of one production lot or parts of one or more production lots.

10.1.10

Levels I, II
and III

Customer service, inventory management, and order fulfilment procedures shall be in place to verify that the correct ProTerra-certified product consignments have been shipped to customers ordering ProTerra-certified products.

10.2

Mass balance

10.2.1

Levels I, II
and III

CORE - In cases where a ProTerra-certified material is mixed with other non-certified material a mass balance shall be maintained to demonstrate that volumes of ProTerra-certified material received are equivalent to ProTerra-certified material dispatched. The non-certified material shall be tested for the absence of pesticides and evidence shall be provided that the non-ProTerra certified material does not originate from deforested areas (refer to indicator 4.1.1) and has not been produced using forced or child labour. Otherwise, the ProTerra certification status will not be granted. Additionally, the final product shall not exceed the maximum residue levels of pesticides permitted in the country of import or use. This shall be confirmed by the certified organisation by providing the analytical results of representative multi-residue analyses of pesticides for each lot supplied.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

10.3

Segregation

10.3.1

Levels I, II
and III

CORE - When using Segregation CoC Model, the economic operator shall have and consistently apply, standard operating procedures for maintaining full segregation for each lot of ProTerra-certified product from non-certified material from the point of receipt to the point of transfer to the next economic operator in the supply chain.

Guidance: Procedures and records may include, depending on the operation level:

- Sampling plan and procedures (for GMOs and pesticides for example).
- Procedures of flushing and cleaning storage and transporting devices for product change in non-ProTerra dedicated sites or equipment/devices.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

10.3.2

Levels I, II
and III

CORE - When using Segregation CoC Model, precautions, including physical labelling of facilities and conveyances, must be in place to prevent co-mingling of ProTerra-certified material with other material during transport, during loading and unloading activities.

Guidance: In the case of smallholders that are part of the supply chain of industrial processors, the implementation of this indicator shall be supported by the processor.

SECTION III: Terms and Definitions

Please consider the following Standard language:

- **“shall” indicates a requirement**
- **“should” indicates a recommendation**
- **“may” indicates a permission**
- **“can” indicates a possibility or a capability**
- **“may not” indicates a prohibited action**

The following definitions apply to ProTerra:

Abuse – mistreat, treat badly; maltreatment: cruel or inhumane treatment, either verbal or physical in nature.

Agrochemicals – all synthetic chemical inputs used directly or indirectly in agricultural production, and for the maintenance of equipment and storage, including: • Detergents • Pesticides (including fungicides, herbicides, insecticides) • Fertilisers • Mineral oil-based products • Production aids such as cleaning agents.

Applicable legislation laws applicable in the country of production concerning the legal status of the area of production in terms of: land use rights, environmental protection, forest protection and management, biodiversity conservation, third parties’ rights, labour rights, human rights, rights of indigenous peoples, tax, anti-corruption, trade and customs regulations and importers applicable regulations for incoming goods.

Chain of Custody – a documented chain of economic operators through whose facilities a given lot of product has passed.

Consignment – volume of a shipment of product changing custody or ownership in the supply chain, composed of one or more production lots, or split from a given lot. A consignment can be comprised of merged consignments and can be split into various consignments. Each consignment is assigned a unique identification number for traceability purposes and inventory control.

Core Indicator – Core indicators are those that are considered by the ProTerra Foundation to be essential to mitigate sustainability negative impacts. These indicators are essential and shall be met by applicants and their core suppliers to be granted the ProTerra Standard certification. Core Indicators shall be complied with from the beginning and maintained throughout the entire certification period.

Core Supplier/Service provider – a supplier of a core input that is added as part of the formulation of a product or of an essential service associated to the production of a certified products/commodities under the ProTerra programme. For instance, a supplier of soybeans is a core supplier to a soy-crushing plant, while a core service provider is for example outsourcing of harvesting labour.

Dedicated – facilities, equipment or vehicles used exclusively for the storage, handling, transport, distribution, production or processing of certified products.

Economic Operator – organisation or individual with legal ownership or physical control of agricultural commodities, derived products, and products made with them. Economic operators may be in any node of the supply chain. In the context of this Standard a certified organisation means the same as a certified economic operator.

Environmental and Social Impact Assessment (ESIA) – a structured and science-based process for predicting and assessing the potential environmental and social impacts of a proposed project, and designing appropriate compensation, mitigation, management and monitoring measures to deal with negative impacts.

Forest – land spanning more than 0,5 hectares with trees higher than 5 metres and a canopy cover of more than 10%, or trees able to reach those thresholds in situ, excluding land that is predominantly under agricultural or urban land use.

Geolocation – the geographical location of a plot of land described by means of latitude and longitude coordinates corresponding to at least one latitude and longitude point and using at least six decimal digits.

GM (Genetically Modified or Genetic Modification) – products or processes employing gene splicing, gene modification, DNA editing, recombinant DNA technology, or transgenic technology. Also refers to products produced using one or more GM inputs or

process elements. Cloned animals and their progeny are also considered GMOs under this Standard.

GMO (Genetically Modified Organism) – a plant, animal, or other organism whose genetic makeup has been modified using recombinant DNA (gene splicing) or DNA editing methods or food/feed products derived from such an organism. Refers to products derived from a species of which GM varieties have been commercialised somewhere in the global production system.

