



Forest Management Certification Standard



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Forward

The Korea Forestry Promotion Institute is an agency specialized in leading the promotion of the forestry industry by supporting a rise in incomes of people engaged in forestry and industrialization of forestry, and launched the Korean Forest Certification Council (or KFCC) in January 2015 with support and demands from interested parties concerned with the domestic forestry industry to introduce the Korea Forest Certification Scheme.

The KFCC was established as an internal organization under the Kofpi that serves as an agency of operating the Korea Forest Certification Scheme (or the KFCC Scheme) and of developing standards to realize sustainable forest management here in South Korea and spread it elsewhere. It is joined by various interested parties of seventeen organizations such as owners of national, public and private forests; forestry businesses in the timber and paper industry; environmental groups; labor groups; consumer groups; technological associations; universities and research institutions. On top of that, it also has separate three subcommittees including Standard Subcommittee which creates and reviews a proposed bill for standards and collects opinions about the bill from the public. The bill is later referred to the KFCC which deliberates and makes a decision.

Introduction of Standard

This standard contains requirements for forest management agents to pull off sustainable forest management from the perspective of the environment, society and economy.

As a signatory to Montreal Process, South Korea has made efforts to set and implement criteria and indicators for sustainable forest management on a national scale. In this sense, this standard has provided common criteria to pursue integration into the Montreal Process while actual evaluation indicators have been developed according to the PEFC's Requirements for Sustainable Forest Management (PEFC ST 1003:2018) after collection of opinions from interested parties to reflect the characteristics of domestic forest sites.

This standard is a product from a draft made according to transparent and fair procedures by the Standard Subcommittee joined by interested parties of fifteen organizations in the fields of the environment, society, economy and policy including mountain owners and experts and by a working group for proposing a bill for standards after going through pilot application at forest sites and collection of opinions from the public. In December 2015, it was introduced to the KFCC by which its primary standard was finally approved.

In this standard, a subject of a sentence shall be regarded as those responsible for forest management and the term "shall" is used throughout this standard to indicate required provisions.

1. Scope

This standard shall be applicable to all of forest management units including forest management agents (a forest owner and a forest manager), forest laborers and contractors.

Above this standard, Group Forest Management Certification follows the (KFCC-A-01) 「Group Forest Management Certification」.

2. Normative Reference

The following normative references are essential for the application of this standard. Regardless of the issuance year stated or not, the most updated version (including the amendment) of the references shall be used.

ILO No. 87, Freedom of Association and Protection of the Right to Organise Convention, 1948 ILO No. 29, Forced Labour Convention, 1930

ILO No. 98, Right to Organise and Collective Bargaining Convention, 1949 ILO No. 100, Equal Remuneration Convention, 1951

ILO No. 105, Abolition of Forced Labour Convention, 1957

ILO No. 111, Discrimination (Employment and Occupation) Convention, 1958 ILO No. 138, Minimum Age Convention, 1973

ILO No. 169, Indigenous and Tribal Peoples Convention, 1989 ILO No. 182, Worst Forms of Child Labour Convention, 1999

ISO/IEC 17021-1, Conformity assessment — Requirements for bodies providing audit and certification of management systems — Part 1: Requirements

United Nations, United Nations Declaration on the Rights of Indigenous Peoples, 2007 United Nations, Universal Declaration of Human Rights, 1948

Stockholm Convention on Persistent Organic Pollutants, 1998 PEFC ST 1001, Standard Setting – Requirements

PEFC ST 1002, Group Forest Management Certification – Requirements

PEFC GD 1007, Endorsement and Mutual Recognition of National Systems and their Revision

PEFC ST 2002, Chain of Custody of Forest Based Products – Requirements

ISO Guide 2, Standardization and related activities — General vocabulary

3. Terms and Definition

3.1 Primary forest (primeval forest)

A natural forest untouched by the force of humans from the ancient time

3.2 Fundamental ILO Conventions

Eight fundamental conventions (ILO 29, 87, 98, 100, 105, 111, 138, 182) that are especially separated by the ILO Board of Directors from other conventions given the fundamental principles and rights at the workplace such as forced labor, freedom of association and protection of the right to organize, a right to organize and collective bargaining, equal remuneration, abolition of forced labour, discrimination (employment and occupation), minimum age and worst forms of child labour

Note: ILO(International Labour Organization): a labor organization of the UN that addresses labor issues

3.3 Steep slop

A natural/artificial slop (including a retaining wall or an embankment) belonging to a residential area, a road/railroad and a park; or a mountain area adjacent to it that has been designated as such by the presidential decree

Note The following are steep slop-lands according to the presidential decree 「Prevention of Steep Slop Disasters Act」.

1. An artificial slop with a height of 5m or higher from the ground and a gradient of 34° or higher and a length of 20m or longer
2. A natural slope with a height of 50m or higher from the ground and a gradient of 34° or higher
3. Other artificial and natural slops or mountain areas regarded necessary to be managed to prevent disasters by relevant agencies or directors of Headquarters for Prevention of Disasters and Safety established in provinces, cities, districts or counties according to Article 6(1) of the Framework Act on the Management of Disasters and Safety

3.4 Animal population

A group of the same species animals in a certain region and time

3.5 Endangered species

A species that is at the risk of extinction of the entire or the considerable number of its population

3.6 Monitoring

A series of activities of providing advice or a warning to the subject of monitoring by studying and keeping tabs on the subject's state, behaviors and specific matters

3.7 Unstocked forest land

A forest land which has yet to grow trees / An unstocked land refers to a forest land with a crown area of less than 20% at a state-owned and less than 30% at a private forest. Generally speaking, it is a forest land without growing trees.

3.8 Tending

A means given to tree stands in order to clear up the forest floor from creation of young stands after reproduction until the new reproduction period comes, to enhance soil as a way to help growth of forest trees and to fulfill the purpose of production

3.9 Felling

An activity of cutting trees down and trimming small trees, or logging trees at a forest

3.10 Variety

A taxonomic rank below that of species for a group different from others with a practical trait that has general genetic features

3.11 Non-timber forest products

All forest products excluding timber which are derived from trees such as resin and leaves as well as products from plants and animals

3.12 Erosion control work

Construction to prevent from disasters and undo the damage caused by moving soil, sand or gravel due to heavy rains or winds / The construction can be done as an engineering work and forest plantation, or in between. Depending on construction sites, it can be largely divided into hill side erosion control, wild stream erosion control and sand dune fixation. The erosion control work includes restoration of a devastated land; establishment of structures to prevent mountains or other lands from collapsing, soil from running off or sand from blowing away; seeding and growth of plants; and accompanying landscaping or conservation of headwaters.

3.13 Forest

Terms and conditions set forth in 「Creation and Management of Forest Resources Act」 are as follows. But, standing trees and bamboos on farmlands, grasslands, residential areas and roads, and their lands shall be excluded.

1. Standing trees and bamboos that are growing in a group and their lands
2. Lands where standing trees and bamboos growing in a group temporarily have disappeared
3. Lands reserved to grow standing trees and bamboos in a group
4. Roads (forest trails) built for management and maintenance of a forest
5. Rocky lands and marshlands (a wet land surrounded by swamps and ponds) located in lands mentioned in 1 to 3 above

3.14 Forest regeneration

A process of again creating a forest that has been used for felling

3.15 Forest management plan

A plan devised to organize and combine forest lands, labor and capital, the main elements for forest management, in order to effectively achieve the purpose of forest management in consideration of features of the forestry industry including ① general research, ② forest sectioning, ③ forest research, ④ treatments regimes, ⑤ facility plans, ⑥ budgeting, ⑦ evaluation plans of management outcome

3.16 Forest management unit

A specific forest area that is distinguished along the boundaries on the map and is managed by the single management system for the clear purpose under multi-year management plans

3.17 Forest management agent

Those responsible for operation and management of forest resources including the management system, structure, plans and field work

3.18 Use rights

A right of utilizing forest resources under the local custom or mutual agreement or according to rules set by those who hold other access rights

3.19 Forest ownership

A right to fully control a forest including its use, profits and sales, or a right to lease/sell a forest to others, use/destroy it or to do with it as one sees fit

3.20 Forest resources

All resources that a forest holds in general / They are divided into two : material and non-material resources. Material resources refer to byproducts such as wild vegetables, mushrooms, sap and minerals as well as lumber that is main products of a forest whereas non-material resources include intangible benefits such as the public good or environmental functions that a forest offers to humans. Wild animals that correspond to hunting resources are included in these forest resources.

3.21 Local provenances

A tree species adapted to the local conditions (soil, water, supply of nutrients and drainage) and climate (temperature, precipitation, air volume and salinity)

3.22 Biodegradable

A property to be degraded by the enzyme system of bacteria or other living organisms

3.23 Productivity

A maximum amount of goods or commodities produced with an input of production factors / Productivity consist of production means and men (labor) who realize production using the means.

3.24 Growth amount

An amount of growth for a certain period of time

3.25 Biotope

A certain area where a specific organism interacts with other organisms / The size of biotope varies and the term itself does not bear any positive or negative meaning. Rather, it has a value-neutral meaning.

3.26 Riparian area

A dam (according to a planned flood line) used as a source of water supply and some upstream areas designated and notified by the Minister of environment to preserve the water quality of Geum River, Nakdong River, Yeongsan/Seomjin River and Han River

3.27 Horizontal and vertical structure

A vertical structure means divisions of a forest from the forest canopy to the surface while a horizontal structure refers to the distribution of individual trees or tree communities depending on their diameters

3.28 Wetlands

A transition area where a land and hydrosphere meet with a shallow water on the surface of or adjacent to the surface of the water table

3.29 Work manual

A forest management manual according to the purpose of forest management with appropriately application of felling, forestation and tending to maintain and create a forest

3.30 Forestation

A process to create a forest by planting young trees at a felling site

3.31 Age class

Making a class of ages by putting together ages of stands according to the needs of the forest practices (The number of age is represented as age class which is 20 years for a high tree or 5 years for a coppice forest, and it starts from the first class for the youngest.)

3.32 Buffer zone

A border zone created to minimize impact from changes that occur in both sides

3.33 Exotic trees

A tree species introduced from overseas and a counterpart to an indigene species

3.34 GMO trees

A tree modified with a way that does not produce genetic materials from natural crossbreeding and/or recombination

3.35 Genetic diversity

Genetic information or subsequent diversity of traits out of biodiversity that

represents variability of all living organisms which lead to variability of an ecological complex

3.36 Silviculture

All activities to purely tend a forest such as tree planting, tending of young trees and shoots, cutting weeds, pruning, salvage cutting, freeing from vines, fertilization, thinning, pest control except for forestation

3.37 Rotation period

A period from the start of felling until the entire forest is logged down according to a plan to log a forest in a working bloc

3.38 Uneven-aged forest

A forest composed of trees whose age is different each other

3.39 Stakeholder

Individuals, institutions, local residents, employees, investors, guarantors, clients, consumers, environmental groups, consumer groups and the general public who have legitimate interests in goods and services provided by a forest management unit

3.40 Artificial forest

A forest created by humans who plant trees or a forest tended with stands and hands of people

3.41 Forest Type

- 1) An external shape of a forest such as species, age and growth of trees that form the forest and creation of the forest canopy,
- 2) The forest type, in general, can be divided into needle-leaved, broad-leaved, mixed and bamboo forests. (It is based on 75% of tree species determined by the FAO during planning of forest management, which means if the ratio of coniferous trees is 75% or more, it shall be

regarded as a needle-leaved forest.)

3.42 Forest condition

Conditions of a group of trees that form stands such as a forest type, forest age, a tree height, age class, diameter class, a degree of stocking, tree crown density, volume, a growth ratio, a rate of mixed forests, low vegetation

3.43 Growing tree stock

A forest tree, subject to labor, is the basic factor out of capital goods in forest management and is normally a product from a seed or a seedling. In this sense, it has been named growing tree stock since it is regarded as a capital that keeps production down the road.

3.44 Silviculture system

The silviculture system is divided into a high forest (high tress), a low forest (coppice trees) and a composite forest according to the style of forest management.

3.45 Endemic species

A variety preserved in each region without going though breeding

3.46 Reproductivity

A capacity to reproduce within a range that does not reduce the total volume in a forest

3.47 Reforestation

Creation of a forest artificially in a land again which had originally been a forest but was converted for other usage

3.48 Conversion of mountain areas

Use of a mountain area other than planting, forest tending, felling, collection of forest products such as quarrying and temporary use of a forest land; and a change in a mountain area's properties for such use

3.49 Species diversity

Diversity of all species living on the earth including plants, animals, germs, bacteria and protozoans

3.50 Local community

As a living community created in a certain area, it includes regionality, a local-based society and a series of collective practices based on a local area.

3.51 Local residents

A person or people residing in a certain area

3.52 Forest land conditions

Topographical and environmental features that impact the growth of trees at a forest

3.53 Natural regeneration

Creation of a young forest mainly by the force of the nature

3.54 Carbon sink

Stands, bamboos, organic matters from withered plants, soil, wooden goods and forest biomass energy that absorb and store carbon

3.55 Abandoned land

An deserted land which was used as a farmland but has been left uncultivated for long

3.56 Shape

The state and a degree of a change depending on the diameter and location of a tree trunk

3.57 Mixed forest

A forest mixed with coniferous trees and broad-leaved trees

3.58 Chemical substances

A series of fertilizers, insecticides, germicide and hormones used for forest management

3.59 Recreational function

A rest and healing function for the body and mind in a forest

3.60 Integrated Pest Management (IPM)

The careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimise risks to human health and the environment (source: FAO 2018).

3.61 Management system

Set of interrelated or interacting elements of an organisation to establish policies and objectives and processes to achieve those objectives.

3.62 Manager

Person who directs and controls an organisation.

Note: A manager may also be a person executing her or his ownership rights or traditional or customary tenure rights.

3.63 Non-forest ecosystem

Land not meeting the definition of forest.

3.64 Trees outside Forests (TOF)

Trees growing outside areas of nationally designated forest land. Such areas will normally be classified as "agriculture" or "settlement".

4. Organisation

4.1 General

The requirements for sustainable forest management defined by regional, national or sub-national forest management standards shall:

- a) include management and performance requirements that are applicable at the forest management unit level, or at another level as appropriate, to ensure that the intent of all requirements is achieved at the forest management unit level;

Note: An example of a situation where a requirement can be defined as being at another level (e.g. group/regional) is monitoring of forest health. Through monitoring of forest health at regional level, and communicating of results at the FMU level, the objective of the requirement is met without the necessity to carry out the individual monitoring of each forest management unit.