GMO-Risk Product – refers to any product derived from a food species of which GM varieties have been commercialised anywhere in the global food production system. Appendix A to this Standard contains an identification of crops and products that have high GMO risk.

Greenhouse Gases or Emissions – those gases, such as carbon dioxide, nitrous oxide, and methane, which are transparent to solar radiation but opaque to longwave radiation.

Grower – a person or organisation that develops activities required for the cultivation of crop plants and/or management of livestock.

High Conservation Value (HCV) is an area that has a biological, ecological, social or cultural value of outstanding significance or critical importance as follows. Examples are:

- areas with species diversity, concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels;
- areas with landscape-level ecosystems and mosaics large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance;
- areas with ecosystems and habitats that are rare, threatened, or endangered, habitats or refugia;
- areas that have ecosystem services or basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes; and

- areas with cultural values, sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or indigenous peoples, identified through engagement with these local communities or indigenous peoples.

(Source: HCV COMMON GUIDANCE FOR IDENTIFICATION, HCV Resource Network, Oct 2013).

Identity Preservation/Identity Preserved (IP) – use of segregation and traceability procedures to maintain the identity of specific lots of agricultural or processed products throughout all stages of production, maintenance, transport, storage and processing. IP is primarily used to preserve the authenticity of defined traits or characteristics of products, one of which is the ProTerra Certified status of the product.

Indentured Servant – a labourer under contract to work for an employer for a specific amount of time to pay off a debt. Typically, in the case of indentured servitude, the employers provide little if any monetary remuneration; however, they are responsible for accommodation, food, other essentials, and training.

Inputs – any material or substance that becomes a part of the final product, or a component of which becomes a part of the product. These include the following:

- Agricultural inputs, such as seeds, fertilisers, and pesticides
- Unprocessed agricultural products, such as vegetables, grains, fruits, greens, herbs, and other fresh foods, etc.
- Feed components, such as grains, forage plants, vitamins, enzymes, minerals
- Manufacturing and processing inputs, including ingredients, flavourings, seasonings colourings, additives, and all other substances present in the final manufactured products, such as residues of processing aids.

Integrated Pest Management (IPM) – IPM programmes use current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment.

International Treaties and Conventions – an agreement under international law made

by states and international organisations. A treaty may also be known as: (international) agreement, protocol, covenant, convention, exchange of letters, exchange of notes, memorandum of understanding, etc. Regardless of the terminology, all these international agreements under international law are equally treaties and the rules are the same.

Irrigation – practice of supplying land with water so that crops and plants will grow independently of weather conditions. This includes surface irrigation, sprinkler irrigation and drip irrigation.

Labour (or Trade) Unions – an organisation of individuals associated through type of employment, or labour. These organisations may be comprised of individual workers, professionals, former workers, or the unemployed. The most common, but by no means only, purpose of these organisations is “maintaining or improving the conditions of their employment.”

Legal Minimum Wage – the lowest wage, determined by law or collective agreement that an employer has to pay to a worker for a specified job. This excludes overtime premium.

Lot – volume of product originated in agriculture or industrial processing that is assigned a unique identification number linking that production volume to a given period.

Management system – A management system is a set of policies, processes and procedures used by an organisation to ensure that it can fulfil the tasks required to achieve its objectives. In the case of the ProTerra Standard, these objectives relate to the organisation’s supply chain.

Mass Balance – A system for controlling the input quantities and equivalent output of certified materials/products at each stage of the supply chain, taking into account conversion rates, in case of processing.

Non-GMO or Non-GM – A plant, animal, or other organism, or derivative of such an organism, whose genetic structure has not been altered by gene splicing, gene modification, recombinant DNA technology, transgenic technology, DNA editing, or by a process or product whose production utilises GM processes or inputs.

PCR analyses – biochemistry and molecular biology techniques for isolating and exponentially amplifying a fragment or sequence of interest of DNA, via polymerase replication, without using a living organism.

Pesticide – a collective term that refers to all insecticides, fungicides, and herbicides.

Piece work – any type of employment in which a worker is paid a fixed piece rate for each unit produced or action performed, regardless of time.

Product – materials or goods that are assessed as part of the ProTerra Standard certification process, which the certified organisation offers to the market, at whatever stage of the production chain (i.e., as a final consumer product, an ingredient for further manufacturing, a raw agricultural crop or commodity, etc.).

Segregation – the system of facilities, equipment, and procedures through which an Economic Operator keeps ProTerra-certified products physically separated from non-ProTerra certified material from the point of receipt to the point of transfer to the next Economic Operator in the chain of custody.

Smallholder – a farm where the majority of the labour is provided by family members. This implies family farm or family agriculture excluding corporations or business enterprises. Profits accrue primarily to the farmer and his family and the farm is the primary source of income for the smallholder.

Stakeholder – a party with an interest or concern in a given programme, event, supply chain or system.

Standard – the term “Standard” herein refers to the Standard for the ProTerra certification programme, which is this document.

Strip test – immunologically-based screen-testing strip devices, which analyse the protein expressed by the DNA, and are used as a rapid and on-site method for the identification of GM seed or crops.

Supplier – any party from whom an input or service is obtained.

Traceability – the system of documentation that enables any economic operator in the supply chain to trace the product or raw material, or a derivative thereof, back through the supply chain.

Worker – this term refers to an organisation’s direct employees, subcontractors working in or for the organisation on its premises. It also includes all permanent and temporary members of the organisation’s labour force.

APPENDIX A: Identification of commercialised GM crops and their derivatives

The list below (ProTerra GMO listing) identifies crops, animal derivatives and processed inputs and ingredients that have a direct or indirect risk of being genetically engineered.

Crops

The following crops carry the risk of being genetically engineered, because engineered varieties of these crops are grown large scale in at least one country.

They are listed here roughly in order of decreasing prevalence in the marketplace.

Soy	
Corn	
Cotton	The seed is also used to make vegetable oil and animal feed.
Canola	
Rice	
Papaya	
Potato	
Alfalfa	Also includes alfalfa produced with GMO Rhizobium inoculants.
Zucchini	
Yellow Crook-neck Squash (summer squash)	
Tomato	
Sugar Beets	Planted after 2007 crop.

Animal Derivatives

Animal derivatives refer to products derived from cattle, sheep, pigs, chickens, and other common livestock, fowl, and fish.

Most animal-derived products have GMO-risk because soy, corn, cottonseed, alfalfa, and canola are commonly used in feed, and because injections of recombinant bovine growth hormone are used to increase milk production.

GMO veterinary inputs such as vaccines, sperm, and drugs are also commonly used in livestock production systems.

Milk	
Meat	Hides and skins would also be included in this category.
Eggs	
Honey and other bee products	

Processed Inputs and Ingredients, and Related Derivatives

The following is a non-exhaustive list of derivatives with high GMO risk, which are commonly used in food production. It is meant to provide examples of materials that will be considered high risk.

Ascorbic Acid	
Amino Acids	
Aspartame	
Bacterial Starters	
Caramel	Derived from glucose syrup.
Cellulose	Can be derived from GM cotton.

Chymosin	
Citric Acid	Derived from corn.
Cloned Sperm	
Corn Flour	
Corn Gluten	
Corn Grits	
Corn Oil	
Corn Starch	Includes both native and modified corn starch.
Corn Syrup	
Corn Syrup Solids	
Dextrose	Derived from corn.
Enzymes	
Ethanol	Derived from corn or GMO sugar beets.
Flavorings, “natural” and “artificial”	The carrier may also be GM.
Fructose	Derived from corn.
Glucose	Derived from corn.
Glucose Syrup	Derived from corn.
Glycerides	Derived from corn.
Hydrolyzed Vegetable Protein	
Maltodextrins	Derived from corn.

Molasses	Derived from sugar beets, beginning 2008 crop.
Monosodium Glutamate	Derived from corn.
rBGH, rBST, recombinant bovine growth hormone	
Sodium Ascorbate	Derived from corn.
Sodium Citrate	Derived from corn.
Soy Fiber	
Soy Flour	
Soy Grits	
Soy Lecithin	
Soy Milk	
Soy Oil	
Soy Protein Isolate/ Concentrate	
Soy Sauce, Black SoyBean Sauce	
Sucrose	Derived from sugar beets, beginning 2008 crop.
Textured Vegetable Protein	Including soy protein.
Tofu, Bean Curds, Soy Curds	
Xanthan Gum	
Vaccines	
Veterinary Medicines	

Vitamin A	
Vitamin B6 (pyridoxine)	
Vitamin B12 (cyanocobalamin)	
Vitamin C	
Vitamin E	Includes other/mixed tocopherols.
Yeast and Yeast Products	

Additionally, to the ProTerra GMO listing above, to access updated information on GM crops, auditors shall check databases indicated herein to see if additional crops are listed as having a GM version.

The auditor shall check **all** five (5) databases of the organisations listed below and document such searches and their results. This is to be done prior to determining the duration of the audit, as additional time may be required to confirm compliance with the requirements of ProTerra Principle 5. If a crop is listed in at least one of the databases and does not figure in the ProTerra GMO listing, it is still to be considered as having GM risk and for the sake of ProTerra certification, Principle 5 is fully applicable.

Databases to be checked, if relevant, are:

- 1.** EU GMO register;
- 2.** Euginius – European GMO Initiative for a Unified Database System;
- 3.** ISAAA (International Service for the Acquisition of Agri-biotech Applications) GM Approval Data base/ GM Crops List;
- 4.** USDA Agricultural Marketing Service US Department of Agriculture: List of Bioengineered Foods;
- 5.** CropLife International, Biotradestatus database

APPENDIX B: List of relevant international treaties and conventions

- The Universal Declaration of Human Rights;
- The International Covenant on Civil and Political Rights;
- The International Covenant on Economic, Social and Cultural Rights;
- The Convention on the Prevention and Punishment of the Crime of Genocide;
- The Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment;
- The International Convention on the Elimination of All Forms of Racial Discrimination;
- The Convention on the Elimination of All Forms of Discrimination Against Women;
- The Convention on the Rights of the Child;
- The Convention on the Rights of Persons with Disabilities;
- The United Nations Declaration on the Rights of Indigenous Peoples;
- The Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities;
- United Nations Convention against Transnational Organised Crime and the Palermo Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, supplementing the United Nations Convention against Transnational Organised Crime;
- The International Labour Organisation's Declaration on Fundamental Principles and Rights at Work;
- The International Labour Organisation's Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy;

The International Labour Organisation's core/fundamental conventions:

- Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87);
- Right to Organise and Collective Bargaining Convention, 1949 (No. 98);
- Forced Labour Convention, 1930 (No. 29) and its 2014 Protocol;
- Abolition of Forced Labour Convention, 1957 (No. 105);

- Minimum Age Convention, 1973 (No. 138);
 - Worst Forms of Child Labour Convention, 1999 (No. 182);
 - Equal Remuneration Convention, 1951 (No. 100);
 - Discrimination (Employment and Occupation) Convention, 1958 (No. 111).
-
- 1992 Convention on Biological Diversity and taking into account possible amendments following the post 2020 UN Convention on Biological Diversity, including the obligations of the Cartagena Protocol on the development, handling, transport, use, transfer and release of living modified organisms and of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity of 12 October 2014;
 - Ramsar Convention on Wetlands of International Importance (1971);
 - International Trade in Endangered Species of Wild Fauna and Flora (CITES) of 3 March 1973;
 - Minamata Convention on Mercury of 10 October 2013 (Minamata Convention);
 - Stockholm Convention of 22 May 2001 on Persistent Organic Pollutants (POPs Convention);
 - Rotterdam Convention on Prior and Informed Consent Procedures for Certain Hazardous Chemicals and Pesticides in International Trade (1998);
 - FAO International Code of Conduct on the Distribution and Use of Pesticides (1985 revised 2002);
 - Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (UNEP/FAO), adopted on 10 September 1998;
 - Vienna Convention for the protection of the Ozone Layer and its Montreal Protocol on substances that deplete the Ozone Layer;
 - Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal of 22 March 1989 (Basel Convention);
 - World Heritage Convention Concerning the Protection of the World Cultural and Natural Heritage;
 - Basel Criteria on Sustainable Soy Production (2004);
 - ILO Occupational Safety and Health Convention, 1981 (No. 155).

APPENDIX C: Pesticides listed in WHO Classes Ia, Ib and II, Rotterdam Convention and Stockholm Convention

Please refer to the websites listed below regarding pesticides and other hazardous chemicals that may not be used in the production of ProTerra-certified materials.

- The WHO Recommended Classification of Pesticides by Hazard and guidelines to classification, most recent edition;
- The Rotterdam Convention Annex III Chemicals;
- The Stockholm Convention - all POPs listed.

NOTE - Observe that the names of all the materials listed on these websites are just generic chemical names. Brand names/commercial products are not provided. It is necessary that all certified operations compare all product labels with these lists. The Certification Body and their auditors shall verify if all labels properly list the names of all the components of commercial formulations of the agrochemical products and if these chemicals are banned in the above-cited listing.

APPENDIX D: Sources of information on satellite imagery

The references listed below can be used as sources of georeferencing data:

- Sentinel 1's imagery from Copernicus programme;
- Landsat imagery from Nasa;
- Planet imagery from Norway's International Climate and Forest Initiative;
- Copernicus Land Monitoring service;
- Copernicus Emergency Management services;
- FAO Global Forest Resource Assessments (FRA);
- Global Forest Watch (GFW) from World Resource Institute;
- FAO – State of World's Forest;
- PRODES and DETER Systems from INPE (for Brazil);
- TRASE;
- Agroideal (Brazil, Argentina and Paraguay);
- Global Risk Assessment Services (GRAS);
- High Carbon Stock Approach (HCSA);
- The Atlas of Economic Complexity.

APPENDIX E: Crop Tree Specific Guidance

The following guidance applies to crop trees such as almond, coconut, cocoa, hazelnut, coffee, orange, etc. It is not intended to be prescriptive but must be adapted and interpreted according to the climatic conditions of the crop and agricultural region to be tested or certified.

PRINCIPLE 6: Pollution and waste management

Minimising the pollution of the environment should be a focal point of sustainable practices associated with the food and feed supply chain. This Principle aims to support certified organisations in using methods to store, handle and dispose of waste and hazardous materials that do not harm the natural environment or local communities.

6.1

Appropriate management of hazardous waste and pollutant materials

6.1.3

Levels I
and III

CORE - Certified organisations shall discharge sewage /effluents in a manner that does not cause water pollution and does not contaminate the soil or crops with chemicals, heavy metals, by-products, excess nutrients or pathogens. Raw sewage shall not be used to irrigate crops.

Guidance for crop trees: One should not use recycled or reclaimed water as a source of irrigation water, unless documented as having received tertiary treatment which includes a pathogen disinfection step.

6.2

Management and appropriate disposal of non-hazardous waste

6.2.2

Levels I
and III

CORE - Certified organisations shall manage biological wastes such as manure, straw, crop residues, food scraps, and processing by-products, among others, in an appropriate way to avoid pollution and/or to prevent these from becoming a source of pathogenic contamination or pest harbouring. Management of these waste shall at least comply with national laws relevant to the location of the certified operation, as stated in Principle 1 of this standard. In countries where there are no relevant local laws and/or regulations, organisations should apply World Bank and IFC guidelines.

Guidance for crop trees: Manure must be stored away from areas where tree crops are grown and handled. Manure slurry must be stored for at least 60 days in the summer and 90 days in the winter before applying to fields.

Physical barriers and/or diversion buffers must be deployed to prevent runoff from stacked piles into water sources, equipment storage areas, orchard traffic areas or into the orchard.

Non-composted raw manure must be aged for at least six months prior to application.

Non composted, untreated manure should never be applied less than 120 days prior to harvest.