- b) be clear, performance based and auditable;
- c) apply to activities of all forest operators in the defined forest area who have an impact on achieving compliance with the requirements;
- d) require record-keeping that provides evidence of compliance with the requirements of the forest management standards;
- e) specify "100% PEFC certified", or another system specific claim, as claim to be used to communicate the origin of products in an area covered by the standard to customers with a PEFC chain of custody;

Note: System specific claims of PEFC endorsed standards and PEFC Council approved abbreviations of such claims and the claim "100% PEFC certified", and their translations into languages other than English, are published online on the PEFC website www.pefc.org.

- f) require that where owners/managers of forests are selling products from areas other than covered by the standard, only products from areas covered by the standard are sold with the claim "100% PEFC-certified" or a system specific claim;

- g) require that claims on the origin of products in an area covered by the standard are only made by forest owners/managers covered by a PEFC recognised certificate issued against the standard;
- h) specify requirements concerning the information which need to be provided to a PEFC chain of custody certified customer;
- i) include an overview of applicable legislation, if requirements of this benchmark are not reflected in the regional, national or sub-national standard, because they are already addressed through the legislation.

4.2 Understanding the needs and expectations of affected stakeholders

The standard requires that the organisation shall determine:

- a) the affected stakeholders that are relevant to the sustainable forest management;
- b) the relevant needs and expectations of these stakeholders.

4.3 Determining the scope of the management system

4.3.1 The standard requires that the organisation shall determine the boundaries and applicability of the management system to establish its scope.

4.3.2 The standard requires that forest management shall comprise the cycle of inventory and planning, implementation, monitoring and evaluation, and shall include an appropriate assessment of the social, environmental and economic impacts of forest management practices. This shall form a basis for a cycle of continuous improvement.

4.3.3 The organisation shall clearly define forest ownership and use rights.

- a) The organisation shall have legal certification documents for forest ownership and use issued by the government, local governments and related organisations.
- b) The organisation shall clearly mark forest ownership boundaries on the map.

5. Leadership

5.1 The standard requires that the organisation shall provide a commitment:

- a) to comply with the sustainable forest management standard and other applicable requirements of the certification system;
- b) to continuously improve the sustainable forest management system

5.2. The standard requires that this commitment shall be publicly available.

5.3 The standard requires that responsibilities for sustainable forest management shall be clearly defined and assigned.

6. Planning

6.1 Actions to address risks and opportunities

6.1.1 The standard requires that the organisation shall consider risks and opportunities concerning compliance with the requirements for sustainable forest management. Size and scale of the operations of the organisation shall be considered.

6.1.2 The standard requires that inventory and mapping of forest resources shall be established and maintained, adequate to local and national conditions and in correspondence with the requirements described in this international benchmark standard.

6.2 Management plan

6.2.1 The standard requires that management plans shall be:

- a) elaborated and periodically updated or continually adjusted;
- b) appropriate to the size and use of the forest area;

c) based on applicable local, national and international legislation as well as existing land-use or other official plans; and

d) adequately covering forest resources.

6.2.2 The standard requires that management plans shall take into account the different uses or functions of the managed forest area.

6.2.3 The standard requires that management plans shall include at least a description of the current forest management unit, long-term objectives, and the average annual allowable cut, including its justification.

6.2.4 The standard requires that the annually allowable use of non-wood forest products shall be included in the management plan where forest management covers commercial use of non-wood forest products at a level which can have an impact on their long-term sustainability.

6.2.5 The standard requires that management plans specify ways and means to minimise the risk of degradation and damage to forest ecosystems.

6.2.6 The standard requires that management plans shall take into account the results of scientific research

6.2.7 The standard requires that a summary of the management plan, appropriate to the scope and scale of forest management, shall be publicly available and shall include information on the general objectives and forest management principles.

6.2.8 The standard requires that the publicly available summary of the management plan may exclude confidential business and personal information and other information made confidential by applicable legislation or for the protection of cultural sites or sensitive natural resource features.

6.3 Compliance requirements

6.3.1 Legal compliance

6.3.1.1 The standard requires that the organisation shall identify and have access to

the legislation applicable to its forest management and determine how these compliance obligations apply to the organisation.

Note: For a country which has signed a FLEGT Voluntary Partnership Agreement (VPA) between the European Union and the producing country, the “legislation applicable to forest management” is defined by the VPA agreement.

6.3.1.2 The standard requires that the organisation shall comply with applicable local, national and international legislation on forest management, including but not limited to forest management practices; nature and environmental protection; protected and endangered species; property, tenure and land-use rights for indigenous peoples, local communities or other affected stakeholders; health, labour and safety issues; anti-corruption and the payment of applicable royalties and taxes.

6.3.1.3 The standard requires that where no anti-corruption legislation exists, the organisation must take alternative anti-corruption measures appropriate to the risk of corruption.

6.3.1.4 The standard requires that measures shall be implemented to address protection of the forest from unauthorised activities such as illegal logging, illegal land use, illegally initiated fires, and other illegal activities.

6.3.2 Legal, customary and traditional rights related to the forest land

6.3.2.1 The standard requires that property rights, tree ownership and land tenure arrangements shall be clearly defined, documented and established for the relevant management unit. Likewise, legal, customary and traditional rights related to the forest land shall be clarified, recognised and respected.

Note: Guidance for the handling of tenure arrangements can be obtained from the FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security.

6.3.2.2 The standard requires that forest practices and operations shall be conducted in recognition of the established framework of legal, customary

and traditional rights such as outlined in ILO 169 and the UN Declaration on the Rights of Indigenous Peoples, which shall not be infringed upon without the free, prior and informed consent of the holders of the rights, including the provision of compensation where applicable. Where the extent of rights is not yet resolved, or is in dispute, there are processes for just and fair resolution. In such cases forest managers shall, in the interim, provide meaningful opportunities for parties to be engaged in forest management decisions whilst respecting the processes and roles and responsibilities laid out in the policies and laws where the certification takes place.

6.3.2.3 The standard requires that forest practices and operations shall respect human rights as defined by the Universal Declaration on Human Rights.

6.3.3 Fundamental ILO conventions

6.3.3.1 Forest management agents (including subcontractors) and forest laborers shall comply with basic ILO Conventions and domestic labor regulations, and employment matters occurring from forest management shall be documented and systematically managed.

- a) A reasonable procedure shall be devised regarding hiring, placement, education and training, promotion and dismissal of employees at all ranks.
- b) According to the ILO Convention, minors 15 year old or under shall not be employed in all types of forest labor.
- c) A minimum wage defined by the Labor Act shall be observed, and a proper wage system that reflects domestic prices shall be in place.
- d) Regulations and employment rules regarding hiring of forest laborers shall be prepared.
- e) An employment contract written in detail for an individual forest laborer shall be kept in storage, and the forest laborer shall be fully understood of the contract contents.
- f) The employment contract for a forest laborer shall specify that he or she is equally granted all workers' rights defined by the Labor Act and provisions of compensation due to a disaster are also included.

- g) A reasonable and proper system shall be in place to solve employment-related conflicts.
- h) A contractor who hires forest laborers shall sign up for social security programs including an employee insurance and a national health insurance.
- i) A forest laborer shall obligation to participate in training related to forest operation (i.e. a first-aid treatment and safety education, etc.) while forest management agents shall have a responsibility to implement the training.
- j) Forest manager and forest owner shall identify of risk, have protect measures, safety equipment and facilities etc, and provide those information to secure a safe working condition for forest laborers.
- k) A forest laborer shall wear personal protective gear all the time before working and be fully aware of how to use forestry equipment.

6.3.4 Health, safety and working conditions

6.3.4.1 The standard requires that forest operations shall be planned, organised and performed in a manner that enables health and accident risks to be identified and all reasonable measures to be applied to protect workers from work-related risks. Workers shall be informed about the risks involved with their work and about preventive measures.

6.3.4.2 The standard requires that working conditions shall be safe, and guidance and training in safe working practices shall be provided to all those assigned to a task in forest operations. Working hours and leave shall comply with national laws or applicable collective agreements.

Note: Guidance for specifying national standards can be obtained from the ILO Code of Good Practice: Safety and Health in Forestry Work.

6.3.4.3 The standard requires that wages of local and migrant forest workers as well as of contractors and other operators operating in PEFC-certified areas shall meet or exceed at least legal, industry minimum standards or, where applicable, collective bargaining agreements.

Note: Where wages are below the living wage of a country, steps should be taken to attain increased wages towards a living wage level over time in addition to increases for inflation.

6.3.4.4 The standard requires that the organisation is committed to equal opportunities, non-discrimination and freedom from workplace harassment. Gender equality shall be promoted.

7. Support

7.1 Resources

7.1.1 The standard requires that the organisation shall determine and provide the resources needed for the establishment, implementation, maintenance and continual improvement of the sustainable forest management system.

7.2 Competence

7.2.1 The standard requires that forest managers, contractors, employees and forest owners shall be provided with sufficient information and kept up-to-date through continuous training in relation to sustainable forest management, as a precondition for all management planning and practices described in this benchmark.

7.3 Communication

7.3.1 The standard requires that effective communication and consultation with local communities, indigenous peoples and other stakeholders relating to sustainable forest management shall be provided.

7.4 Complaints

7.4.1 The standard requires that appropriate mechanisms are in place for resolving complaints and disputes relating to forest management operations, land use rights and work conditions.

7.5 Documented Information

7.5.1 The standard requires that the organisation's management system shall include documented information required by the standard and determined by the organisation as being necessary for the effectiveness of the sustainable forest management system.

7.5.2 The standard requires that the documented information is relevant, and updated as appropriate, to the activities of the organisation.

8. Operation

8.1 Conservation of Biodiversity

8.1.1 Management objectives shall be specified in the forest management plan to maintain and enhance biodiversity of species and genetic levels in forest ecosystems.

8.1.2 The basic data regarding the state of forest ecosystems such as the area and composition of forest floor and age class in the ecosystem shall be systematically recorded and maintained.

8.1.3 Forest resources shall be investigated, mapped and managed to protect the ecologically important forest areas as follows and to maintain and enhance the status of those areas.

- a) Forest ecosystems that are protected, rare, sensitive or representative such as riparian areas and wetland biotopes
- b) Areas containing endemic species and habitats of threatened species that need protection
- c) Areas containing genetic resources on sites that are threatened or protected
- d) Nationally significant large-scale landscape areas with a high population of naturally-born species

8.1.4 Rare, threatened and endangered species shall be managed according to relevant guidelines for their protection.

- a) Separate protection and management technology for native or rare species that are valuable for maintaining biodiversity
- b) Appropriate protective measures based on experts' advice by identifying composition types and their populations
- c) Relevant measures such as monitoring or controlling to prevent illegal hunting, catching, and exploitation

- d) Prohibition of taking advantage of rare, threatened, and endangered species as a commercial purpose and, if possible, protective measures to increase the population of a species

8.1.5 Tree species shall be chosen in consideration of the reasonable level of growing tree stock, forest management objectives and local conditions as for afforestation and reforestation.

- a) Afforestation and reforestation activities that contribute to the improvement and restoration of ecological connectivity shall be promoted
- b) Native species and local provenances that are well adapted to site conditions are preferable, if possible.
- c) After evaluating impacts that exotic species or varieties have on the native species and local provenances, exotic species or varieties may be used only in cases where negative impacts can be prevented or minimized, or positive effects are expected environmentally or economically.

8.1.6 Genetically modified trees shall not be used.

8.1.7 Forest management practices shall, where appropriate, be deployed to promote structural diversity both horizontally and vertically such as uneven-aged and mixed stands as well as the diversity of species and landscapes. Traditional management systems that have created valuable ecosystems, such as coppice, on appropriate sites shall be supported, when economically feasible.

8.1.8 Tending and harvesting activities shall be conducted in a way that does not cause lasting damage to ecosystems.

8.1.9 An action shall be taken to strike a balance between the size of an animal population including grazing and its pressure on forest regeneration and growth as well as on biodiversity.

8.1.10 Dead trees, hollow trees, old groves and rare tree species shall be maintained to a certain degree of population and distribution necessary to maintain, enhance and protect biodiversity, after taking into account the potential effect on health and stability of forests and surrounding ecosystems.

8.2 Maintenance of Forest Ecosystem Productivity

8.2.1 Management objectives shall be specified in the forest management plan to maintain productive capacity of forests to produce a range of wood and non-wood forest products and services on a sustainable basis.

8.2.2 An action shall be taken to maintain productive capacity of forests in order to produce wood and non-wood forest goods and services in a sustainable manner.

- a) A long-term plan regarding forest production shall be drawn and enforced while considering economic, social, ecological substantiality and any available market studies, possibilities for new markets to archive sound economic performance
- b) A drawing that states different functions of forests in the forest management plan is required.
- c) Natural regeneration, if appropriate, is the first priority to be considered and implemented.

8.2.3 Production of wood, non-wood forest goods and services shall be encouraged and systematically managed in consideration of the forests' functions.

8.2.4 It is necessary to properly utilize policy measures applicable to the forest management unit in order to achieve sustainable production, and keep them as a record.

8.2.5 Production of wood and non-wood forest products, tending and regeneration shall be carried out in a way not to decline the forest' productivity.

8.2.6 An appropriate plan considering harvested forest products with due regard to value loss including nutrient off-take etc., shall be made to ensure that a harvesting rate does not exceed a growth rate, and wood and non-wood forest products shall be produced to a degree that does not go beyond the forest reproductive ability and by using suitable production methods. The exploitation of non-timber forest products, including hunting and fishing shall be regulated, monitored and controlled, especially.

8.2.7 Relevant infrastructure shall be planned, constructed, and maintained while minimizing negative impacts on the environment ,ecologically important forest area listed under 1.3, and consideration of protecting species listed under 1.4.

8.3. Maintenance of Ecosystem's Health and Vitality

8.3.1 Management objectives shall be specified in the forest management plan to maintain and enhance health and vitality of forest ecosystems and to recover degraded forest ecosystems, if possible, using a silvicultural means.

8.3.2 An action shall be taken to maintain and enhance health and vitality of forest ecosystems in the forest management unit.

- a) Forest operation shall be implemented in accordance with the management guidelines for sustainable forest resources.
- b) Periodically, silvicultural activities including forest tending and thinning shall be carried out according to work manuals.

8.3.3 Means and measure shall be devised to prevent any factors (pests, fire etc) causes that could have negative impacts on health and vitality of forest

ecosystems, and an appropriated action making use of these policy instruments shall be taken against the cause if detected.