Manure should be applied at the end of the season, preferably when soils are warm, not saturated and/or cover cropped.

When planting new trees, manure is to be spread two weeks before planting. Manure should be incorporated into the soil immediately after application to minimise wind drift and water run-off.

Tractors, front-end loaders, and other tools and equipment used in manure handling shall be thoroughly cleaned after each use.

Washing water must be prevented from draining to water sources, the orchard floor or any area where harvested crops are handled or stored.

All food and beverage containers or other metallic and glass materials must be kept out of the orchard, as a potential source of foreign-material contamination.

PRINCIPLE 9: Adoption of good agricultural practices

Good agricultural practices are fundamental to maximise the benefits of agricultural activity while minimising negative impacts on the environment, workers and neighbouring communities. This Principle aims to support organisations to maximise soil health while reducing and optimising the use of agricultural inputs, especially the use of pesticides, and other toxic/polluting materials.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of the indicators associated with this Principle shall be supported by the processor.

9.1

Systems of good practices

9.1.1 Level I

CORE - Certified organisations shall adopt agricultural good practices and adopt conservation systems such as Integrated Pest Management (ICP). As much as possible, organisations should adopt organic agricultural practices and ensure adequate and continuous monitoring of crop health and the implementation of measures to improve crop resilience.

Guidance for crop trees: A regular programme for inspection of all buildings, structures and fields must be developed, to check for evidence of pest populations or deposits of animal droppings. The programme should include regular and frequent monitoring of affected and treated areas to accurately assess the effectiveness of the programme. Inspections should be documented.

The accumulation of pest and vector attractants, including water, cull piles and any food source must be prevented. Garbage, trash and related debris should be collected and removed frequently. All waste receptacles should have tight-fitting covers.

Insect pest build-up must be prevented. Rodent and small mammal population build-up must be prevented, unless the presence of predators and raptors are welcome for pest management.

Pests must be removed from traps and property to ensure clean and sanitary facilities and to avoid attracting additional pests.

All equipment that comes in contact with crops must be regularly inspected for evidence of animal droppings or deposits and soiled surfaces must be sanitised with approved disinfectants.

All government regulations and pesticide label instructions must be thoroughly followed.

The pest control program must be documented.

9.3

Soil and crop management

9.3.4 Level I

CORE - Certified organisations shall minimise desertification, soil erosion and damage to soil structure caused by wind, water, human activities and the presence of farm animals.

Guidance for crop trees: Domestic animals are prevented from free access to the orchard. Wild animal and bird traffic through the orchard is minimised by eliminating all sources of habitat, nesting and hiding places for rodents and other vermin in and around the orchard and farm operational areas. This will include keep equipment “boneyards” and debris piles away from orchards and inspect unused buildings for possible issues with pest nesting.

All food and beverage containers or other metallic and glass materials must be kept out of the orchard, as a potential source of foreign-material contamination.

Suitable methods should be used to keep dust to a minimum. Minimising dust helps reduce the spread of contamination and is one additional benefit of meeting or exceeding air quality objectives.

The orchard floor should be kept as level, smooth and dry as practical during the season. Development of uneven areas within inter-row spaces should be prevented as this could result in pooling of rainfall.

Where necessary, temporary shallow diversion channels may be constructed to prevent rainfall ponding, draining from the soil surface at the tree-line to the drying windrows.

9.4

Documentation of agricultural production

9.4.4 Level I

CORE - Certified organisations shall maintain records of all fertilisers, pesticides, other agrochemicals and other inputs purchased, used, and disposed of, including biocontrol agents. Data on pests, diseases, weather conditions during spraying, and weeds shall also be recorded and retained.

Guidance for crop trees: Fertiliser application records must typically include: type of manure or compost used, rates and locations of the application.

9.7

Management of agrochemicals and chemical residues

9.7.1

Levels I
and II

CORE - Agrochemicals (including pesticides and fertilisers), shall be applied using methods that minimise harm to human health, wildlife, plant biodiversity, and water and air quality.

Guidance for crop trees: Where pesticides are applied, these must be managed in a way such that it will not affect pollinating bees, and only pesticides that will not interfere with the population of bees shall be used.

APPENDIX F: Animal Husbandry

The Guidance below is fully part of the ProTerra Standard for Social Responsibility and Environmental Sustainability (ProTerra Standard v5.0).

Animal husbandry is the agricultural practice of breeding and raising livestock (animals). Due to its specific nature, this Appendix has been developed to address relevant and specific issues associated with this industry.

All ProTerra requirements that are not referred to fully apply. This appendix is only applicable to those specific requirements or guidance that differ from the ProTerra Standard.

PRINCIPLE 1: Management system, compliance with laws, international conventions and the ProTerra Standard

International, national and local laws are in place to protect human rights, ecosystems and promote sustainable business practices. This Principle relates to all other ProTerra Principles and the topics they cover. It also includes the need for compliance with Food Safety regulations, as applicable, depending on the level of the organisation and the activity they are engaged with. Principle 1 determines that organisations shall comply with whatever provides the highest level of protection, the ProTerra Standard requirements or laws and regulations.

1.1

Compliance with all applicable national and local laws, regulations, and applicable international conventions.