- a) It is necessary to have a disaster control manual in place for such cases as wildfire and pests and pro-actively use it, and the use of pesticides shall be kept to a minimum and biologically preventive measures shall be used based on economic feasibility.
- b) If equipment or pesticides have to be used for pest control, instructions provided by a supplier shall be followed. Proper equipment and training shall be secured before using them.
- c) Effect of factors that affect health and vitality of forest ecosystems and the factors themselves shall be monitored every 5 years.
- d) The use of fertilizers cannot be an alternative to proper soil nutrient management, but fertilizers shall be used in a controlled manner and with environmental considerations, provided that proper nutrient management is possible through the use of fertilizers.

8.3.4 Chemical fertilizers, pesticides, highly toxic pesticides, and the use of the following pesticides, which are prohibited by international cooperation and domestic laws, shall be prohibited.

- a) WHO type 1A and 1B
- b) Pesticides containing chlorinated hydrocarbons

Note: If there is no other viable alternative, WHO 1A and 1B grade pesticides may be used in accordance with domestic laws.

8.3.5 All records of pesticide use shall be documented

8.3.6 Techniques of tending, harvesting, extraction and transport shall be deployed to minimize damage on trees and soil.

- a) Technical guidelines regarding forest operation shall be in place and an appropriate means of operation may be chosen.
- b) It is required to use fuel, oil and other chemicals used in forestry machine as stated in the relevant guidelines, and to use eco-friendly products such as

biodegradable chain oil and hydraulic liquid to minimize environmental impacts from machinery work, if possible.

- c) Leakage of oil or indiscriminate disposal of wastes during forest management operation shall be strictly prohibited, and wastes shall be disposed of in accordance with the relevant guidelines, if possible, in an environmentally accountable manner.
- d) The leakage of oil or fuel during forest work shall be prevented, and emergency procedures shall be prepared to minimize environmental damage caused by accidental leakages

8.4 Conservation and Maintenance of Soil and Water Resources

8.4.1 Management objectives shall be specified in the forest management plan to maintain and enhance a protective function of the forest for society such as protection of infrastructure, soil from erosion, climate control, carbon sequestration and water resources from adverse impacts including floods or avalanches.

8.4.2 Locations and watersheds of areas that are environmentally sensitive within a forest management unit shall be marked on the map and appropriate management measures shall be established, and information regarding the current state of the areas shall be recorded and maintained.

- a) Site where the first and foremost priority is to protect soil and water resources such as erosion-prone areas or areas that cause excessive erosion into watercourses
- b) Site with a steep slope or where erosion is forecasted
- c) Site where construction is planned such as road construction and erosion control

8.4.3 The forest that protects water resources shall be under special care, and the use of harmful substances negatively affecting water quality and improper silvicultural practices shall be avoided.

- a) Forest management practices negatively affecting the volume and quality of

water resources shall be minimized.

- b) A buffer zone shall be properly set aside and marked on the map to prevent soil erosion and protect water resources in riparian areas.

8.4.4 Damage shall be minimized from all types of physical disturbances including road construction and erosion control, and proper road drainage facilities shall be installed and maintained.

- a) Installation of roads or other obstacles shall be minimized near riparian areas or wetlands, and a buffer zone shall be properly set aside for conservation of soil, water resources, biodiversity and landscapes while conducting forest operation.
- b) Road construction and erosion control shall be conducted according to the relevant technique guideline, if possible, in an environmentally friendly manner.
- c) Attention shall be paid to the choice of an operation season or timing in order to minimize soil spillage and an avalanche due to machinery work.

8.5 Maintenance and Enhancement of Forest Resources and Contribution to the Global Carbon Cycle

8.5.1 Management objectives based on land use planning shall be specified in the forest management plan to maintain and increase forest areas and to maintain and improve the quality of economical, ecological, cultural, and social value of forest resources. For the purpose of management plan, appropriate silvicultural measures shall be taken to maintain or reach a level of the growing stock that is economically, ecologically and socially desirable.

8.5.2 It needs to recognize that forest management plays a role in preventing global warming as a carbon sink in the forest management unit. The management commitment for such a role shall be declared.

8.5.3 Forest management shall be comprised of cyclic processes to improve and

maintain forest resources such as investigation into forest resources, mapping, planning, implementation, monitoring and evaluation based on the principle of continuous improvement. Assessment of the social, environmental, and economic impacts of forest management operations shall be conducted.

8.5.4 Forests shall not be converted into any other type of land use, including a conversion of a primeval forest into forest plantations unless in justified circumstances such as the following cases.

- a) National or local policies and legislations shall be observed in terms of land use and forest management, and the forest in question is already included in the national or local land use plan including public/stakeholders consultation.
- b) If the converted part is a small percentage(5% or less) of forests in the certified area.
- c) There is no negative impact on forest ecosystems that are rare, threatened and endangered; habitats of such species; culturally and socially important areas, and other protected areas.
- d) It is possible to conserve a forest for a long term and contribute to socio-economic benefits.
- e) not destroying forests that store significant amounts of carbon.

8.5.5 The standard requires that afforestation of ecologically important non-forest ecosystems shall not occur unless in justified circumstances where the conversion:

- a) is in compliance with national and regional policy and legislation applicable for land use and forest management and is a result of national or regional land-use planning governed by a governmental or other official authority; and
- b) is established based on a decision-making basis where affected stakeholders have opportunities to contribute to the decision-making on conversion through transparent and participatory consultation processes; and
- c) does not have negative impacts on threatened (including vulnerable, rare or endangered) non- forest ecosystems, culturally and socially significant areas, important habitats of threatened species or other protected areas; and

- d) entails a small proportion of the ecologically important non-forest ecosystem managed by an organisation; and
- e) does not destroy areas of significantly high carbon stock; and
- f) makes a contribution to long-term conservation, economic, and social benefits.

8.5.6 The standard requires that if conversion of severely degraded forests to forest plantations is being considered, it must add economic, ecological, social and/or cultural value. Precondition of adding such value are circumstances where the conversion:

- a) is in compliance with national and regional policy and legislation applicable for land use and forest management and is a result of national or regional land-use planning governed by a governmental or other official authority; and
- b) is established based on a decision-making basis where affected stakeholders have opportunities to contribute to the decision-making on conversion through transparent and participatory consultation processes; and
- c) has a positive impact on long-term carbon sequestration capacity of forest vegetation; and
- d) does not have negative impacts on ecologically important forest areas, culturally and socially significant areas, or other protected areas; and
- e) safeguards protective functions of forests for society and other regulating or supporting ecosystem services; and
- f) safeguards socio-economic functions of forests, including the recreational function and aesthetic values of forests and other cultural services; and
- g) has a land history providing evidence that the degradation is not the consequence of deliberate poor forest management practices; and
- h) is based on credible evidence demonstrating that the area is neither recovered nor in the process of recovery.

8.5.7 The standard requires that the quantity and quality of the forest resources and the capacity of the forest to store and sequester carbon shall be safeguarded in the medium and long term by balancing harvesting and growth rates, using appropriate silvicultural measures and preferring

techniques that minimise adverse impacts on forest resources.

8.5.8 The standard requires that climate positive practices in management operations, such as green- house gas emission reductions and efficient use of resources shall be encouraged.

8.5.9 If possible, the conversion of abandoned and treeless land into a forest shall be considered.

8.5.10 Responsibilities and authorities for sustainable forest management shall be clearly determined, and records relating to forest management and providing evidence of compliance with the requirements of this document shall be kept for a minimum of five years

8.6 Reinforcement and Maintenance of Long-term and Multilateral Socio-Economic Benefit

8.6.1 Management objectives shall be specified in the forest management plan to respect the forest's socio-economic and multiple functions and make an effort for that matter.

8.6.2 Forest operation shall be carried out in a way not to impose significant negative impacts on forest resources while considering their socio-economic roles, recreational functions and aesthetic values.

8.6.3 Efforts shall be made to provide opportunities for the long-term welfare and economic benefits to the local community adjacent to the forest.

- a) A fair or better opportunity for employment, education or contracts shall be provided to the locals and the underprivileged class.
- b) Users shall be informed of regulations and appropriately put under control to make sure that they do not cause any negative impacts on the forest's various functions in case the public is granted access to forest-related services

and amenities within a range where they don't cause a negative influence on the forest ecosystem.

8.6.4 Sites or locations that locals value culturally, ecologically, economically and spiritually shall be under proper protective measures.

- a) Sites or landmarks with cultural, ecological, economical, and spiritual significance to locals shall be identified through a mutual agreement among stakeholders, and shall be properly divided into sections and managed.
- b) Reasonable procedures shall be established to sort out conflicts regarding sites or landmarks as mentioned above.

8.6.5 A system shall be established to effectively communicate with stakeholders, and make the best use of their local forest-related experience and knowledge in forest management.

- a) It is necessary to perform activities to encourage locals and a variety of stakeholders to join forest management such as forest management planning, decision making, data collection, monitoring and evaluation, and such activities shall be kept as a record.
- b) Local communities adjacent to a forest shall be actively utilized to secure forest management information and supply and demand of laborforce.
- c) Appropriate mechanism for resolving Complaints and disputes relating to forest management between forest operators and local people shall be provided.

8.6.6 A systematic scheme shall be up and running to ensure effective distribution of incentives and fair division of costs and benefits among stakeholders.

- a) As for national and public forests, stakeholders in the forest management unit shall be clearly defined, so that they have an access to information regarding forest management and participation in decision-making process.
- b) As for national and public forests, how costs and benefits occur from forest management shall be, in principle, made to public.
- c) A systematic scheme shall be up and running to ensure effective and fair distribution among stakeholders.

d) A proper system shall be up and running to solve conflicts occurring between stakeholders.

8.6.7 Contribution shall be made to contribute to research activities and data collection needed for sustainable forest management or to support relevant research activities carried out by other organizations, and forest management shall be based on the results of scientific research, such as research institute, Forest Agency etc.

9. Performance evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 The standard requires that monitoring of forest resources and evaluation of their management, including ecological, social and economic effects, shall be periodically performed, and results fed back into the planning process.

9.1.2 The standard requires that health and vitality of forests shall be periodically monitored, especially key biotic and abiotic factors that potentially affect health and vitality of forest ecosystems, such as pests, diseases, overgrazing and overstocking, fire, and damage caused by climatic factors, air pollutants or by forest management operations.

9.1.3 The standard requires that where it is the responsibility of the forest owner/manager and included in forest management, the use of non-wood forest products, including hunting and fishing, shall be regulated, monitored and controlled.

9.1.4 The standard requires that working conditions shall be regularly monitored and adapted as necessary.

9.2 Internal audit

9.2.1 Objectives

The standard requires that an internal audit programme at planned intervals shall provide information on whether the management system

a) conforms to

- the organisation's requirements for its management system;
- the requirements of the national sustainable forest management standard

b) is effectively implemented and maintained.

9.2.2 Organisation

The standard requires that the organisation shall:

- a) plan, establish, implement and maintain an audit programme(s) including the frequency, methods, responsibilities, planning requirements and reporting, which shall take into consideration the importance of the processes concerned and the results of previous audits;
- b) define the audit criteria and scope for each audit;
- c) select the auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
- d) ensure that the results of the audits are reported to relevant management;
- e) retain documented information as evidence of the implementation of the audit programme and the audit results.

9.3 Management review

9.3.1 The standard requires that an annual management review shall at least include

- a) the status of actions from previous management reviews;
- b) changes in external and internal issues that are relevant to the management system;
- c) information on the organisation's performance, including trends in:
 - nonconformities and corrective actions;
 - monitoring and measurement results;

- audit results;
- d) opportunities for continual improvement.

9.3.2 The standard requires that the outputs of the management review shall include decisions related to continual improvement opportunities and any need for changes to the management system.

9.3.3 The standard requires that documented information as evidence of the results of management reviews shall be retained.

10. Improvement

10.1 Nonconformity and corrective action

10.1.1 The standard requires that when a nonconformity occurs, the organisation shall:

- a) react to the nonconformity and, as applicable:
 - i. take action to control and correct it;
 - ii. deal with the consequences;
- b) evaluate the need for action to eliminate the causes of the nonconformity, in order that it does not recur or occur elsewhere, by:
 - i. reviewing the nonconformity;
 - ii. determining the causes of the nonconformity;
 - iii. determining if similar nonconformities exist, or could potentially occur;
- c) implement any action needed;
- d) review the effectiveness of any corrective action taken;
- e) make changes to the management system, if necessary.

10.1.2 The standard requires that corrective actions shall be appropriate to the effects of the nonconformities encountered.

10.1.3 The standard requires that the organisation shall retain documented information as evidence of:

- a) the nature of the nonconformities and any subsequent actions taken;
- b) the results of any corrective action.

10.2 Continual improvement

The standard requires that the suitability, adequacy and effectiveness of the sustainable forest management system and the sustainable management of the forest shall be continuously improved.

Appendix 1: Guidelines for the interpretation of requirements in the case of forest plantations

Requirement	Interpretation for forest plantations
<p>6.2.2 The standard requires that forest management plans shall take into account the different uses or functions of the managed forest area.</p> <p>8.1.1 The standard requires that management shall aim to maintain or increase forests and their ecosystem services and maintain or enhance the economic, ecological, cultural and social values of forest resources.</p> <p>1.1.1 The standard requires that health and vitality of forest ecosystems shall be maintained or enhanced and degraded forest ecosystems shall be rehabilitated wherever and as far as economically feasible, by making best use of natural structures and processes and using preventive biological measures.</p> <p>1.1.1. The standard requires that adequate genetic, species and structural diversity shall be encouraged or maintained to enhance the stability, vitality and resistance capacity of the forests to adverse environmental factors and strengthen natural regulation mechanisms.</p> <p>8.4.1 The standard requires that management planning shall aim to maintain, conserve and enhance biodiversity on landscape, ecosystem, species and genetic levels.</p> <p>8.6.1 The standard requires that forest management planning shall aim to respect all socio-economic functions of forests and local economies.</p>	<p>The requirements 6.2.2, 8.1.1, 8.2.1, 8.2.2, 8.4.1 and 8.6.1 cannot be applied to individual forest stands and shall be considered on a larger scale (bioregional) within the whole forest management unit where the stands of fast growing trees are complemented by buffer zones and set-aside areas dedicated to environmental, ecological, cultural and social functions.</p> <p>In order to enhance landscape and biodiversity values, and water and soil protection, the size and distribution of the buffer zones and conservation set-aside areas shall be identified at the preparatory stage of the forest plantation establishment, based on social, environmental and ecological assessment, as well as reviewed during the subsequent replanting stages.</p>
<p>8.1.4 The standard requires that forest conversion shall not occur unless in justified circumstances where the conversion (...)</p>	<p>The requirement that “forest conversion shall not occur” means that forest plantations established by a forest conversion after 31 December 2010 in other than “justified circumstances” do not meet the requirement and are not eligible for certification.</p>