1.1.1 Levels I, II and III

CORE - Certified organisations shall be consistently in compliance with all applicable national and local laws, regulations, and applicable international conventions. This includes having all the necessary valid permits, authorisations and registers associated with its operations. The legal requirements of raw material production and sourcing of the countries into which the economic operator exports raw materials and/or related products must also be complied with.

Guidance specific for animal husbandry: The requirement for legal compliance applies to all topics covered by the ProTerra Principles and their respective Criteria and Indicators. Compliance with Food Safety regulations is mandatory as applicable (depending on the level of the organisation and the activity they are engaged with). National Animal Husbandry and Animal Welfare regulations must be complied with. Implementing operational procedures aligned with regulation may be a way to achieve compliance. It is to the responsibility of each organisation to provide evidence of legal compliance. Additionally, organisations are expected to comply with Anti-corruption regulations and with international laws and standards on the rights of indigenous people and the tenure rights of the local community.

A list of relevant international treaties and conventions can be found in Appendix B. The most stringent requirement shall always apply, and if the ProTerra Standard exceeds national or local regulatory requirements, certified organisations shall adhere to the Standard.

In the case of smallholders that are part of the supply chain of industrial processors seeking certification, support around compliance issues should be provided by processors.

PRINCIPLE 4: **Biodiversity conservation, effective environmental management and environmental services**

Deforestation is a relevant cause of climate change and of the loss of natural habitats leading to biodiversity loss, and loss of ecosystem services. This Principle seeks to eradicate the clearing of high conservation values areas (HCV) for agriculture. Through implementing this Principle, businesses will protect ecosystems and adhere to governmental and international regulations.

4.1

Land use conversion and forest conservation

4.1.3

Levels I
and III

Certified organisations shall minimise soil erosion and damage to soil structure caused by wind, water, human activity and animals. The use of livestock trails to reduce soil trampling and gully formation should be considered.

4.1.4

Levels I
and III

Certified organisations shall prevent the access of animals to surface water bodies using fences, buffer strips, or other physical barriers and prevent overgrazing of pastureland.

Guidance specific for animal husbandry: Overgrazing can be prevented through the use of rotational grazing systems based on seasonal and local ecosystem resilience.

4.1.5

Levels I
and III

Certified organisations shall ensure that only permitted levels of chemical substances (including pharmaceuticals and other preparations for medical or veterinary purposes), are ultimately released into the environment, acting to reduce:

- exposure of the natural environment to these chemicals;
- negative impact on biodiversity and,
- creation of resistance to medical or veterinary use chemicals.

PRINCIPLE 5:

No use of Genetically Modified Organisms (GMOs)

There is still a scientific debate about whether genetic engineering is harmless for animal and human health, as proponents of GMOs claim. However, the use of GMOs has led to changes in farming practices that have resulted in less crop diversity and to an increase in herbicide-resistant weeds, leading to increased use of pesticides, with all the associated side effects (pollution of aquifers, detrimental effects on workers' health, loss of micro-biodiversity). It has also increased costs for producers. Many consumers and producers are concerned about GMO ingredients and want to make informed choices about where their food comes from. This includes understanding the social and environmental footprint of their choices.

This Principle aims to ensure that GMOs are not present in certified organisations.

The applicability of this Principle is determined by assessing risks of GMO presence, contamination or use. The auditor should refer to Appendix A for risk assessment. If risk is non-existent this Principle is not applicable.

Organisations must also follow the ProTerra Guidance on GMO testing and sampling as part of this Principle.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of all indicators that are under Principle 5 must be supported by the processor.

5.1

GMOs and Genetically Engineered Organisms are excluded

5.1.1 Levels I, II and III

CORE - Genetically modified organisms (GMOs) and their by-products shall not be used in the production of ProTerra-certified products. This includes technologies that can be used to edit genes within organisms such as CRISPR/Cas9.

Guidance specific for animal husbandry: GMO risk is checked based on guidance provided under APPENDIX A: IDENTIFICATION OF COMMERCIALISED GM CROPS AND THEIR DERIVATIVES.

Animal feed shall not contain GMO ingredients, considering the aspects under indicator 5.1.3.

5.2

System of identity preservation and segregation

5.2.4 Levels I, II and III

Animals fed with GMO ingredients shall be separated from animals within the ProTerra certification system during feeding and shall be clearly identified.

PRINCIPLE 6: Pollution and waste management

Minimising the pollution of the environment should be a focal point of sustainable practices associated with the food and feed supply chain. This Principle aims to support certified organisations in using methods to store, handle and dispose of waste and hazardous materials that do not harm the natural environment or local communities.

6.2

Management and appropriate disposal of non-hazardous waste

6.2.5 Levels I, II and III

Leaching of manure and urine shall not reach superficial or groundwater sources. Manure stacks shall be located away from water bodies, floodplains, wellhead fields; or other sensitive or specially protected habitats. The stack area should preferably have an impervious pavement and be protected from direct precipitation.

Guidance specific for animal husbandry: Manure, leachate and urine collection systems typically include slotted floors that allow manure/ leachate/urine to drop into a storage area (provided with impervious floor and lateral structure), located beneath the floor; scraping of solid floors and water flushing associated with a wastewater treatment system.

6.2.6 Level I

Manure may be used as a fertiliser on agricultural land after a careful assessment of potential negative impacts due to the presence of hazardous chemical and biological constituents. The results of such an assessment shall be made available to ProTerra auditors.