<p>8.1.5 The standard requires that reforestation and afforestation of ecologically important non-forest ecosystems shall not occur unless in justified circumstances where the conversion (...)</p>	<p>The requirement for the “reforestation and afforestation of ecologically important non- forest ecosystems” means that ecologically important non-forest ecosystems reforested or afforested after 31 December 2010 in other than “justified circumstances” do not meet the requirement and are not eligible for certification.</p>
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Requirement	Interpretation for forest plantations
<p>8.1.6 The standard requires that conversion of severely degraded forests to forest plantations shall be considered, whenever it can add economic, ecological, social and/or cultural value. Precondition of adding such value are circumstances where the conversion (...)</p>	<p>The interpretation in this appendix on 8.1.4 is not applicable to 8.1.6.</p>
<p>8.4.2 The standard requires that inventory, mapping and planning, of forest resources shall identify, protect, conserve or set aside ecologically important forest areas.</p> <p><i>Note:</i> This does not necessarily exclude forest management activities that do not damage biodiversity values of those biotopes.</p>	<p>The requirement laid out in 8.4.2 shall primarily be addressed at the stage of the establishment of forest plantations and those areas shall form part of the buffer zones and set-aside areas that are dedicated to environmental, ecological, cultural and social functions.</p>
<p>1.1.1 The standard requires that a diversity of both horizontal and vertical structures, and the diversity of species such as mixed stands, shall be promoted, where appropriate. The practices shall also aim to maintain or restore landscape diversity.</p> <p>1.1.2. The standard requires that traditional management practices that create valuable ecosystems on appropriate sites shall be supported, where appropriate.</p> <p>8.4.13 The standard requires that standing and fallen dead wood, hollow trees, old groves and special rare tree species shall be left in quantities and distribution necessary to safeguard biological diversity, taking into account the potential effect on the health and stability of forests and on surrounding ecosystems.</p>	<p>The requirements 8.4.8, 8.4.9 and 8.4.13 do not usually apply to forest plantations and shall be understood to be primarily taking place in buffer zones and set-aside areas, which complement forest plantations, and which are dedicated to environmental, ecological, cultural and social functions.</p>
<p>8.4.5 The standard requires that for reforestation and afforestation, origins of native species that are well-adapted to site conditions shall be preferred. Only those introduced species, provenances or varieties shall be used whose impacts on the ecosystem and on the genetic integrity of native species and local provenances have been evaluated, and if negative impacts can be avoided or minimised.</p>	<p>The evaluation of the impact of “introduced species, provenances or varieties” shall be understood as having increased importance for forest plantations and shall be an important part of both the planning and management stages of the production cycle.</p>

Appendix 2: Guidelines for the interpretation of requirements for Trees outside Forests (TOF)

A. Introduction

This Appendix provides interpretation for developing regional, national and sub-national requirements and standards applicable for Trees outside Forests (TOF). As stated in PEFC ST 1003:2018, all requirements referring to 'forest' are also applicable to 'TOF' unless otherwise indicated in this Appendix.

There exists a rich global diversity of TOF systems. Some are natural or semi-natural ecosystems with ecological complexity and ecosystem services equivalent to natural forests. At the other end of the spectrum are individual trees in fields or linear tree formations.

In cases where the PEFC ST 1003:2018 requirements deserve specific interpretation to improve or establish relevancy for TOF, interpretations are provided in Section B.

Specific PEFC ST 1003:2018 requirements which may not be applicable to certain TOF systems are outlined in Section D. To identify such exceptions, PEFC defines four categories to objectively distinguish between different TOF systems. The categories are based on land classification and management intensity: TOF-agriculture (intensive and extensive) and TOF-settlement (intensive and extensive). It is within TOF- agriculture extensive and TOF-settlement extensive that select PEFC ST 1003:2018 requirements may not be applicable.

During the national standard setting process, the typical TOF systems of national

relevance will be identified and the appropriate threshold between intensive and extensive discussed and agreed. Criteria to support this discussion are proposed in Section E. With this threshold articulated, it should be clear to which category particular TOF systems belong and if any flexibility exists when applying the PEFC ST 1003:2018 requirements into regional, national and sub-national standard(s).

B: Interpretation of Requirements for Trees outside Forests

Requirement	Interpretation for TOF
<p>4.3.2 The standard requires that forest management shall comprise the cycle of inventory and planning, implementation, monitoring and evaluation, and shall include an appropriate assessment of the social, environmental and economic impacts of forest management practices. This shall form a basis for a cycle of continuous improvement.</p>	<p>4.3.2 The standard requires that TOF management shall comprise the cycle of inventory and planning, implementation, monitoring and evaluation and shall include an appropriate assessment of the social, environmental and economic impacts of TOF management practices. This shall form a basis for a cycle of continuous improvement.</p>
<p>6.2.5 The standard requires that forest management plans specify ways and means to minimise the risk of degradation of and damages to forest ecosystems.</p>	<p>6.2.5 The standard requires that management plans specify ways and means to minimise the risk of degradation of and damages to natural ecosystems.</p>
<p>6.3.1.1 The standard requires that the organisation shall identify and have access to the legislation applicable to its forest management and determine how these compliance obligations apply to the organisation.</p> <p><i>Note:</i> For a country which has signed a FLEGT Voluntary Partnership Agreement (VPA) between the European Union and the producing country, the “legislation applicable to forest management” is defined by the VPA agreement.</p>	<p>6.3.1.1 The standard requires that the organisation shall identify and have access to the legislation applicable to its TOF management and determine how these compliance obligations apply to the organisation.</p> <p><i>Note:</i> Only where TOF is within the scope of a Country’s FLEGT Voluntary Partnership Agreement (VPA) between the European Union and the producing country, is the “legislation applicable to TOF area” defined by the VPA agreement.</p>
<p>6.3.1.2 The standard requires that the organisation shall comply with applicable local, national and/or international legislation on forest management, including but not limited to forest management practices; nature and environmental protection; protected and endangered species; property, tenure and land-use rights for indigenous peoples, local communities or other affected stakeholders; health, labour and safety issues;</p>	<p>6.3.1.2 The standard requires that the organisation shall comply with applicable local, national or international legislation applicable to TOF area including but not limited to: agriculture and agroforestry; nature and environmental protection; protected and endangered species; property, tenure and land-use rights for indigenous peoples, local communities or other affected stakeholders; health, labour and safety issues; crop damage</p>

anti-corruption and the payment of applicable royalties and taxes.	compensation; anti-corruption and the payment of royalties and taxes.
7.2.1 The standard requires that forest managers, contractors, employees and forest owners shall be provided with sufficient information and required to keep up-to-date through continuous training in relation to sustainable forest management as a precondition for all management planning and practices described in this benchmark.	7.2.1 The standard requires that land managers, contractors, employees and land owners shall be provided with sufficient information and required to keep up-to-date through continuous training in relation to agroforestry, good agriculture practices and forestry techniques as a precondition for all management planning and practices described in this benchmark.

Requirement	Interpretation for TOF
8.1.1 The standard requires that management shall aim to maintain or increase forests and their ecosystem services and maintain or enhance the economic, ecological, cultural and social values of forest resources.	8.1.1 The standard requires that management shall aim to maintain or increase the cover, value and/or diversity of trees in the landscape and their related ecosystem services in ways that enhance the economic, ecological, cultural and social values and are aligned with existing land- use regimes. <i>Note:</i> When the requirement is not achievable within individual, TOF-extensive areas, it can be considered at landscape level.
8.1.2 The standard requires that the quantity and quality of the forest resources and the capacity of the forest to capture and store carbon shall be safeguarded in the medium and long term by balancing harvesting and growth rates, using appropriate silvicultural measures and preferring techniques that minimise adverse impacts on forest resources.	8.1.2 The standard requires that management shall maintain or enhance TOF resources and their capacity to capture and store carbon in the medium and long term by balancing harvesting and growth rates, and by minimising direct or indirect damage to ecosystem resources. <i>Note:</i> When the requirement is not achievable within individual, TOF-extensive areas, it can be considered at landscape level.
8.1.4 The standard requires that forest conversion shall not occur unless in justified circumstances (...)	8.1.4 The standard requires that conversion to TOF shall not occur unless in justified circumstances (...) TOF areas established by a forest conversion after 31 December 2010 in other than “justified circumstances” do not meet the requirement and are not eligible for certification.
8.1.5 The standard requires that afforestation of ecologically important non-forest ecosystems shall not occur unless in justified circumstances (...)	8.1.5 The standard requires that conversion of ecologically important non-forest ecosystems to TOF areas shall not occur unless in justified

	<p>circumstances (...)</p> <p>TOF areas established by a conversion after 31 December 2010 in other than “justified circumstances” do not meet the requirement and are not eligible for certification.</p>
<p>8.1.6 The standard requires that if conversion of severely degraded forests to forest plantations is being considered, it must add economic, ecological, social and/or cultural value. Precondition of adding such value are circumstances where the conversion (...)</p>	<p>Not applicable.</p>

Requirement	Interpretation for TOF
<p>8.2.1 The standard requires that health and vitality of forest ecosystems shall be maintained or enhanced and degraded forest ecosystems shall be rehabilitated wherever and as far as economically feasible, by making best use of natural structures and processes and using preventive biological measures.</p>	<p>8.2.1 The standard requires that health and vitality of TOF areas shall be maintained or enhanced and degraded lands shall be rehabilitated whenever this is feasible, by making best use of landscape features, natural processes and using preventive biological measures.</p>
<p>8.2.2 The standard requires that adequate genetic, species and structural diversity shall be encouraged or maintained to enhance the stability, vitality and resilience of the forests to adverse environmental factors and strengthen natural regulation mechanisms.</p>	<p>8.2.2 The standard requires that adequate genetic, species and structural diversity shall be encouraged or maintained to enhance the stability, vitality and resilience of the TOF area.</p>
<p>8.2.4 The standard requires that appropriate forest management practices such as reforestation and afforestation with tree species and provenances that are suited to the site conditions or the use of tending, harvesting and transport techniques that minimise tree and/or soil damages shall be applied.</p>	<p>8.2.4 The standard requires that appropriate TOF management practices shall use tree, crop and animal species and provenances that are suited to the site conditions and the use of tending, harvesting and transport techniques that minimise tree and/or soil damage shall be applied.</p>
<p>8.3.1 The standard requires that the capability of forests to produce a range of wood and non-wood forest products and services on a sustainable basis shall be maintained.</p>	<p>8.3.1 The standard requires that the capability of the TOF area to provide wood products, non- wood forest products and/or services from trees on a sustainable basis shall be maintained.</p>
<p>8.4.1 The standard requires that management planning shall aim to maintain, conserve or enhance biodiversity on landscape, ecosystem, species and genetic levels.</p>	<p>8.4.1 The standard requires that management planning shall aim to maintain, conserve or enhance biodiversity on landscape, ecosystem, species and genetic levels.</p> <p><i>Note:</i> When the requirement is not achievable within individual, TOF-extensive areas, it can be considered at landscape level or through group certification.</p>
<p>8.4.12 The standard requires that, with due</p>	<p>8.4.12 The standard requires that,</p>

regard to management objectives, measures shall be taken to control the pressure of animal populations on forest regeneration and growth as well as on biodiversity.	with due regard to management objectives, measures shall be taken to balance the effect of domesticated and wild animals on the regeneration and growth of trees, as well as on biodiversity and the control of fire.
8.5.1 The standard requires that protective functions of forests for society, such as their potential role in erosion control, flood prevention, water purification, climate regulation, carbon sequestration and other regulating or supporting ecosystem services shall be maintained or enhanced.	8.5.1 The standard requires that the protective functions of trees within the agriculture and settlement landscape shall be maintained or enhanced.

Requirement	Interpretation for TOF
8.6.5 The standard requires that the best use shall be made of forest-related experience and traditional knowledge, innovations and practices such as those of forest owners, NGOs, local communities, and indigenous peoples. Equitable sharing of the benefits arising from the utilization of such knowledge shall be encouraged.	8.6.5 The standard requires that traditional knowledge and recognized best practice for agroforestry & TOF management be utilized. Equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices shall be encouraged.

C. Additional requirement for Trees outside Forests

Requirement	Interpretation for TOF
–	The standard requires that management of the agricultural components within a TOF system shall follow good agricultural practice and available guidelines.

D. Requirements potentially not applicable to Trees outside Forests

The following requirements are considered potentially not applicable to TOF-agriculture extensive and TOF-settlement extensive unless considered otherwise during the regional, national standards setting process.

Requirements	Status	Rationale
6.2.2; 6.2.6; 6.2.7; 7.1; 7.2,1; 7.3.1; 7.4.1; 8.3.5; 8.4.8; 8.5.5; 9.1.1; 9.1.3	Not applicable to: <ul style="list-style-type: none"> • TOF-agriculture extensive • TOF-settlement extensive. 	TOF management is of a sufficiently low intensity, scale and/or investment level that requirements cannot be realistically incorporated
8.2.1; 8.4.2; 8.6.2; 8.6.6	Not applicable to: <ul style="list-style-type: none"> • TOF-agriculture extensive • TOF-settlement extensive. 	The requirement(s) are related to an issue which is not a risk or issue within a TOF extensive context.
8.2.2; 8.3.2; 8.4.11; 8.4.12	Not applicable to: <ul style="list-style-type: none"> • TOF-settlement extensive. 	The requirements do not relate well to context where trees are planted and managed primarily for aesthetics and environmental health.

E. Establishing the threshold for intensive and extensive TOF systems at the National level

If the national standard-setting process agrees to develop specific requirements and/or standard(s) for TOF, all PEFC ST 1003:2018 requirements are applicable with the potential exception of some requirements in the case of TOF-agriculture extensive and/or TOF-settlement extensive system. In this case, the standard-setting process must build agreement around the appropriate threshold between "intensive" or "extensive" TOF systems, based on clear rationale. The eligibility of a particular TOF system must be clearly communicated within standard(s).

When establishing the threshold between the intensive and extensive categorisation of TOF systems, the national standard-setting process should consider at least:

- size of management unit
- tree cover/hectare
- economic value of production
- intensity of management
- scale of cultural, ecological and conservation value

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