6.2.7 Levels I, II and III

Animal carcasses shall be properly managed and quickly disposed of in order to prevent the spread of disease, odours, and to avoid the attraction of vectors. Certified organisations shall ensure that animal carcasses are not recycled into animal feed.

Guidance specific for animal husbandry: Where no authorised collection of carcasses is available, on-site burial may be considered if permitted by the competent authorities and following best practices.

6.3

Control of atmospheric pollution

6.3.2

Levels I
and III

Measures to reduce the impacts of ammonia and odours should be considered.

Guidance specific for animal husbandry: Such measures may include: facilities should be located distant from neighbours; control of the temperature, humidity, and other environmental factors of manure storage to reduce emissions and composting of manure to reduce odour emissions, for example.

PRINCIPLE 7: Water management

Water is a scarce resource in many parts of the world. It is also a resource under constant threat of contamination and misuse. This Principle aims to ensure the responsible use of water by preserving the quality and quantity of local water resources and protecting them from contamination.

7.2

Good practices in water management

7.2.3

Levels I
and III

Reduction and reuse of water shall be practised by certified organisations.

Guidance specific for animal husbandry: Examples of water reuse initiatives include: water used for cleaning milking equipment to clean the milking parlour; using calibrated, well-maintained self-watering equipment; collecting and using rainwater, for example.

PRINCIPLE 8: Greenhouse gases and energy management

Global warming poses a major threat to the environment and to people's lives and also threatens the way the world conducts business. The management of greenhouse gas emissions and its reduction are key to reducing global warming. This Principle encourages organisations to incrementally minimise the use of non-renewable energy in favour of renewable sources.

8.1 Management of greenhouse gas emissions

8.1.3 Level I Methane emissions from manure should be managed.

Guidance specific for animal husbandry: Management techniques include: controlled anaerobic digestion (to produce biogas), flaring/burning, use of biofilters, composting, and aerobic treatment. This may involve the use of closed storage tanks or maintaining the integrity of the crust on open manure storage ponds/lagoons.

PRINCIPLE 9: Adoption of good agricultural practices

Good agricultural practices are fundamental to maximise the benefits of agricultural activity while minimising negative impacts on the environment, workers and neighbouring communities. This Principle aims to support organisations to maximise soil health while reducing and optimising the use of agricultural inputs, especially the use of pesticides, and other toxic/polluting materials.

In the case of smallholders that are part of the supply chain of industrial processors, the implementation of the indicators associated with this Principle shall be supported by the processor.

9.1

Animal welfare

9.1.1 Levels I, II and III

Certified organisations shall implement animal welfare standards and practices in its operations. Killing methods that reduce suffering shall be used. Animal welfare regulations must be observed.

Guidance specific for animal husbandry: The animal production industry should aspire to provide:

1. Freedom from thirst, hunger and malnutrition
2. Freedom from discomfort
3. Freedom from pain, injury and disease
4. Freedom from fear
5. Freedom to engage in relatively normal patterns of animal behaviour.

Detailed guidance should be sought from the World Organisation for Animal Health.

9.2

Documentation of production

9.2.1 Levels I and III

Certified organisations shall maintain production records.

Guidance specific for animal husbandry: Records include: production, yield, breeding, origin and administration of feed, disease records, records of the origin and use of veterinary products, sales and purchase records, maintenance, repair and cleaning records.

9.2.2 Levels I and III

Certified organisations shall collect, organise and keep the following information related to ProTerra certified material for a period of 5 years from the date the animal and/or animal product was placed on the market, accompanied by evidence:

- description, including the trade name and type of the animals and/or animal products being certified;
- quantity (expressed in net mass or, when applicable, volume, or number of units)¹ of the animals and/or animal products;
- identification of the country, region and area of production;
- geolocalisation of all plots of land on which the animals and/or animal products were produced as well as the date or time range of production. Where a product contains or has been produced with animal-derived inputs produced on different plots of land, the geolocalisation of all different plots of land shall be included.
- name, email and address of any business or person **from** whom they have been supplied with the animals and/or animal products;
- name, email and address of any business or person **to** whom they have supplied the animals and/or animal products;
- adequate conclusive and verifiable information that the animals and/or animal products originate from deforestation-free land/ areas;
- adequate conclusive and verifiable information that the production of animals and/or animal products has been conducted in accordance with the relevant legislation of the country of production, including the right to use the respective area for the purposes of the production of the animals and/or animal products.

9.3

Reduction of toxic and polluting materials

9.3.1 Levels I and III

Certified organisations shall avoid or reduce the use of toxic or polluting materials whenever possible and shall select inputs with the lowest possible toxicity and environmental impact for the required application.

1) The quantity must be expressed in kilograms of net mass or, when applicable, against the indicated Harmonised System code.

Guidance specific for animal husbandry: Typically, at the farm level, there will be a need to use chemicals to maintain hygiene and to prevent disease outbreaks (e.g., for cleaning and disinfecting agents and pharmaceuticals). Where chemicals are used, farmers should only use chemicals that are approved for use in animal farming by the appropriate government authorities. Chemicals used to sterilise pens and equipment shall only be used in accordance with the manufacturer's instructions and shall be stored safely and responsibly when not in use. At the industry level, other chemicals are typically used in ancillary activities, such as equipment maintenance fluids and lubricants.

9.3.2
Levels I
and III

Chemicals (including pesticides, pharmaceuticals and other preparations for medical or veterinary purposes) listed in the WHO Classes Ia, Ib lists, Rotterdam Convention, Stockholm Convention, as well as pesticides forbidden by local, regional and national law, shall not be used. Hazardous substances listed in the Rotterdam Convention shall also not be used in agricultural or industrial operations.

Guidance specific for animal husbandry: Lists of all chemicals referenced in this indicator may be found on the websites listed in Appendix C of the ProTerra Standard.

9.3.3
Levels I
and III

Chemical products (including pesticides, pharmaceuticals and other preparations for medical or veterinary purposes), shall be applied using methods that minimise harm to human and animal health, wildlife, plant biodiversity, and water and air quality.

9.3.4
Levels I
and III

Chemical products (including pesticides, pharmaceuticals and other preparations for medical or veterinary purposes), shall be handled, stored, transported, and disposed of according to manufacturers' instructions, and legal requirements, or according to procedures documented to be superior.

Guidance specific for animal husbandry: Chemicals shall be stored and transported in their original containers or in other appropriate containers that are clearly labelled to identify the contents. Certified organisations shall follow the manufacturer's recommendations and legal requirements for the disposal of chemical waste and empty containers. Certified organisations shall when possible, return empty containers to the supplier.

9.4

Operational excellence

9.4.1 Levels I, II and III

Certified organisations shall observe internationally recognised guidelines, such as those published by FAO, on land/space requirements for livestock production and transportation.

9.4.2 Levels I, II and III

Certified organisations shall ensure that feed meets the specific nutritional requirements of the animals in their different production and growth stages and shall use quality and uncontaminated feed materials

9.4.3 Levels I, II and III

Buildings (pens, barns, etc.) shall be designed to prevent access by pests and environmental contaminants while providing comfort to animals. Adequate ventilation shall be provided to prevent and/or remove the accumulation of dust, odours, heat and contaminated air.

9.4.4 Levels I, II and III

Buildings (pens, barns, etc.) shall be kept clean. Certified organisations shall have a written sanitation programme that indicates the areas to be cleaned, the cleaning procedure, the frequency of cleaning, the cleaning agents used, and the person assigned and shall ensure that equipment and instruments used in animal husbandry are properly cleaned and disinfected between each use.

9.4.5 Levels I, II and III

Certified organisations shall ensure proper animal care and disease prevention and shall use veterinary products strictly in accordance with the manufacturer's instructions or veterinary prescriptions/instructions.

9.4.6
Levels I, II
and III

Certified organisations shall control farm animals, equipment, personnel, and wild or domestic animals entering the facility. Vehicles and equipment that go from farm to farm (e.g. transport of veterinarians, farm suppliers, buyers, etc.) should be subject to special precautions such as restricting their operation to specific areas with biosecurity measures.

Guidance specific for animal husbandry: Examples of methods that can be used include: quarantine periods for new animals, washing and disinfection of crates, disinfection and coverage of shoes before entering livestock zones, providing protective clothing for personnel, and closing of holes in buildings and fences to keep wild animals out.

Document Revision History

Title	Date	Pages	Type of Document
CERT ID ProTerra Standard Version 1.0	April 17, 2006	1- 28	Normative document and code of practice for certification of responsible production of food and feed in agriculture, transport, storage and industrial processing - Initial release for public. CONTROLLED COPY.
CERT ID ProTerra Standard Version 2.0 (DRAFT)	January 11, 2008	1-53	Full revision of the standard based on input from stakeholders since April 2006.
CERT ID ProTerra Standard Version 2.0	April 24, 2008	1-54	Revision of Version 2.0 (DRAFT) based on stakeholder feedback.
ProTerra Standard Version 2.2	September 1, 2010	1-56	Revision of Version 2.0 in response to comments from the certification body, from inspectors, from industry members, from standards experts, and from non-profit organisations.
ProTerra Standard Version 2.9	July 22, 2011	1-61	Revision of Version 2.2 in response to comments from economic operators, certification body auditors, industry members, environmental consultants and non-profit organisations.
ProTerra Standard Version 2.9.5	December 27, 2011	1-61	Revision of Version 2.9 to correct minor errors in the text.

ProTerra Standard Version 3.0 (DRAFT)	July 15, 2014	1-54	Changes in the structure of Version 2.9.5 to make auditable only indicators and not criteria. Reduction of the number of principles from 18 to 10 by grouping of similar issues, integration of some indicators as well as exclusions of others such as: Principle 17 - Continuous improvement and Principle 18 - Correct labelling and logo use. These principles were converted into indicators of Principle 1. Exclusion of Appendix A - ProTerra Certification Procedures.
ProTerra Standard Version 3.0	December 28, 2014	1-45	Revision of Version 3.0 based on stakeholder feedback after 2 rounds of public consultation. Definition of exemptions for smallholder and family run farms; including the actual lists of hazardous pesticides.
ProTerra Standard Version 4.0	26 December, 2018	1 to 76	Full revision of the standard based on input from stakeholders received from 19 February to 20 April, 2018. Increase of number of core indicators.
ProTerra Standard Version 4.1	September 25, 2019	5 and 33	Version 4.1 has been issued to remove reference made to the American Non-GMO Project Standard (US).
ProTerra Standard Version 5.0	September, 14 2023	1 to 102	Full revision of the standard based on input from stakeholders. This document was subject to public consultation.